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International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

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FPL Ad hoc Group Missing/duplicated/erroneous Filed flight plan /Flight plan (FPL) evaluation meeting (FPL/AD/MON)

Mexico City, Mexico, 24-26 February 2015

Agenda Item 4 FPL Guideline and Contact List presentation

FLIGHT PLANNING SUPPORT IN THE NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN ICAO REGION

(Presented by United States)

EXECUTIVE SUMMARY

This paper presents information and suggested tools in constructing the flight planning support environment regarding the need to improve the quality of flight plan data being submitted into the ATC flight data systems and relayed through the en route, oceanic and terminal Inter-facility Data Communications systems in support of flight in domestic and international airspace.

Action:	Use/update the Flight Plan Filer Contact List delivered and Discuss/decide whether the need for regional standardized flight plan filing information is needed.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection

1. Introduction

1.1 The increasing traffic demand between Flight Information Regions (FIR) drives the need to improve efficiency and maintain the accuracy for the ATC providers. The flight plan data provides the identified, capabilities, request route and destination conventions for interoperability among automated systems allowing data exchange between ATSU's that are harmonized to a common standard. Providing standardized methods of referencing the required information for flight planning is a key component. The ATC Flight Plan is the critical information source for ATS Interfacility Data Communications (AIDC), or similar automation, can provide the basis by which automated data exchange can be harmonized between ATSU's providing air traffic service in, and adjacent to FIRs. Within these efforts the data which travels through the interfaced systems are often thought of in an ancillary manner since error checks are built into the processing of integrated systems. Data quality and integrity is essential for the processing of aircraft through the international ATC systems. Users are dependent on the accuracy of this critical information.

1.2 Developing a set of guidelines, processes and resources for implementing standards may be a key component in improving the flight planning process. The Flight Planning Monitoring Group has expressed a need for a reference list for Flight Plan fillers and filer contact information. The United States agree to update a contact list they had in their possession and make it available for NACC member states with the hope it would become a living reference tool for flight plan maintenance and interaction within the region. An additional item which will be offered to the meeting membership is whether consolidating standardized flight plan filing practices within a guidelines reference document is a viable idea. It is recognized that Aeronautical Information Publication (AIP) often contains this type of information in accordance with *AIRAC (Aeronautical Information Regulation and Control)* cycles; however a consolidated quick reference source may offer some benefits.

1.3 The U.S. and NAM ICD member states have realized automation gains that provide significant safety and efficiency benefits. A recent example of extending automation capability in the North American region is the Miami Air Route Traffic Control Center (ARTCC) 2011 automation interface with the Havana Area Control Center (ACC). While the implementation of the automated data exchange capability provides significant benefits to the controller, there is one area of concern that potentially touches many regions. This issue depends on the quality of the flight plans being filed and the continuity of the data which follows a flight through international ATC systems. Flight plans received before the interface was automated were processed manually. The flight plans are received by automation systems are much less forgiving of format and syntax and errors which could be absorbed within a manual interface. Many errors in filed flight plans which may have gone undetected for years within a manual system are now problematic within automation. When filed information is in conflict from different flight plan versions, it requires manual intervention and correction else it erodes the benefits of automation. Additionally, multiple flight plans received for the same flight must be manually parsed and edited to ensure the correct data is being entered for internal system use and forwarded by the computer system for downstream facilities. Conflicting information between those flight plans filed at the departure airports and those filed by the airlines or commercial filers are often seen.

2. Discussion

2.1 As early as the Third NACC Working Group Meeting (NACC/WG/3) held in Guatemala City, Guatemala 9-13 May 2011 the quality control issues in flight planning was addressed. As a result of a working group held at that meeting, actions were developed which are intended to improve the flight plan deficiencies identified in the NACC, South America and adjacent airspace. Only after forming the FPL Working Group has productive dialogue resulted in identifying deficiencies and addressing the actions necessary to resolve the problems.

2.2 In the FPL Monitoring Group it was agreed that errors, missing FPLs, duplicates have caused safety risks, increased work load and resulted in negative impacts to efficiency. The impacts the errors and reoccurring nature discovered in the data analysis demands an active approach be taken to pursue solutions. Specific instances of errors which yield safety issues have occurred and include misstatement of: aircraft type, wake turbulence category, route and equipment capabilities. Omission of data filed in an original flight plan by a subsequent flight plan is also an error which can have an impact as great as flaws in the data. Specific examples associated with flight plan errors and duplication have been recorded with a many of the aircraft transiting or landing in U.S., Mexican and Cuban airspace and originating in South and Central America and the Caribbean. In these cases where data is being received which is in error, is missing or the integrity has been compromised, data processing decisions will have to be evaluated. The challenges associated with flight planning have been discussed within the FPL Monitoring Group meetings and it was agreed any progress toward reducing flight planning errors, as well as duplicate flight plans would be of significant benefit. The issuing of flight plans by multiple originators, the multiple transmissions of flight plans by the same originator and the re-issuing flight plans due to changes are recurring issues.

2.3 It has been offered that a solution must include quality control initiatives for filers and filing services to improve the transmitted data to conform to ICAO 4444 standards and conventions. The quality control solution must also be a collaborative procedures effort, one aimed at reducing the number of flight plans in error and reducing instances of multiple flight plans for the same flight.

2.4 It was further offered that safeguarding the integrity of the data was of primary importance and that the quality of data being introduced into individual ATC systems and forwarded into the collective systems must be maintained at a high level. Havana has noted that they have to manually compare the original FPL from the airline operator against the second one received from the point of departure. They are considering the information coming directly from the airline operator, as more valid versus the information from another source due to the number of errors being detected in the second flight plan. This approach would normally be contrary to normal operations as in most cases the most recently filed flight plan is considered the most valid since it should contain the most recent information. This procedure would be a departure from the standard course of action but may be necessary to mitigate the impact of flight data with errors.

2.5 The impact of a retransmitted flight plan with filed with errors is offered with the example of UPS flight 357, B763/H, flying from Central America to Miami FL on 18 March 2012. The flight plan was originally filed by the airline's central dispatch office in the United States. This example is available for review and still poses a problem in 2015.

2.6 The route of flight requires filing with the Flight Information Region (FIR) between point of origin and destination. This is accomplished as was such a fling from UPS Airline Operations Center (AOC). Havana ACC and Miami Air Route Traffic Control Center (ARTCC) have both flight plans, the flight plan from the point of departure being the most recently filed. After leaving the departure FIR the flight enters the Havana FIR. Both flight plans were filed via AFTN and accepted into the Havana ATC system, they are not duplicates since there is different information associated with each. Using the information in latest flight plan would be the logical course of action since it would be the most recent and should have the most current information. The conflict in the aircraft types; B752 versus B763, goes unnoticed as the Flight Plan Message (FPL) is received via ATFN and accepted into the system. The separation standard for both aircraft in the en route radar environment is 5 miles. Automation sends the active data via the current flight plan message (CPL) to Miami. The aircraft is worked through Miami ARTCC airspace and descends in preparation for landing at Miami International Airport via the CURS01 STAR. UPS357 is handed off between the Miami Center and Miami Approach Control and the ARTCC Host Automation sends the Miami ATC automation system as a B757 not a B767. The Safety Issue now is more critical as heavy jet separation is required in the terminal environment wake turbulence is being provided for a non-heavy B757 aircraft.

2.7 Retransmitted/Duplicate/Multiple Flight Plans - The cited example is not an isolated case and a number of like problems are being identified with countries that file flight plans in addition to those filed by the airline or flight plan filing services. Although we call these duplicates 'retransmitted' since they are for the same aircraft and for the same flight, they are in fact multiple flight plans. Examples of the many types of errors are plentiful.

2.8 Flight plan errors and duplication/retransmission of flight plans are interconnected problems as multiple flight plans with conflicting information about the same flight can degrade processing efficiency and safety of flight. As can be seen, the issues described in this working paper span international boundaries and will require a collaborative approach to identify the causes which are behind the proliferation of errors. We can identify the specific deficiencies associated with the flight plans will need the help of ICAO, the ANSPs, and the local filing authorities to improve the quality of flight plans being routed through the international flying environment.

3. Current Working Actions:

3.1 The attached presentation illustrates the specific Item 1 and Item 2 artefacts being spoken to in this working paper.

Item 1 Contact List –Construct a contact list which allow member states to gather points of contact from service providers within North America, Central America, , the Caribbean, South America and other areas whose traffic transit the region. This list will be used to contact filers about any deficiencies, errors in the filed FPL.

Item 2 Regional Standardized Guidelines Filing Document – The US is proposing for consideration whether a document for standardized practices or exceptions to standardized practices would be a useful tool to aid filers in navigating in, out and through the NACC region. It is recognized that *AIPs* often contains this type of information in accordance with *AIRAC* cycles, however a consolidated quick reference source may offer some benefits.

4. Conclusion

4.1 Please note the information presented in this paper and implement tools or procedures which may help to correct filing practices and standardize proper filing procedures within those regional ATC systems which process flight plan data with the intent of identifying the need for quality assurance where data integrity could be compromised.

5. Action for the Meeting

- a) consider the Items 1 and 2 elaborated on in the accompanying presentation;
- b) use/update the Contact List delivered as item 1; and
- c) discuss whether the need for regional standardized flight plan filing information is necessary and what a reference document would look like if constructed.

FPL Monitoring Contact List and Filing Guideline Options

Presented To: NACC

**By: Dan Eaves, FAA En Route
Requirements & Validation**

Date: Feb 2015



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Flight Plan Filer Contact List

- FPL Monitoring Group determined that a Flight Plan Filer Contact List was requested as a reference document which contains airlines/dispatchers information to provide a method to contact filers in the case of a missing and or errored flight plan.
- US is providing a recently updated list intended to be a 'living document', to be periodically updated to include changes received from the FPL Monitoring Group, filers and airlines.



Flight Plan Filer Contact List

Version 1

1	A	B	C	D	E	F	G	H
	Filer	ID	POC Name	POC Email	Office	Cell	Other	Comments
2	ABS Jets (Czech Republic) (LKPRABPX & LKPRABY)		Michal Pazourek (Chf Disp)	pazourek@absjets.cz ops@absjets.cz	+420 220 111 388	+ 420 602 205 852		
3	ABX Air KILNABXD	ABX	Alain Terzakis Ron Spanbauer	Alain.Terzakis@abxair.com Ron.Spanbauer@Globalflightsource.com	937-366-2464 937-366-2435	937-655-0703	(800) 736-3973 x62450 (937) 366-2450 24hr.	
4	Aeromexico Files thru HFIEDS (MMMMXAMXW)	AMX	Raul Aguirre (FPF)	raguirre@aeromexico.com.mx	011(5255) 9132-5500		(281) 233-3406	
5	Air Berlin EDDTBERA	BER	Recep Bayindir	Recep.Bayindir@airberlin.com dispatch@airberlin.com	49-30-3434-3705			
6	AirBridgeCargo Airlines KDCAABWX UWLWIEPD	ABW	Dmitry Levushkin Chief Flight Dispatcher Volga-Dnepr Airlines	Dmitry.Levushkin@volga-dnepr.com	7 8422 590370 7 8422 590067			Also see Volga-Dnepr Airlines (VDA)
7	Air Canada CYYZACA/W thru LIDO	ACA	Richard Steele (Mgr Flt Supt) Rod Stone	Richard.Steele@aircanada.ca rodney.stone@aircanada.ca	905 861 7572 905 861 7570	647 328-3895	905 861 7528	
8	Air China Jeppesen KDENX LDS	CCA	Weston Li (Mgr. American Ops) Zhang Yuenian	liwenhua67@hotmail.com liwenhua@airchina.com	604-233-1682	778-883-3315		
9	Air Europa		Bernardo Salleras Flight Ops	bsalleras@air-europa.com pmiowux@air-europa.com	34 971 178 281 (Ops Mgr)			
10	Air France LFPGAFFN	AFR	Thierry Vuillaume	Thierry.Vuillaume@airfrance.fr	+33 (0)14156 78 65			
11	Air India KJFKAICD Files thru HFIEDS	AIC	Puneet Kataria	pkataria@airindiausa.com p_kataria@hotmail.com	718-632-0125 718-632-0162direct	917-9811807	+ 91-22-66858028	Use SABRE for flights arriving/departing USA
12	Air New Zealand (Uses SABRE software)	ANZ	Steve Kelly	Steve.Kelly@airnz.co.nz flight.despatch@airnz.co.nz	+64 9 2563438 +64 9 256 3941	+64 21 672717	(310) 665-3976 011 649 256 3941	
13	Air Shuttle KABQASHD	ASH	Sandra Park	Sandra.Park@mesa-air.com	602-685-3748		(602) 685-4300	Also see Mesa Airlines below
14	Air Sprint KARXAAAN Air Support (Denmark)	ASP	Jim Eliam (Chief Pilot) Henrik Kristensen Martin Bjerregaard	dispatch@airsprint.com hk@airsupport.dk mb@airsupport.dk support@airsupport.dk	888-634-3330	403-690-0169 403-730-2344	(877) 588-2344	



Flight Plan Filer Contact List

Version 1- Confirmed Filer Tab

1	A	B	C	D	E	F	G	H
	Filer	ID	POC Name	POC Email	Office	Cell	Other	Comments
2	ABS Jets (Czech Republic) (LKPRABPX & LKPRABY)		Michal Pazourek (Chf Disp)	pazourek@absjets.cz ops@absjets.cz	+420 220 111 388	+ 420 602 205 852		
3	ABX Air KILNABXD	ABX	Alain Terzakis Ron Spanbauer	Alain.Terzakis@abxair.com Ron.Spanbauer@Globalflightsource.com	937-366-2464 937-366-2435	937-655-0703	(800) 736-3973 x62450 (937) 366-2450 24hr.	
4	Aeromexico Flies thru HPIEDS (MMMMXAMXW)	AMX	Haul Aguirre (FPF)	raguirre@aeromexico.com.mx	011(5255) 9132-5500		(281) 233-3406	
5	Air Berlin EDDTBERA	BER	Recep Bayindir	Recep.Bayindir@airberlin.com dispatch@airberlin.com	49-30-3434-3705			
6	Air Canada KID UW 3 Air Canada CY thru LIDO	ABX	Alain Terzakis Ron Spanbauer	Alain.Terzakis@abxair.com Ron.Spanbauer@Globalflightsource.com			937-366-2464 937-366-2435	937-655-0703 (800) 736-3973 x62450 (937) 366-2450 24hr.
7			Rod Stone	rodney.stone@aircanada.ca	905 861 7570			
8	Air China Jeppesen KDENX LDS	CCA	Weston Li (Mgr. American Ops) Zhang Yuenian	liwenhua67@hotmail.com liwenhua@airchina.com	604-233-1682	778-883-3315		
9	Air Europa		Bernardo Salleras Flight Ops	bsalleras@air-europa.com pmiowux@air-europa.com	34 971 178 281 (Ops Mgr)			
10	Air France LFPGAFFN	AFR	Thierry Vuillaume	Thierry.Vuillaume@airfrance.fr	+33 (0)14156 78 65			
11	Air India KJFKAICD Files thru HPIEDS	AIC	Puneet Kataria	pkataria@airindiausa.com p_kataria@hotmail.com	718-632-0125 718-632-0162direct	917-9811807	+ 91-22-66858028	Use SABRE for flights arriving/departing USA
12	Air New Zealand (Uses SABRE software)	ANZ	Steve Kelly	Steve.Kelly@airnz.co.nz flight.dispatch@airnz.co.nz	+64 9 2563438 +64 9 256 3941	+64 21 672717	(310) 665-3976 011 649 256 3941	
13	Air Shuttle KABQASHD	ASH	Sandra Park	Sandra.Park@mesa-air.com	602-685-3748		(602) 685-4300	Also see Mesa Airlines below
14	Air Sprint KARXAAAN Air Support (Denmark)	ASP	Jim Eliam (Chief Pilot) Henrik Kristensen Martin Bjerregaard	dispatch@airsprint.com hk@airsupport.dk mb@airsupport.dk support@airsupport.dk	888-634-3330	403-690-0169 403-730-2344	(877) 588-2344	
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Flight Plan Filer Contact List

Version 1 – AFTN Filer IDs Tab

	A	B	C	D	E
1	Filer ID	AFTN Address	Filer Name		
2	ICE	BIKFICEO	ICELANDAIR		
3	ABD	BIRKABDO	AIR ATLANTA		
4	ABL	CYHZABLD	AIR BC		
5	ARN	CYHZARNX	AIR CANADA REGIONAL		
6	CJA	CYHZCJAX	CANJET AIRLINES		
7	ONT	CYHZONTD	ONTARIO		
8	YNC	CYKFNSSB			
9	VRD	CYKFNSSL	VIRGIN ATLANTIC AIRWAYS		
10	PCE	CYKFNSSP			
11	YSG	CYKFNSSW	KITCHENER-WATERLOO INTL		
12	YPU	CYKFXNSX			
13	ZWB	CYTZPOED	PORTER AIRLINES		
14	ACA	CYULACAC	AIR CANADA		
15	SSV	CYULSSVX	SKYSERVICE		
16	SYB	CYULSYBX	SKYSERVICE		
17	TSC	CYULTSCX	AIR TRANSAT		
18	ROK	CYVRROKO	NATIONAL AIRLINES INC.		
19	ZZH	CYYCCOIX	COLT INTERNATIONAL, INC		
20	MPE	CYYCMPEX	CANADIAN NORTH AIRLINES		
21	WJA	CYYCWJAO	WEST JET		
22	Yyc	CYYCXXSK	SKYPLAN SERVICES LTD.		
23	ACA	CYYZACAW	AIR CANADA		
24	CJT	CYYZCJTX	CARGOJET		
25	YSB	CYYZSKVX	SKY REGIONAL AIRLINES		
26	CIU	CYYZXNSR	CIELOS AIRLINES		
27	BSK	CYYZXNSS	MIAMI AIR		

Confirmed Filer List **AFTN Filer IDs**



Providing Regional Flight Planning Guidance



Providing Regional Flight Plan Guidance

- The US would like to suggest that the FPL Monitoring Group explore the possibility of providing regional guidance to address the conventions needed to file successful flight plans.
- Although the FPL Monitoring Group has identified issues associated with missing, duplicate/multiple and errors in flight plans.
- Several identified actions have been offered as a contributing to solving/mitigating the identified problems.
- An issue of 'inconsistent application of the filing conventions within the ICAO 4444 ' is possibly a common thread which may run through flight plan filing in the NACC



Providing Regional Flight Plan Guidance

- With different flight planning systems which process flight plans throughout the region interpretations of what is required in the flight plans may be different with different departure points.
- The issue can result in the same flight plan being accepted at the point of origin but rejected by FIRs along the route of flight
- These instance can result in missing flight plans, confusion among airlines and filing services as well as an issue to implementing AIDC automation
- The US would like to provide an example of how flight plan conventions can be offered to provide standardized conventions for filing or at least differences between systems processing flight plans



Providing Regional Flight Plan Guidance

Example

- An example of the possible disparity in flight planning between FIRs and their conventions is examined below. If one FIR accepts this flight plan and another does not it can be a problem and possibly a safety issue
- **Error: Inconsistent filing of RVSM Capability**
- The following flight plan is incorrect because it indicates the flight plan is RVSM approved and that it is Non-RVSM. Automation should reject this flight plan.

(FPL-LN141AB-IG-C550/L-SGD**W**/CU1-KA001245-N038F320 TATES3
TATES V469 NESTO DCT TVT KEATN5-KCLE037-STS/MEDEVAC
NONRVSM SUR/282B CODE/A0A669)



**En Route and Oceanic Services
Aeronautical Information and Flight Planning Enhancements
FAA ICAO Flight Planning Interface Reference Guide
Version 2.1**



**Federal Aviation
Administration**

November 15, 2012

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

Technical Performance Support Group, AJE- 36



**Federal Aviation
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FAA ICAO Flight Planning Interface Reference Guide

1. Introduction

1.1 Scope

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 effective 11/15/2012, and incorporates published supplementary requirements, instructions and guidelines for proper filing of FPLs with the Federal Aviation Administration’s (FAA) En Route Automation System (ERAS).

This document provides instructions for filing ICAO flight planning messages within ERAS to ensure message acceptance and the most efficient automation processing.

This document describes interface requirements for sending ICAO-format flight planning messages via Aeronautical Fixed Telecommunications Network (AFTN) to ERAS. It identifies the standards on which these messages are based, describes FAA-specific content requirements, and identifies data allowed in ICAO-format messages that is not used by FAA. The intended audiences are flight plan service providers, military organizations, and airlines in the direct file program that send flight planning messages to ERAS. These flight planning messages include:

1. Filed Flight Plan (FPL);
2. Modification (CHG);
3. Delay (DLA); and
4. Cancellation (CNL).



2. Operational Use of Flight Planning Messages

2.1 Initial FPL Filing

2.1.1 Flights Remaining Entirely within U.S. Domestic Airspace

File an ICAO FPL if your flight will remain entirely within U.S. domestic airspace¹ and the operator desires application of RNAV routes. File only with the Air Route Traffic Control Center (ARTCC) containing the departure airport; flight information is automatically passed to each ARTCC along the route of flight. FPLs filed with any other ARTCCs along the route may create duplicate flight plans and/or unnecessary flight plan rejections by downstream facilities.

ERAS does not require EET/ data in an ICAO FPL for the route portion in U.S. domestic airspace. ERAS will accept EET/ data; however, it will not process that data if filed.

¹ **U.S. Domestic Airspace:** In this document U.S. domestic airspace includes that airspace over the 48 contiguous United States and Puerto Rico. It does not include any foreign or international airspace (e.g. oceanic airspace controlled by Oakland, New York and/or Anchorage ARTCCs).



Note: U.S. domestic airspace does not include any foreign or international airspace (e.g. oceanic airspace controlled by ARTCCs at Oakland, New York and/or Anchorage).

2.1.2 Flights Leaving U.S. Domestic Airspace

File an FPL for any flight leaving U.S. domestic airspace. For the U.S. domestic portion of the flight, file only with the ARTCC containing the departure airport. Flight information is automatically passed to each ARTCC along the route of flight within U.S. airspace. FPLs filed with any other U.S. domestic ARTCC along the route may be discarded or rejected by subsequent ARTCCs.

Provide EET/ data starting with the first Oceanic or non-U.S. Flight Information Region (FIR) in accordance with (IAW) guidance in ICAO Doc. 4444.

Note: If a flight leaves U.S. domestic airspace and later re-enters U.S. domestic airspace, the reentry portion of the flight should be handled per Section 2.1.3, and 2.1.4 below.

2.1.3 Flights Entering U.S. Domestic Airspace (from or Through Canada)

Do not address the FPL to any U.S. domestic facility when entering U.S. domestic airspace from, or through Canada. Current flight plan data will be automatically forwarded from the Canadian Automated Air Traffic System (CAATS) to ERAS, prior to boundary crossing. FPLs addressed to any U.S. domestic ARTCC along the route may create processing problems, including duplicate flight plans and/or flight plan rejections by downstream facilities.

2.1.4 Flights Entering U.S. Domestic Airspace (Except from Canada)

An FPL is required when entering U.S. domestic airspace from international or oceanic airspace, except from or through Canada. The FPL should be addressed to the first U.S. domestic FIR in the route of flight. FPLs addressed to any other U.S. domestic ARTCC along the route may create processing problems for downstream facilities. They may also be discarded or rejected by those ARTCCs.

2.1.5 Addressing an FPL Message

Guidance on addressing flight plans for domestic or international flight planning can be found in the Aeronautical Information Publication (AIP) ENR Section 1.11. AFTN addresses for sending FPLs to ERAS are documented in ICAO Doc. 8585, Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services. The list of relevant addresses is also found in section 5.3. Identifying a Flight in an FPL

2.1.6 Aircraft Identification

A 2 - 7 character aircraft identification is required in Item 7 of an FPL in compliance with ICAO Doc. 4444 and ICAO Annex 7, Aircraft Nationality and Registration Marks, with the following exception:

Exception: For FPLs filed with ERAS, if the aircraft identification starts with a number, the FPL will be rejected. If this occurs, contact Flight Data at the ARTCC to which the FPL was sent so they can ensure acceptance in ERAS. (FPLs filed with oceanic automation are accepted if the aircraft identification starts with a number).



Table 2-2-1. Duplicate Flight Plan Rules

Scenario	Recommendations	Issues
Flight with multiple stopovers	File each leg of the flight in a separate FPL as required.	None. Each FPL will have a different departure/destination and will thus be distinguishable as separate legs by ERAS.
Multiple FPLs filed for the same flight	<p>Do not file multiple FPLs with the same departure, destination and departure time.</p> <p>Send a CNL message for the original FPL, or contact the facility flight data unit to cancel the FPL prior to filing a new FPL with the same aircraft identification.</p>	<p>If departure, destination, departure time and route are identical, subsequent FPLs will be rejected.</p> <p>If multiple FPLs are filed for the same departure, destination, departure time and route, there is a risk of confusion in activating the wrong FPL, a risk of saturating computer resources, and additional ATC workload to manage the multiple proposals.</p>
Multiple flights from the same airport on the same day	As long as the flights have different departure times, each flight can be filed independently (i.e., multiple flights can be filed at the same time for the same day).	No issues.

2.2 Changing an FPL after Filing



2.2 Changing an FPL after Filing

2.2.1 Eligibility to Change FPL Data

An FPL can be changed by the filing entity until the flight data has been displayed to ATC. This is typically 30 minutes before proposed departure time, but may be an hour or longer in some cases. If a revision is made to a previously filed FPL after the departure flight data has been displayed to ATC, the message will be rejected. If this occurs, call the Flight Data Unit at the departure ARTCC to coordinate the change.

2.2.2 Identifying an FPL to be Changed

When submitting a revision (i.e. DLA, CNL, or CHG) to a previously filed flight plan, the FPL must be uniquely identifiable. The following information, when available, is used to match an FPL in the database:

1. Aircraft Identification (Field 7a)
2. Optional Reference Data (Field 3c) – refers to the Optional Message Number (Field 3b) of the FPL to be modified
3. Departure Aerodrome (Field 13a)

44450000

DRAFT



4. Estimated Off-Block Time (EOBT)(Field 13b)
5. Destination Aerodrome (Field 16a)
6. Date of Flight (Field 18, DOF/), if one was filed

For example, if no Optional Reference Data or Departure Time is provided, and there is more than one FPL with the same aircraft identification, Departure Aerodrome and Destination Aerodrome, then the revision will be rejected. The most reliable form of reference is the Optional Reference Data (Field 3c) because it uniquely identifies the FPL being modified in all cases.

Note: IAW ICAO Doc. 4444, ERAS will not accept a CHG or CNL containing Field 16b (Total EET).

2.2.3 Message Types Used to Change an FPL

The following ICAO flight planning messages should be used to change an FPL. The messages should be formatted IAW Sections 3.3 through 3.5, below.

- Send a Modification (CHG) message to revise any FPL field, including an Estimated Off-Block Time (EOBT/Field 13b) that also requires a change to a previously filed Date of Flight (Field 18, DOF/).
- Send a Delay (DLA) message to change an EOBT that does not require a revision to the DOF/. (For flights delayed over midnight, use the CHG message to change EOBT and DOF/)Send a CNL message to cancel an FPL. If a CNL message is accepted, the FPL will be deleted from ERAS.

3. Automated Filing of ICAO-Format Flight Planning Messages

3.1 General Message Construction

3.1.1 Header

Each message must contain an International Alphabet No. 5 (IA-5) header IAW ICAO Annex 10, Aeronautical Telecommunications, Volume 2.

Note: ERAS does not process the Optional Data Fields defined in Annex 10. If included, the Optional Data Fields are ignored.

Note: ERAS does not process additional address lines (AD) as defined in Annex 10.

3.1.2 Message Syntax

Flight planning messages follow the structure described in ICAO Doc. 4444, Appendix 3, including:

1. After the header information, enclose message contents in parentheses.
2. Begin each field with a hyphen (“-”).

Note: Do not include a hyphen character within any field or the message will be rejected; this error is most commonly observed in Field 18. Do not include additional fields (e.g. Field 19) other than those allowed or the message will be rejected.



3.2 Filed Flight Plan (FPL) Message

3.2.1 FPL Contents

FAA generally follows ICAO Doc. 4444 for FPL message construction. Table 3-2-1 provides instructions which address FAA-specific content requirements, limitations and exceptions.

Table 3-2-1. FPL Instructions

Field	Element	Required/ Optional/ Prohibited	Examples
3	(a) Message Type Designator	Required	FPL
	(b) Optional Message Number When included: <ol style="list-style-type: none"> 1. The three-letter NADIN address where the filer would like the ACK/REJ message sent, followed by an oblique stroke (XXX/); 2. The four-letter LOCID of the ARTCC to which the FPL is addressed by the filer (KZXX); and 3. A three-digit sequential message number assigned by the filer (ddd). 	Optional	NTD/KZDC351
	(c) Optional Reference Data	Prohibited	
7	(a) Aircraft Identification This field must contain a 2 to 7 character identifier. Note: The domestic ERAS will not accept an aircraft identification that begins with a number.	Required	N123W UAL101 CGXWL
	Oblique Stroke	Prohibited	
	(b) Beacon Mode (c) Beacon Code	Prohibited Prohibited	
8	(a) Flight Rules	Required	I



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Field	Element	Required/ Optional/ Prohibited	Examples
	(b) Type of Flight	Optional for domestic flights; otherwise Required	S
9	(a) Number of Aircraft Include the number of aircraft, up to 99, if the number is greater than 1. If there is one aircraft, omit this element. If there are more than 99 aircraft, use 99.	Required if number of aircraft is 2 or more; otherwise Prohibited	3 11
	(b) Type of Aircraft Must be an approved type designator consistent with ICAO Doc. 8643. ICAO type designators are available at http://www.icao.int/anb/ais/8643/index.cfm . If there is no approved type designator for the aircraft, insert the characters ZZZZ and enter the aircraft type in Field 18 after "TYP/".	Required	C172 B753 ZZZZ
	(c) Wake Turbulence Category (WTC) Must match the WTC for the Field 9b Type of Aircraft as published in ICAO Doc. 8643; this information is available at http://www.icao.int/anb/ais/8643/index.cfm . <i>Note:</i> If ICAO and FAA standards differ, the user should file the ICAO standard for WTC indicator. <i>Note:</i> Use of a "J" for the Airbus 380 (type designator A388) is not defined in Doc. 4444 and the ERAS will not accept a "J" in Field 9c.	Required	H M L



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Field	Element	Required/ Optional/ Prohibited	Examples
10	<p>(a) Radio Communication, Navigation and Approach Aid Equipment and Capabilities</p> <p>Include capability per ICAO Doc. 4444, Appendix 3.</p> <p>Note: Codes which convey equipment capability may be listed in any sequence.</p> <p>Indicate PBN capability by filing “R” and describing the capability in PBN/ and NAV/ as described in Section 4 below. Note that filing an “R” without filing PBN/ will result in flight plan rejection.</p> <p>Indicate other navigation, communications, or data application capability by filing “Z” and describing the capability in NAV/, COM/, or DAT/ in Field 18. This should normally be done only per ANSP instruction.</p> <p>Note that filing a “Z” without filing NAV/, COM/, or DAT/ will result in flight plan rejection.</p> <p>The FAA instructions regarding when it is appropriate to file a particular capability are in Section 4.0</p>	Required	<p>SG</p> <p>SGHIRW</p> <p>SELJ2DGW</p> <p>SDGW</p>
	<p>(b) Surveillance Equipment</p> <p>Include capability per ICAO Doc. 4444, Appendix 3, as follows:</p> <ul style="list-style-type: none"> • One letter indicating the transponder capability, if any, followed by • A code for each ADS-B capability present, if any. File at most one code each for 1090ES, UAT, and VDL capabilities followed by • A code for each ADS-C capability present. <p>Note: FPLs indicating ADS-C capability in Field 10b should also contain Field 18, REG/ data.</p> <p>Indicate other surveillance capability by describing the capability in SUR/ in Field 18. This should normally be done only per ANSP instruction. The FAA requires information in SUR/ when ADS-B capability for UAT or 1090ES compliant with RTCA DO-282B or DO-260B is filed. (No entry is required for 260A or 282A equipment)</p>	Required	<p>C</p> <p>S</p> <p>E</p> <p>SB1G1</p> <p>SB1U2</p>



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Field	Element	Required/ Optional/ Prohibited	Examples
13	<p>(a) Departure Aerodrome</p> <p>File the location identifier (LOCID) of the departure point as listed in ICAO Doc. 7910,</p> <p><i>or</i></p> <p>If there is no Doc. 7910 location identifier, file a location identifier from FAA Order 7350.8 (at http://www.faa.gov/air_traffic/publications/) following the instructions in Section 1-4-1 of that order.</p> <p><i>or</i></p> <p>If the LOCID contains a number, if no LOCID is assigned or if the LOCID is not known:</p> <ul style="list-style-type: none"> • Insert “ZZZZ” in Item 13 and • Provide departure airport information in Item 18 by inserting “DEP/” followed by data described in Attachment 2, DEP/. <p>Note: The domestic ERAS does not accept “AFIL” in Field 13a.</p>	Required	KJFK KGAI ZZZZ
	<p>(b) Time</p> <p>Enter the Estimated Off-Block Time (EOBT)</p>	Required	1200 2230
15	<p>(a) Expected Cruise speed per ICAO Doc. 4444, Appendix 3.</p> <p>Note: The domestic ERAS will not accept metric speed (e.g., K0800). The Oceanic system in KZAK, KZWY, and PAZA will accept metric speed.</p> <p>Note: The speed filed in this Field should be the expected speed at the requested Initial Cruise Altitude filed in Field 15b below.</p>	Required	N0443 M081



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Field	Element	Required/ Optional/ Prohibited	Examples
	<p>(b) Requested Altitude per ICAO Doc. 4444, Appendix 3.</p> <p><i>Note:</i> The domestic ERAS will not accept metric altitude (e.g., M1400). The Oceanic system in KZAK, KZWY, and PAZA will accept metric altitude.</p> <p><i>Note:</i> Information in this Field should reflect the requested “Initial Cruise Altitude,” which is defined as the first planned en route altitude, determined without regard to intermediate level-offs due to airway, or airspace strata, or ATC departure procedures. This may be the final requested altitude, or an altitude associated with a filer planned step climb level-off.</p>	Required	F310 A070
	<p>(c) Route, IAW ICAO Doc. 4444, Appendix 3, with additions IAW Attachment 1, Route (Field 15) Additions.</p> <p><i>Note:</i> Speed and altitude changes in Field 15c are permitted, but are not part of the clearance per the Aeronautical Information Publication (AIP). The controller has limited ability to see such data.</p>	Required	See Attachment 1
16	<p>(a) Destination Aerodrome</p> <p>File the location identifier (LOCID) of the destination as listed in ICAO Doc. 7910,</p> <p><i>or</i></p> <p>If there is no Doc. 7910 location identifier, file a location identifier from FAA Order 7350.8 (at http://www.faa.gov/air_traffic/publications/) following the instructions in Section 1-4-1 of that order.</p> <p><i>or</i></p> <p>If the LOCID contains a number, no LOCID is assigned or the LOCID is not known:</p> <ul style="list-style-type: none"> • Insert “ZZZZ” in Item 16 and • Provide destination airport information in Item 18 by inserting “DEST/” followed by the data described in Attachment 2, DEST/. 	Required	KSFO KOUN ZZZZ



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Field	Element	Required/ Optional/ Prohibited	Examples
	<p>(b) Total Estimated Elapsed Time (EET) Enter the EET per ICAO Doc. 4444, Appendix 3.</p>	Required	0344
	<p>(c) Alternate Aerodrome File the location identifier (LOCID) of the alternate as listed in ICAO Doc. 7910, <i>or</i> If there is no Doc. 7910 location identifier, file a location identifier from FAA Order 7350.8 (at http://www.faa.gov/air_traffic/publications/) following the instructions in Section 1-4-1 of that order. <i>or</i> If the LOCID contains a number, no LOCID is assigned or the LOCID is not known:</p> <ul style="list-style-type: none"> • Insert “ZZZZ” in Item 16 and • Provide alternate airport information in Item 18 by inserting “ALTN/” followed by the data described in Attachment 2, ALTN/. <p>Note: ERAS stores this data but performs no processing of it.</p>	Optional	KLAS KGAI ZZZZ
18	<p>Other Information IAW ICAO Doc. 4444, Appendix 3, with additions IAW Attachment 2, Other Information (Item 18) Additions. Note: If there is no information in Item 18, insert “-0” (single hyphen with a zero) IAW ICAO Doc 4444. For detailed instructions, see Attachment 2.</p>	Required	-0 -EET/ CZY20201 KZOB0624 KZID0659 RMK/NRP ADCUS
19	<p>ERAS will reject an FPL which includes Field 19. Note: Use of a hyphen within Field 18 will be interpreted as the beginning of Field 19 data and will cause rejection of the FPL.</p>	Prohibited	



3.6.2 Examples of ACK Messages

3.6.2.1 ACK for FPL with Optional Message Number – ACK to Optional NADIN address vice FPF/AFTN address

US Airways (AFTN address KTULUSAD) filed for America West (NADIN address AWE). ACK or REJ response will be sent to NADIN address AWE, not AFTN address KTULUSAD. The complete rules for routing responses are as follows:

1. AFTN originator address must be adapted as answerable in the receiving center, or no response is provided.
2. If optional NADIN address in ICAO Field 03b is not adapted or not present, response is sent to AFTN originator.
3. If optional NADIN address is present in Field 03b and is adapted, response is sent to that address.

Input from US Airways

FF KZDCZQZX
231411 **KTULUSAD**
(FPLAWE/KZDC004-AWE603-IS
-A319/M-SDIW/C
-KBWI1230
-N0291F090 SWANN3 SWANN V214 DQO DCT
-KPHL0017
-RMK/DVRSN)

Output to AWE (Adapted in NADIN as KPHXAWED)

ACK FPL/004 KZDC AWE603 KBWI 1230 KPHL



3.6 ACK Responses

There are no ACK messages defined in ICAO Doc. 4444 that allow a receiving ATS unit to respond to flight planning messages filed without message numbers. FAA has therefore defined ACK message responses, as outlined in Table 3-6-1. Domestic ERAS systems 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:

Table 3-6-1 ACK Message Composition

Field	Element	Required/ Optional/ Prohibited	Examples
n/a	Message Type	Required	ACK

Field	Element	Required/ Optional/ Prohibited	Examples
n/a	Single space character	Required	
03	(a) Message Type Designator (FPL, CNL, CHG, DLA) of the message being responded to	Required	FPL CHG
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

Note: If the three-letter NADIN address (Field 3b) is not adapted or not filed, response will be sent to the AFTN originator address.



3.7 REJ Response

FAA has defined REJ message responses, as outlined in Table 3-7-1. A table defining acronyms used in reject messages can be found in section 5.1. Domestic ERAS systems support use of

REJ responses to FPL, CHG, DLA and CNL messages. If ERAS identifies errors in the processing of a message, a REJ message will be provided in the following format:

Table 3-7-1 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 CHG
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 and Host
n/a	Input message identification:	Required	CNL-DAL1964-KDCA2125-KLGA (Entire input message)

Note: If the three-letter NADIN address (Field 3b) is not adapted or not filed, response will be sent to the AFTN originator address.

3.7.1 Examples of REJ Messages



3.7.1.1 REJ for invalid FPL

Field 15a (Cruising Speed) is invalid due to an illegal prefix (K). The REJ identifies the element and data in error, and provides the entire contents of the erroneous incoming message.

Input from Leesburg Flight Service Station

FF KZDCZQZX

101214 KZDCAVBXX

(FPLDCA/KZDC015-N57FC-IG

-C500/L-SDGWZ/C

-KDAN1530

-**K0300**F210 DCT FVX DCT

-KCHO0020

-PBN/A1B2B3 NAV/RNVE99 RMK/PTP PATTERN WORK IRMK/FRC)

Output to DCA

REJ FPL/015 KZDC **SPD K0300F210 DCT FVX DCT FORMAT**

FPLDCA/KZDC015-N57FC-IG-C500/L-SDGWZ/C-KDAN1530-K0300F210 DCT FVX DCT-

KCHO0020-PBN/A1B2B3 NAV/RNVE99 RMK/PTP PATTERN WORK IRMK/FRC)

3.7.1.2 REJ of CNL with Multiple Flight Plans

An Optional Message Number was not included in the CNL. The CNL will be rejected if more than one FPL exists with the same ACID, departure airport, EOBT and destination airport.

Input from Delta Airlines

FF KZDCZQZX

231411 KATLDALW

(CNL-DAL1964-KDCA2125-KLGA-0)

Output to KATLDALW

REJ CNL KZDC **MULTIPLE FLIGHT PLANS MANUAL COORDINATION REQUIRED**

CNL-DAL1964-KDCA2125-KLGA-0



Conclusion

- Harmonization of flight plan filing supports safety objectives through standardization and promotes regional economic efficiencies. A harmonized system can support flight plan filing by allowing air traffic within the region and to know what the conventions are supported by which FIRs.
- Standardized flight plan filing not only extends the knowledge of our member states process recurring filing issues.
- Standardization of flight planning provides support for our AIDC technologies and implementation and is critical to cross-border, regional and multi-regional interoperability. This, in turn, drives the seamless operation of regional and global systems.

