

**En Route and Oceanic Services
Aeronautical Information and Flight Planning Enhancements**

FAA ICAO Flight Planning Interface Reference Guide

Version 1.2



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Change Description	Action	Date	Version
Initial Release		12/20/07	1.1
<ul style="list-style-type: none"> • Add change table; • Change EET/ data filing instructions for flights remaining entirely within U.S. domestic airspace 	<ul style="list-style-type: none"> • Insert table on pg. 3; • Replace Section 2.1.1, para. 2, with new para. 	1/15/08	1.2

1. Introduction

1.1 Scope

This document provides references for filing domestic International Civil Aviation Organization (ICAO) Filed Flight Plans (FPL) and associated flight planning. 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) 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, accompanied by [Acceptance/Rejection of Domestic ICAO Messages](#), provides instructions for filing ICAO flight planning messages within ERAS to ensure 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 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).

1.2 Background

The ability to fly a performance based navigation route depends on both the equipment of the aircraft and the capability of the crew. The availability of a performance based navigation route depends on current airspace configuration and compatibility of the route with current Air Traffic Control (ATC) configuration and procedures.

The current ERAS uses Domestic Flight Plan (FAA Form 7233-1), Field 3, Special Equipment, to determine a flight's eligibility for performance based navigation routing, but this method results in problems such as:

1. Incorrect assumptions may be made about flights filing Global Positioning System or Required Navigation Performance (RNP) with respect to Area Navigation (RNAV)-1 capability; and
2. FAA-unique equipment qualifiers cannot always be accurately translated; which is an issue for flights which traverse another country's airspace (one that follows ICAO conventions) and subsequently reenters U.S. domestic airspace, resulting in loss of information when the flight re-enters U.S. airspace.

FAA is resolving these issues by requiring an ICAO-format FPL to be filed, which accurately specifies performance based navigation capability and is compatible with ICAO standards. In addition, the implemented solution will improve the ability of the user to control the type of departure and arrival route assigned by ERAS. This will be done by providing the means to specify performance based navigation capability by phase of flight in an FPL, and adapting preferential routes to assign routes based on performance based navigation capability.

1.3 FAA FPL Services

FAA FPL services include the ability to:

1. File an FPL;
2. Make modifications to that FPL up to a set time before departure; and
3. Cancel a previously filed FPL.

Facilities adapted within ERAS will receive acknowledgement messages (i.e., acceptance (ACK) and/or rejection (REJ)) for each flight planning message sent to ERAS.

1.4 Document Organization

Section 2 describes the expected operational use of FPL messages, including rules and limitations for use, expected responses and use by ATC.

Section 3 describes the format and content accepted by the ERAS for each type of flight planning message and its associated fields.

Section 4 identifies FAA and ICAO documents, defines terms and acronyms, and provides detailed reference material for field content.

Section 5 provides suggested guidelines for user flight planning interfaces.

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 remains entirely within U.S. domestic airspace and the flight desires automatic 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 be discarded or rejected by those ARTCCs.

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

Note: U.S. domestic airspace does not include any foreign or international airspace (this includes 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 route of 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 those 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 return portion of the flight should be handled per Section 2.1.3, below.

2.1.3 Flights Entering U.S. Domestic Airspace

An FPL is required when entering U.S. domestic airspace.

If a flight enters U.S. domestic airspace through one of the following FIRs, file an FPL with EET/ data with the first FIR in this list along the route of flight:

1. Miami FIR;
2. New York Oceanic FIR; and
3. Oakland Oceanic FIR.

An FPL filed from North American (Canada or Mexico) into Domestic U.S. airspace can file with the first domestic entry ARTCC. FPLs filed with any other U.S. domestic ARTCCs along the route may be discarded or rejected by those ARTCCs.

2.1.4 Addressing an FPL Message

AFTN addresses for sending FPLs to ERAS are documented in ICAO Doc. 8585, Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services.

2.2 Identifying a Flight in an FPL

2.2.1 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: 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.

2.2.2 Optional Message Number

FAA allows use of an Optional Message Number in Item 3, Field 3b, for routing of ACK/REJ messages. When provided, this Optional Message Number allows ERAS to distinguish between multiple flights with the same aircraft identification, departure point and destination. Field 3b shall include:

1. The three-letter National Data Interchange Network (NADIN) address where the filer would like the ACK/REJ message sent, followed by an oblique stroke (XXX/);
2. The four-letter location identifier (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).

Example: AWE/KZHU004 is message #004 addressed to Houston ARTCC with ACK to America West

2.2.3 FPLs with the Same Aircraft Identification

Two or more FPLs filed to the same ARTCC with the same aircraft identification are called duplicate flight plans. There are several situations where this might arise, and in some cases, ERAS can accept such FPLs. The rules are summarized in Table 2-2-1.

Table 2-2-1. Duplicate Flight Plan Rules

Scenario	Recommendations	Issues
Flight with multiple stopovers	File each leg of the flight 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	Do not file an FPL with the same departure, destination and departure time. Send a CNL message for the original FPL prior to filing a new FPL with the same aircraft identification.	If departure, destination, departure time and route are identical, subsequent FPLs will be rejected. 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 an addition to ATC workload to manage the multiple proposals.
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).	No issues.

2.3 Changing an FPL after Filing

2.3.1 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 change message is sent after the departure flight data has been displayed to ATC, the message will be rejected. If this occurs, call Flight Data at the departure ARTCC to coordinate the change.

2.3.2 Identifying an FPL to be Changed

When submitting a change message (DLA, CNL, or CHG) the FPL to be changed 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)
4. Destination Aerodrome (Field 16a)

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 change message 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 Fields 13b (Departure Time) or 16b (Total EET).

2.3.3 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 [Acceptance/Rejection of Domestic ICAO Messages](#) and Sections 3.3 through 3.5, below.

- Send a Modification (CHG) message to change FPL data other than the proposed departure time.
- Send a Delay (DLA) message to change a proposed departure time; do not use a CHG message.
- 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 other than those allowed (e.g., Field 19) or the message will be rejected.

3. ERAS accepts and processes the following messages:
 - a. FPL;
 - b. CHG;
 - c. DLA; and
 - d. CNL.

3.1.3 Message Content

Message content accepted by ERAS is per ICAO Doc. 4444, Appendix 3, except as noted in Sections 3.2 through 3.5. The content for response messages (ACK or REJ) sent from the ERAS is per Section 3.6. There are no corresponding ICAO message definitions in Doc. 4444 for these ACK/REJ messages.

3.2 Filed Flight Plan (FPL) Message

3.2.1 FPL Contents

FAA generally follows ICAO Doc. 4444 with regard to 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: 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: ERAS will not accept an aircraft identification that begins with a number.	Required	N123W UAL101 CGXWL
	Oblique Stroke (b) Beacon Mode (c) Beacon Code	Prohibited Prohibited Prohibited	
8	(a) Flight Rules	Required	I
	(b) Type of Flight	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

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Field	Element	Required/ Optional/ Prohibited	Examples
	<p>(b) Type of Aircraft</p> <p>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.</p> <p>If there is no approved type designator for the aircraft, insert the characters ZZZZ and enter the aircraft type in Field 18 after "TYP".</p>	Required	C172 B753 ZZZZ
	<p>(c) Wake Turbulence Category (WTC)</p> <p>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.</p> <p>Note: If ICAO and FAA standards differ, the user should file the ICAO standard for WTC indicator.</p>	Required	H M L
10	<p>(a) Radio Communication, Navigation and Approach Aid Equipment</p> <p>Include capability per ICAO Doc. 4444, Appendix 3.</p> <p>Note: Doc. 4444 allows some letters to be prescribed by individual ATS units; FAA requirements are as follows:</p> <p>S: FAA assumes VHF RTF, ADF, VOR and ILS (consistent with Doc. 4444)</p> <p>R: Oceanic ATC assumes RNP10 capability.</p> <p>Domestic ATC assumes RNP/RNAV capability exists, but uses data after "NAV/" in Field 18 to determine the level of capability.</p> <p>W: FAA assumes RVSM capability.</p> <p>X: FAA assumes Minimum Navigational Performance Specification (MNPS) capability</p> <p>Y: FAA does not associate any capability with Y, though FAA will accept and pass a Y that is filed.</p> <p>Any letters not assigned by ICAO Doc. 4444 are accepted by ERAS, but no capability is associated with them.</p> <p>Note: Letters which convey equipment capability may be listed in any sequence.</p>	Required	SG/C SGHIRW/S
	<p>(b) Surveillance Equipment</p> <p>Include capability per ICAO Doc. 4444, Appendix 3.</p>	Required	

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Field	Element	Required/ Optional/ Prohibited	Examples
13	<p>(a) Departure Aerodrome</p> <p>File a 4-letter LOCID whenever available, IAW FAAO 7350.7, Location Identifiers, Section 6, Assignment Listing</p> <p><i>or</i></p> <p>Convert a 3-letter LOCID by prepending a “K, IAW FAAO 7350.7, Section 1-4-1, Use of Location Indicators</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 13 and • Provide the name of the airport in Item 18 by inserting “DEP/” followed by the LOCID or name of the departure airport. <p>Note: ERAS does not accept “AFIL” in Field 13a.</p>	Required	KJFK KGAI ZZZZ
	<p>(b) Time</p> <p>Enter the Proposed Departure Time</p>		
15	<p>(a) Expected Cruise speed per ICAO Doc. 4444, Appendix 3.</p> <p>Note: Except in Ocean21, ERAS will not accept metric speed (e.g., K0800).</p>	Required	N0443 M081
	<p>(b) Requested Altitude per ICAO Doc. 4444, Appendix 3.</p> <p>Note: Except in Ocean21, ERAS will not accept metric altitude (e.g., M1400).</p>	Required	F310
	<p>(c) Route, IAW ICAO Doc. 4444, Appendix 3, with additions IAW Attachment 1, Route (Field 15) Additions.</p> <p>Note: 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	
16	<p>(a) Destination Aerodrome</p> <p>File a 4-letter LOCID whenever available IAW FAAO 7350.7</p> <p><i>or</i></p> <p>Convert a 3-letter LOCID by prepending a “K” IAW FAAO 7350.7</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 13 and • Provide the name of the airport in Item 18 by inserting “DEST/” followed by the LOCID or name of the departure airport. 	Required	KSFO KOUN ZZZZ

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Field	Element	Required/ Optional/ Prohibited	Examples
	(b) Total Estimated Elapsed Time (EET) Enter the EET per ICAO Doc. 4444, Appendix 3.	Required	
	(c) Alternate Aerodrome File a 4-letter LOCID whenever available IAW FAAO 7350.7 <i>or</i> Convert a 3-letter LOCID by prepending a “K” IAW FAAO 7350.7 <i>or</i> If the LOCID contains a number, no LOCID is assigned or the LOCID is not known: <ul style="list-style-type: none"> • Insert “ZZZZ” in Item 13 and • Provide the name of the airport in Item 18 by inserting “ALTN/” followed by the LOCID or name of the departure airport. <i>Note:</i> ERAS stores this data but performs no processing of it.	Optional	KLAS KGAI ZZZZ
18	Other Information IAW ICAO Doc. 4444, Appendix 3, with additions IAW Attachment 2, Other Information (Item 18) Additions. <i>Note:</i> If there is no information in Item 18, insert “-0” (single hyphen with a zero) IAW ICAO Doc 4444.	Required	-0 -RMK/NRP ADCUS EET/KZNY0624 KZID0659
19	ERAS will reject an FPL which includes Field 19.	Prohibited	

3.2.2 FPL Examples

Following are examples of FPLs. Additional examples can be found in [Acceptance/Rejection of Domestic ICAO Messages](#).

3.2.3 Flight Capable of RNAV 1 which Remains Entirely within U.S. Domestic Airspace

```
(FPL-UAL1447-IS
-A320/M-SDGIRWZ/S
-KIAD2130
-N0360F360 DCT DAILY J61 HUBBS DCT KEMPR DCT ILM
AR21 CRANS FISEL2
-KFLL0206
-NAV/RNVD1E2A1)
```

3.2.4 Flight which Remains Entirely within U.S. Domestic Airspace, Destination LOCID contains a number

```
(FPL-TST101-IG
```

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-C172/L-SD/C
-KFDK1025
-N0110F080 DCT EMI DCT TAFFI DCT
-ZZZZ0026
-DEST/MD31)

3.2.5 Flight Leaving U.S. Domestic Airspace

(FPL-AAL945-IS
-B763/H-SXWDHIRY/S
-KDFW0210
-N0473F330 JPOOL9 BILEE J87 IAH DCT VUH B753 MARTE UB753 BZE
DCT LIB UG436 LIXAS/N0465F370 UG436 TRU UL780 SULNA DCT TOY
UW208 EMBAL BAYOS3
-SCEL0902 SAEZ
-EET/MMID0114 SEGU0417 SPIM0455
MOXES0623 SCFZ0655 LIVOR0742 SCEZ0810
SEL/KLPS REG/N396AN)

3.2.6 Flight Entering U.S. Domestic Airspace, EET data for 1st U.S. FIR, only

(FPL-AAL946-IS
-B763/H-SXWDHIRY/S
-SCEL0140
-N0473F310 ELBOS2 VTN DCT TOY UL302 LIM UG436 TRU UG436 TAL
UG436 RADIM/N0471F350 UG436 LIB DCT BZE UB753 MID B753 VUH DCT
CQY CQY5
-KDFW0928 KDAL
-EET/SCFZ0049 SPIM0210 SEGU0411 MHTG0449 MMID0706 KZHU0801 SEL/APGQ
REG/N371AA)

3.3 Modification (CHG) Message

The CHG message is used to change flight data previously filed in an FPL, except for the proposed departure time. Use the DLA message to change the proposed departure time (see Section 3.4, DLA Message, below). There are a number of rules for acceptable CHG messages, including:

1. The CHG must originate from the same source as the FPL.
2. A CHG can modify any of Fields 7, 8, 9, 10, 13, 15, 16 or 18.
3. A CHG cannot modify the same Field more than once in the same message.
4. If the aircraft identification (Field 7) is changed, it must be the only Field changed.
5. If Field 13a or 16a is changed, make sure the original departure or destination is included in Fields 13a and 16a, and the new departure or destination is included in Field 22 of the CHG.
6. If Field 13 or 16 is modified to contain "ZZZZ", a corresponding Field 18 entry following DEP/ or DEST/, as appropriate, must also be included.
7. If Field 13 or 16 is modified, Field 15 must also be included in the message.
If Field 15c is modified, always include Field 13 and 16 in the message.

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Note: Fields 7, 13 and 16 in the CHG message must contain the entered information from the original FPL *before* the modification contained in Field 22.

3.3.1 CHG Contents

FAA generally follows ICAO Doc. 4444 with regard to CHG message construction. Table 3-3-1 provides instructions which address FAA-specific content requirements, limitations and exceptions.

Table 3-3-1. CHG Instructions

Field	Element	Required/ Optional/ Prohibited	Examples
3	(a) Message Type Designator	Required	CHG
	(b) Optional Message Number When included: 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 When included, the Optional Reference Data should match the Optional Message Number (Field 3b) of the FPL message being modified by the CHG.	Optional	NTD/KZDC347
7	(a) Aircraft Identification This field must contain the 2 to 7 character aircraft identification that matches the FPL previously sent.	Required	N123W AWE101
	Oblique Stroke	Prohibited	
	(b) Beacon Mode (c) Beacon Code	Prohibited Prohibited	
13	(a) Departure Airport LOCID that matches the LOCID previously sent. <i>Note:</i> ERAS does not accept “AFIL” in Field 13a.	Required	KJFK ZZZZ KOUN
	(b) Time <i>Note:</i> Use a DLA message to change the time.	Prohibited	
16	(a) Destination Airport LOCID that matches the LOCID previously sent.	Required	KMIA KGAI ZZZZ
	(b) Time of Arrival	Prohibited	

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Field	Element	Required/ Optional/ Prohibited	Examples
	(c) Alternate Airport	Prohibited	
22	(a) Field Indicator The 1 to 2 digit number identifying the field to be modified.	Required	13
	Oblique stroke	Required	/
	(b) Amended Data Complete new contents of the field, per the specifications for that field. Always include the entire field contents, including elements that did not change.	Required	<i>Field 13 example: KJFK1200 Field 8 example: IS</i>

3.3.2 CHG Examples

Following are examples of CHG messages. Additional examples can be found [Acceptance/Rejection of Domestic ICAO Messages](#).

Always include Fields 13 and 16 in a CHG message as they were before the change. In the following example, the original Departure Aerodrome was KJFK, and the new Departure Aerodrome is KLGA:

```
(CHG-TST001-KJFK-KBOS-13/KLGA1200-15/DCT MERIT DCT ORW ORW3
16/KBOS0028)
```

In the next example, the equipment information is being changed:

```
(CHG-TST102-KFDK-ZZZZ-10/SDG/C)
```

3.4 Delay (DLA) Message

The DLA message is used to change the proposed departure time of a previously filed FPL.

3.4.1 DLA Contents

FAA generally follows ICAO Doc. 4444 with regard to DLA message construction. Table 3-4-1 provides instructions which address FAA-specific content requirements, limitations and exceptions.

Table 3-4-1. DLA Instructions

Field	Element	Required/ Optional/ Prohibited	Examples
03	(a) Message Type Designator	Required	DLA

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Field	Element	Required/ Optional/ Prohibited	Examples
	(b) Optional Message Number When included: 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 When included, the Optional Reference Data should match the Optional Message Number (Field 3b) of the FPL message being modified by the DLA.	Optional	NTD/KZLA347
07	(a) Aircraft Identification This field must contain the 2 to 7 character aircraft identification that matches the FPL previously sent.	Required	N123W DAL32
	Oblique Stroke	Prohibited	
	(b) Beacon Mode (c) Beacon Code	Prohibited Prohibited	
13	(a) Departure Airport LOCID that matches the LOCID previously sent. <i>Note:</i> ERAS does not accept “AFIL” in Field 13a.	Required	KORD KFNB ZZZZ
	(b) Time The revised proposed time of departure.	Required	
16	(a) Destination Airport LOCID that matches the LOCID previously sent.	Required	KLAX ZZZZ KTLH
	(b) Time of Arrival	Prohibited	
	(c) Alternate Airport	Prohibited	

3.4.2 DLA Examples

Following is an example of a DLA message with no message numbers. Additional examples can be found [Acceptance/Rejection of Domestic ICAO Messages](#).

(DLA-TST003-KBOS1230-KIAD)

3.5 Cancellation (CNL) Message

The CNL message is used to cancel a previously filed FPL.

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3.5.1 CNL Contents

FAA generally follows ICAO Doc. 4444 with regard to CNL message construction. Table 3-5-1 provides instructions which address FAA-specific content requirements, limitations and exceptions.

Table 3-5-1. CNL Instructions

Field	Element	Required/ Optional/ Prohibited	Examples
3	(a) Message Type Designator	Required	CNL
	(b) Optional Message Number When included: 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	OLU/KZLC351
	(c) Optional Reference Data When included, the Optional Reference Data should match the Optional Message Number (Field 3b) of the FPL message being modified by the CNL.	Optional	POP/KZMA347
7	(a) Aircraft Identification This field must contain the 2 to 7 character aircraft identification that matches the FPL previously sent.	Required	N657WT HAL201
	Oblique Stroke	Prohibited	
	(b) Beacon Mode (c) Beacon Code	Prohibited Prohibited	
13	(a) Departure Airport LOCID that matches the LOCID previously sent. <i>Note:</i> ERAS does not accept “AFIL” in Field 13a.	Required	KSTL KMSY ZZZZ
	(b) Time The proposed departure time previously sent.	Prohibited	
16	(a) Destination Airport LOCID that matches the LOCID previously sent.	Required	KLAS KSUX ZZZZ
	(b) Time of Arrival	Prohibited	
	(c) Alternate Airport	Prohibited	

3.5.2 CNL Examples

Following are examples of a CNL messages. Additional examples can be found in [Acceptance/Rejection of Domestic ICAO Messages](#).

This is an example of a CNL with no Optional Message Number:

(CNL-TST004-KJFK-KMSP)

This is an example using Optional Reference Data (Field 3c), assuming the original FPL had an Optional Message Number (Field 3b) of ISP/KZNY025:

(CNLISP/KZNY037ISP/KZNY025-TST005-KLGA-KDEN)

3.6 ACK and REJ 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 and REJ message responses, as outlined in [Acceptance/Rejection of Domestic ICAO Messages](#).

4. RNAV in U.S. Domestic Airspace

There are currently two (2) types of RNAV capability used in U.S domestic airspace:

- RNAV 1 and/or RNAV 2 capability IAW [Advisory Circular \(AC\) 90-100A, U.S. Terminal and En Route Area Navigation \(RNAV\) Operations](#) is required for assignment of RNAV Standard Instrument Departures (SID) and Standard Terminal Arrival Routes (STAR).
- Point to Point (PTP) capability IAW [AC 90-45A, Approval of Area Navigation Systems for Use in the U.S. National Airspace System](#) is required for assignment of RNAV PTP routes.

4.1.1 Filing Requirements for Assignment of RNAV Routes

Guidance on information required by ERAS for automatic assignment of RNAV SIDs, RNAV Stars and/or RNAV PTP is found in [Filing Requirements for Assignment of RNAV Routes](#).

4.1.2 General Specification of RNAV Capability

For implementers of the interface, this section documents the complete specification of RNAV format. It shows extensibility to potential future use of other levels of RNAV capability, (e.g. RNAV-0.3).

To file the RNAV level for each phase of flight, follow the following instructions:

1. File the appropriate equipment in ICAO Field 10, including a Z.
2. Insert NAV/ in ICAO Item 18.
Note: File only one NAV/ indicator; ERAS will reject an FPL with more than one NAV/ indicator.
3. Insert the letters “RNV” after NAV/.
 - a. RNAV capability can be specified anywhere following the NAV/ indicator (i.e., order is not important).
 - b. Separate the RNAV capability specification from other NAV/ information with a blank
Example: NAV/TCAS EQUIPPED RNVD1A1E2 JRNAV
 - c. A space is allowed but not required after NAV/ (e.g. NAV/RNVD1 and NAV/ RNVD1 are both acceptable).
4. For each phase of flight for which an RNAV capability is to be specified, insert the letter representing the phase of flight followed by the RNAV level.

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- a. ERAS will process the following letters indicating phase of flight: “D” for departure, “E” for en route and “A” for arrival.
- b. ERAS will accept, but not process, the following reserved letters: “G”, “L” and “S”.
5. After each letter insert a number from 0 to 99.99 to indicate the RNAV level in one of the following formats:
 - a. An integer (e.g., RNVD1).
 - b. An integer followed by a decimal point and one or two integers (e.g., RNVE1.5 or RNVD0.33).

Note: Do not use a decimal point without a following number.

 - c. If the RNAV level is less than one, include a leading zero (e.g., RNVD0.3).
 - d. If an RNAV level of zero is filed then the system will assume no RNAV capability exists for that phase of flight (e.g., RNVA0 or RNVA0.0).
6. Do not include any spaces within the RNAV capability specification (e.g., RNVD0.3E1.5)

Examples of valid RNAV filing:

```
NAV/RNVD0.33E2
NAV/ RNVD1
NAV/TCAS EQUIPPED RNVE4D0.3 JRNAV AUSEP RNP4
NAV/RNP4 RNVA1
```

Examples of invalid RNAV filing (ERAS will assume no RNAV capability):

```
NAV/RNVD0.333      Invalid number (0.333)
NAV/RNV G4         Processing stops when a space is encountered.
NAV/ DRNVE2        String does not START with RNV
NAV/ RNVV2         Letter “V” is not a valid RNV designator
```

5. Reference Material

5.1 Acronyms

The following acronyms are used throughout this Reference Guide.

Table 5-1. Acronyms

Term	Description
AC	Advisory Circular
ACK	Acknowledgement Message
AFTN	Aeronautical Fixed Telecommunications Network
AIP	Aeronautical Information Publication
ARTCC	Air Route Traffic Control Center
ATC	Air Traffic Control
ATS	Air Traffic Service
CHG	Modification Message

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Term	Description
CNL	Cancellation Message
DLA	Delay Message
EET	Estimated Elapsed Time
ERAS	En Route Automation System
FAA	Federal Aviation Administration
FAAO	FAA Order
FIR	Flight Information Region
FP	Domestic Flight Plan IAW FAA Form 7233-1 (non-ICAO)
FPL	Filed Flight Plan
IAW	In Accordance With
ICAO	International Civil Aviation Organization
LOCID	Location Identifier
NADIN	National Data Interchange Network
NAS	National Airspace System
NAVAID	Navigational Aid
NM	Nautical Mile(s)
PTP	Point-to-Point
REJ	Rejection Message
RNAV	Area Navigation
RNP	Required Navigation Performance
SID	Standard Instrument Departure
STAR	Standard Terminal Arrival Route
VOR	VHF (Very High Frequency) Omni directional Range

5.2 References

The following are references for information in this Reference Guide.

Table 5-2. References

Reference	Relevancy to ICAO FPL filing:	Internet Availability
ICAO Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM), Document 4444	Describes ICAO standards for FPL, CHG, DLA, and CNL messages and their use.	http://www.icao.int

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Reference	Relevancy to ICAO FPL filing:	Internet Availability
Aeronautical Information Publication (AIP)	Describes FAA exceptions to ICAO Doc. 4444. Describes when FAA expects a legacy domestic format or ICAO-format FPL to be used.	http://www.faa.gov/atpubs/
International Flight Information Manual (IFIM)	Provides instructions for completing FAA Form 7233-4, International Flight Plan.	http://www.faa.gov/ats/aat/ifim/
Aeronautical Information Manual (AIM)	Describes basic flight information and ATC procedures for use in the U.S. National Airspace System.	http://www.faa.gov/atpubs/
FAAO 7210.3, Facility Operation and Administration	Describes the Air Carrier Interface Program for filing domestic format FPLs over NADIN.	http://www.faa.gov/atpubs/
FAAO 7110.10, Flight Services	Describes addressing instructions for sending an ICAO message to ERAS over AFTN/NADIN. Describes use of ICAO messages over NADIN.	http://www.faa.gov/atpubs/
FAAO 7350.7, Location Identifiers	Defines valid fix identifiers for NAVAIDs, waypoints, intersections, etc., which can be filed in FPLs.	http://www.faa.gov/atpubs/

Attachment 1. Route (Field 15) Additions

1. Field 15b – Level

Some non-ICAO altitude formats are permissible entries in Field 15b for FPLs with routes of flight entirely in U.S. domestic airspace. These are described in [Guidelines for use of ICAO Messages for Domestic Flights](#). Do not use these formats in an International FPL.

2. Field 15c – Route

Some non-ICAO route elements are permissible in Field 15c for FPLs with routes of flight entirely in U.S. domestic airspace. These are described in [Guidelines for use of ICAO Messages for Domestic Flights](#). Do not use these formats in an International FPL.

Most U.S. domestic DPs have a coded designator published in a [Terminal Procedure Publication](#). Include the coded designator, if one exists, as the first element in Field 15c.

[Reserved for information on Route-to-Route Transition]

a. Field 15c1 – ATS route

File published ATS Route designators in Field 15c1 of an FPL.

b. Field 15c2 – Significant point

A significant point can be expressed in any of the following formats:

- Fix or NAVAID ID: 2-5 character ID as published in FAAO 7350.7. ERAS checks both the format and validity of a Fix or NAVAID ID within 50 nautical miles (NM) of U.S. domestic airspace; outside of this airspace only the format of the ID is checked.
- Fix Radial Distance: 2-5 character Fix or NAVAID IDs, followed by a three digit direction in degrees magnetic, followed by 3 digits in NM.

Note: ICAO Doc. 4444 allows only a 2-3 character Fix or NAVAID ID in Field 15c3. Do not use a 4 or 5 character Fix or NAVAID ID in an International FPL.

- Latitude/Longitude (Lat/Long)
 - 2 digits Lat. in degrees, followed by N or S, followed by 3 digits Long. in degrees, followed by E or W.
 - 4 digits Lat. in degrees and minutes, followed by N or S, followed by 5 digits Long. in degrees and minutes, followed by E or W.

Note: ERAS accepts a different Lat/Long format for non-ICAO domestic flight plans (e.g., ddN/dddW, dd/ddd). Do not use that format in an FPL.

c. Field 15c3 – Change of speed or level

Entries in Field 15c3 for change of speed or level at a point are accepted by ERAS but not processed. Be aware of the caution in the AIP, En Route, paragraph 31.6, which reads:

31.6 “Cleared to (destination) airport as filed” does NOT include the en route altitude filed in a flight plan. An en route altitude will be stated in the clearance or the pilot will be advised to expect an assigned/filed altitude within a given time frame or at a certain point after departure. This may be done verbally in the departure instructions or stated in the DP.”

d. Field 15c4 – Change of flight rules (Composite Flights)

ERAS will not accept an FPL containing “IFR” in a route portion within U.S. domestic airspace in Field 15c. If you plan to change flight rules within U.S. domestic airspace during your flight (i.e., VFR then IFR, or IFR then VFR), ensure you file the VFR portion of the flight IAW [FAAO 7110.10](#) and the IFR portion of your flight IAW this document.

NOTE: ERAS accepts “IFR” if included a route portion outside of U.S. domestic airspace.

NOTE: While ERAS does not accept metric speed and altitude in Fields 15a and 15b, they are accepted in Field 15c4.

e. Field 15c5 – Cruise Climb

ERAS will accept an FPL containing a cruise climb request if the climb is outside of U.S. domestic airspace. FAA does not provide for cruise climb clearances in U.S. domestic airspace.

Attachment 2. Other Information (Item 18) Additions

ERAS accepts all Item 18 indicators defined in ICAO Doc. 4444 in any order. Any indicator not defined in ICAO Doc. 4444 may be accepted but not passed to other Air Navigation Service Provider automation systems. If an unrecognized indicator is included, ERAS will treat it as free text that is part of the last recognized indicator. There is no limit to the amount of text after each indicator, though there is an overall size limit of approximately 3,000 characters for the entire FPL.

Table 2-1 outlines rules for ERAS acceptance of each ICAO-defined indicator.

- The first column lists the indicators.
- The second column describes how ERAS processes the information after each indicator and any special rules for the information.
- The third column specifies whether the indicator can be entered into Item 18 more than once.
 - If “No” is specified, ERAS will reject the FPL if the indicator is entered more than once.
 - If “Multiple” is specified, ERAS will allow more than one instance of the indicator in the FPL.
- The fourth column describes when ERAS requires an indicator to be filed.
- The fifth column provides examples for each indicator.

Table 2-1. ERAS Rules for Acceptance of ICAO Item 18 Indicators

Indicator	Content Processing	> One instance allowed?	When Required by FAA	Examples
EET/	Information after EET/ must contain the FIR name of the ARTCC to which the FPL is sent.	No	IAW Section 2.1, Initial FPL Filing, above.	EET/ABCD1234
RIF/	ERAS treats this data as free text.	Yes	Never	RIF/ESP G94 CLA APPH
REG/	ERAS treats this data as free text.	No	Never	REG/N23721
SEL/	ERAS treats this data as free text.	No	Never	SEL/CKAS
OPR/	ERAS treats this data as free text.	No	Never	OPR/AIR CANADA
STS/	ERAS treats this data as free text.	Yes	Never	STS/STATE
TYP/	ERAS treats this data as free text.	No	Never	TYP/EXPERIMENTAL TYP/2F16 2KC135
PER/	ERAS treats this data as free text.	Yes	Never	PER/C PER/M078
COM/	ERAS treats this data as free text.	Yes	Never	COM/SATCOM

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Indicator	Content Processing	> One instance allowed?	When Required by FAA	Examples
DAT/	ERAS treats this data as free text.	No	Never	DAT/V DAT/SV
NAV/	ERAS will examine the data for occurrence of RNV data for automatic assignment of RNAV routes IAW Filing Requirements for Assignment of RNAV Routes .	Yes	Required with RNV data if RNAV routing is desired	NAV/RNP4 NAV/RNAV1 RNP10 RNVD1E2A1 NAV/RNVE99
DEP/	If ZZZZ is filed in Field 13, ERAS will process the 1 st data string following DEP/ as the 1 st element in the route. Follow LOCID instructions in Table 3-2-1, Field 13, above.	No	Required if ZZZZ is filed in Field 13	DEP/S20 DEP/MD21 DEP/JACOX DEP/ERI090012
DEST/	If ZZZZ is filed in Field 16, ERAS will process the 1 st data string following DEST/ as the last element in the route. Follow LOCID instructions in Table 3-2-1, Field 16, above.	No	Required if ZZZZ is filed in Field 16	DEST/S20 DEST/MD21 DEST/JACOX DEST/ERI090012
ALTN/	ERAS treats this data as free text.	No	Never	ALTN/F22 ALTM/KEWR
RALT/	ERAS treats this data as free text.	No	Never	RALT/F22 RALT/KEWR
CODE/	ERAS currently treats this data as free text.	No	Never	CODE/23A16C
RMK/	ERAS treats this data as inter-center remarks, and processes it the same as it does NAS Field 11 of a domestic FP. Any data currently required in NAS Field 11 (e.g., NRP, PTP) should be filed in an FPL after RMK/.	Yes	Never	RMK/NRP RMK/PTP ETOPS RMK/180MIN/1200NM RMK/RULES

In addition, ERAS accepts some non-ICAO formats in Item 18 of FPLs. They are outlined in Table 2-2, below.

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Table 2-2. ERAS Rules for Acceptance of Non-ICAO Item 18 Indicators

Indicator	Content Processing	> One instance allowed?	When Required by FAA	Examples
IRMK/ (Intra-Center Remarks)	ERAS will process this data the same as intra-center remarks in a NAS flight plan. Any data (e.g., FRC) currently filed in NAS Field 11 after an overcast weather symbol should be filed in an FPL after IRMK/. <i>Note:</i> IRMK is intended only for use by FAA.	No	Never	IRMK/FRC
DOF/ (Date of Flight)	ERAS will treat this data as free text. Entry format expected is YYMMDD.	Yes	Never	DOF/071024 (i.e., October 24, 2007)
ORGN/ (Originator)	ERAS treats this data as free text.	No	Never	ORGN/KATLWOAD ORGN/LLBGYDYX
RVR/ (Runway Visual Range)	ERAS treats this data as free text.	No	Never	RVR/75 RVR/200 RVR/300
SRC/ (Source)	ERAS treats this data as free text.	No	Never	SRC/RQP
RFP/ (Replacement Flight Plan)	ERAS treats this data as free text.	No	Never	RFP/Q1
IFP/ (IFPS Indicator)	ERAS treats this data as free text.	No	Never	IFP/NON833