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FAA En Route Automation Flight Planning Interface Guide

Version 3.1

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Table of Contents

Change History

Change Description	Date	Version
• Guide use of ICAO flight plan to support implementation of PBN routes, general use of ICAO flight plan in the NAS	12/20/07	1.0
• Guide to changes due to ICAO 2012	6/5/12	2.0
• Updated guidance on ICAO 2012, additional guidance as requested	11/15/12	2.1
• Updated guidance to reflect new equipment codes; reflect changes in processing (including full replacement of Host with ERAM); removal of items now incorporated in AIM and AIP.	10/1/2022	3.0
• Updated for 7110.10 references	5/9/2024	3.1

Change highlights for Version 3.0:

- Removed guidance specific to the Host system
- Updated guidance to reflect new capability/equipment filing instructions
- Updated reject guidance to be ERAM specific, reflect the latest interface definition, and focus on commonly encountered issues
- Removed information that has become redundant with published guidance, and replaced with links to the publications
- Updated many URL links which had become broken

1. Introduction

1.1 Scope

This document provides guidance for filing flights plans in ICAO format within domestic United States airspace using the FAA En Route Automation System (ERAS). The information provided in this document augments instructions found in the United States Aeronautical Information Publication (AIP) Appendix 2, Aeronautical Information Manual (AIM) Appendix 4, and Order 7110.10DD Appendices A and D.

It identifies the standards on which these messages are based, describes FAA-specific content requirements and exceptions to content allowed by the ICAO Procedures for Air Traffic Management- Air Traffic Management (PANS-ATM, also identified as ICAO Document. 4444). The intended audiences are flight plan service providers, military organizations, and airlines in the direct file program that send flight planning messages to ERAS.

The flight planning messages allowed in the ERAS include:

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

1.2 FAA FPL Services

FAA automated flight planning services include the ability to:

1. File an FPL up to approximately a day in advance of the filed Estimated Off-Block Time (EOBT);
2. Make modifications (CHG/DLA) to that FPL (or cancel) up to a lock out time as defined in Order 7110.10, table 6-2-1.

Flight plan filer addresses adapted within ERAS will receive acknowledgement messages (i.e., acceptance (ACK) and/or rejection (REJ)) for each flight planning message sent to ERAS. ACK and REJ are FAA-specific messages as the PANS-ATM does not define responses to the flight planning messages described.

1.3 Document Organization

Section 2 describes the operational use of flight planning messages, including when they should be used, limitations, and special cases.

Section 3 describes the format and content accepted by the ERAS for each type of flight planning message and its associated Items. Note that much of the content from the previous edition of this document is removed, replaced by reference to order JO 7110.10 which now documents the format requirements for all messages except DLA.

Section 4 provides detailed references and guidance regarding filing of equipment and capabilities to obtain various services, e.g. PBN routes, RVSM, and ADS-B services.

Section 5 contains acronyms and references, including links to resources when available.

Appendix A describes FAA-unique content allowed in Item 15 (Route, cruising speed, cruising level)

Appendix B provides details of FAA use of Item 18.

Appendix C provides guidance for the best codes to include in Item 18 when more than 8 are applicable.

2. Operational Use of Flight Planning Messages

Note: Location to obtain referenced documents is in Section 5.2.

2.1 Initial FPL Filing

An FPL should be submitted according to the instructions in the Aeronautical Information Publication (AIP), Section ENR 1.11 for flights through domestic FIRs. For flights that will cross through Oceanic or Offshore FIRs also consult ENR 7.1-3.

Guidance on relevant AFTN addresses can be found in the AIP ENR 1.11, ENR 7.1-3, Order 7110.10, table 6-2-2, and in ICAO Doc. 8585. Also see Order 7110.10 paragraph 6-2-1.

- *Note: The address to use for flight plans that will enter Guam CERAP airspace is not published in the AIP or Order 7110.10. Guam flight planning is provided by the automation system in Honolulu (*PHZHZQZX*). Flight plans can be filed directly with Honolulu, or the following addresses can also be used. Filing to either of these addresses will direct the flight plan to* PHZHZQZX*.*
    - PGZUZQZX
    - KZUAZQZX

Note that when trying to identify the departure center, boundaries published on the low and high altitude charts are not necessarily reflective of the center boundary at the ground. It is important to determine the departure center by using FAA Order JO 7350.9.

- For IFR pick up at a fix, the responsible center can be determined by using the boundaries at ground level published by the FAA at https://www.faa.gov/air_traffic/flight_info/aeronav/Aero_Data/Center_Surface_Boundaries/

2.1.1 FPL time to file

An FPL can be submitted to the ERAS generally up to 22 hours and 59 minutes in the future. Four centers have unique times that vary slightly from this and are identified in Table 2.1-1 below.

A flight plan can also not be submitted for a time more than 60 minutes in the past (with the slight variations at four centers as identified in Table 2.1-1).

A flight plan submitted outside the requisite time window may be rejected.

Note also that the system processing varies depending on whether DOF/ is included in the flight plan. If there is no DOF/ filed, then the system will assume that the flight is scheduled for today if the proposed departure time is after the “earliest valid flight plan time” shown. Any time earlier than that will be assumed to be the next day.

If DOF/ is filed, then the system will evaluate the proposed departure time on the indicated date and determine whether it is within the bounds shown in Table 2.1-1.

Table 2.1-1 Center-specific Date of Flight Parameters

Center	Earliest valid flight plan	Latest valid flight plan
KZID	30 minutes prior to present time	23 hours 29 minutes in the future
KZMA	55 minutes prior to present time	23 hours 4 minutes in the future
KZME	30 minutes prior to present time	23 hours 29 minutes in the future
KZMP	55 minutes prior to present time	23 hours 4 minutes in the future
All others	60 minutes prior to present time	22 hours 59 minutes in the future

2.1.2 Aircraft Identification

A 2 - 7 character aircraft identification is required in Item 7 of an FPL in compliance with FAA Order JO 7610.12, which is consistent with The PANS-ATM and ICAO Annex 7, Aircraft Nationality and Registration Marks. One case is problematic for processing in U.S. domestic ATC systems:

> ***Exception***: An FPL filed with ERAS will be rejected if the aircraft identification starts with a number. 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).
>
> FAA Order JO 7110.127 describes how flight data will insert a ‘Q’ as a leading character to get such a flight plan accepted by the ERAS. When the flight is outbound to another country, ATC then coordinates with the first foreign facility to ensure they have the correct registration number/aircraft ID.
>
> The operator may file using the ‘Q’ prefix; however, it is important that ATC still know the correct registration and that it has been altered. Therefore, ensure the actual registration is in item 18 REG/, and in the flight plan comments as described in order JO 7110.127.

2.1.3 Optional Message Number

FAA allows use of an Optional Message Number in Item 3, Item 3b, for routing of ACK/REJ messages (see Section 3.6 for guidance on 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. The optional message number also allows for

shorter REJ messages, since the message number is used as reference instead of repeating the entire submitted message.

> ***Note:*** International ATS units are unlikely to accept the optional message number, so use of this feature is best used only with domestic flights.

Item 3b consists of three parts and shall include:

- Part 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/);
- Part 2. The four-letter location identifier (LOCID) of the ARTCC to which the FPL is addressed by the filer (KZXX); and

  Note: Allowable LOCIDs can be found in Section 5.3.
- Part 3. A three-digit sequential message number assigned by the filer (ddd).

  Example*:* COA/KZHU004 is message #004 addressed to Houston ARTCC with ACK to Continental Airlines

Message numbers should be used sequentially, 001 through 999, before restarting the message numbering sequence again at 001. *Do not* restart the message numbering sequence based on time of day, e.g., restart at 001 at 0000Z, or there could be ambiguity when a CHG, CNL or DLA message is received if the FAA automation system is storing multiple FPLs with the same message number.

2.1.4 FPLs with the Same Aircraft Identification

Two or more FPLs filed to the same ARTCC with the same aircraft identification can be accepted under some circumstances; but often cause problems. The processing rules for such flight plans are summarized in Table 2-2-1.

Table 2-2-1. Filing Multiple FPLs with the same Aircraft Identification

Scenario	Recommendations	Issues
Flight with multiple stopovers	File each leg of the flight in a separate FPL as required.	No ERAS issues. Each FPL will have a different departure/destination and will thus be distinguishable as separate legs by ERAS.

Scenario	Recommendations	Issues
Multiple FPLs filed for the same flight	Do not file multiple FPLs with the same departure, destination and departure time. 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.	If departure, destination, departure time and route are identical, subsequent FPLs will be rejected. If a second FPL is filed for the same intended flight, it will be accepted if the departure time or route has any difference. This creates a risk of confusion in activating the wrong FPL, which can result in a different expected route to be flown between the pilot and ATC (when 'cleared as filed' is issued). *See note below.*
Multiple flights (same ACID) 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 ERAS issues. Note that ability to receive automated Pre-departure Clearance (PDC) services may be affected, as the PDC service has time limits on how soon a flight ID is eligible for a PDC after one is issued.

Note: A flight plan should only be filed as a replacement for a previous flight plan if cancellation/deletion of the previous flight plan has been confirmed. This means either receiving an ACK to a CNL message, or verifying with flight data at the relevant center. Within the lockout period a flight plan cannot be cancelled via CNL. Filing multiple flight plans could result in a mismatch between pilot and ATC understanding of the route clearance which can result in safety issues. Instances of a flight initiating an unexpected turn due to difference in the ATC and pilot expected route have occurred.

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 46 minutes before proposed departure time but may be an hour or longer in some cases. As noted above, this is governed by the lockout time published in Order 7110.10, table 6-2-1 and differs by center. 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. It is important to ensure removal of a previous flight plan before submitting any replacement per the discussion in section 2.1.4.

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 (Item 7a)

2. Optional Reference Data (Item 3c) – refers to the Optional Message Number (Item 3b) of the FPL to be modified
3. Departure Aerodrome (Item 13a)
4. Estimated Off-Block Time (EOBT) (Item 13b)
5. Destination Aerodrome (Item 16a)
6. Date of Flight (Item 18, DOF/), if one was filed (remembering that FAA ATC systems accept a DOF/ no later than 1 day ahead, at most 22 ½ hours in the future.)

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 (Item 3c) because it uniquely identifies the FPL being modified in all cases.

Note: IAW The PANS-ATM, ERAS will not accept a CHG or CNL containing Item 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 Item, including an Estimated Off-Block Time (EOBT/Item 13b) that also requires a change to a previously filed Date of Flight (Item 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 a header as described in JO 7110.10, section 6-2-4, items a. through e. This header is consistent with ICAO Annex 10, Aeronautical Telecommunications, Volume 2.

Note: ERAS does not process the Optional Data Items defined in Annex 10.

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 FAA Order JO 7110.10 in Appendix D. The ERAS will process the following messages:

1) FPL

2) CHG
3) DLA
4) CNL

Other messages described in Order 7110.10 Appendix D are not valid for submission to the ERAS.

3.2 Filed Flight Plan (FPL) Message

3.2.1 FPL Contents

FPL format is described in Order 7110.10 Appendix D, paragraph 7.

FPL content is described in the AIM Appendix 4; AIP Appendix 2; and Order 7110.10 Appendix A—each of these contain identical guidance, which generally follows the PANS-ATM for FPL message construction.

Some exceptions, limitation, and detailed guidance on particular items follows:

3.2.1.1 Item 3b- Message number

This item is optional, and is often not accepted by other ATS units. Therefore, use outside of the domestic U.S. system is not recommended. See section 2.1.2 for guidance on content.

3.2.1.2 Item 7a- Aircraft Identification

The ERAS will not accept an aircraft identification that begins with a number. See paragraph 2.1.1 for guidance.

3.2.1.3 Item 7b/c—Transponder Code

The ERAS will not accept an input transponder code in an FPL.

3.2.1.4 Item 8b—Type of flight

The ERAS does not require type of flight to be specified, but use is recommended.

3.2.1.5 Item 9c—Wake Turbulence Category

The ERAS does not process a ‘J’; only H, M, or L is accepted.

3.2.1.6 Item 13a—Departure Aerodrome

The ERAS will accept only four letters in item 13a; any other departure point (e.g. MD31; EMI300021; ENE) should be filed as the first text after Item 18 DEP/ and ZZZZ filed in 13a.

3.2.1.7 Item 15a—Cruising Speed

The domestic ERAS will accept Knots or Mach speed, but will not accept metric speed (e.g., K0800). The Oceanic systems in KZAK, KZWY, and PAZA will accept metric speed.

Note: The speed filed in this Item should be the expected speed at the requested Initial Cruise Altitude filed in Item 15b.

3.2.1.8 Item 15b- Requested Altitude / Cruising Level

The domestic ERAS will accept flight level or altitude, but will not accept metric altitude (e.g., M1400). The Oceanic system in KZAK, KZWY, and PAZA will accept metric altitude. The ERAS will also accept some U.S.-specific altitude designations; these are detailed in Appendix A.

Note: The requested altitude 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.

3.2.1.9 Item 15c—Route

The ERAS processes routes generally according to the PANS-ATM format, however there are a number of non-standard constructs also allowed and some PANS-ATM items that are not applicable in the domestic U.S. See additional guidance in Appendix A.

Note: Speed and altitude changes in Item 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.

Note: The FAA ERAS will accept approximately 1,000 characters in Item 15c. The exact number varies based on a number of factors, and will be slightly less if an automated route is applied; for planning purposes it is advisable to keep the submitted route to no more than 900 characters.

3.2.1.10 Item 16a—Destination Aerodrome

The ERAS will accept only four letters in item 16a; any other departure point (e.g. MD31; EMI300021; ENE) should be filed as the first text after Item 18 DEST/ and ZZZZ filed in 16a.

3.2.1.11 Item 18—Other Information

If there is no other information, insert "0" (the number zero).

For further guidance on Item 18 content see Appendix B.

3.2.1.12 Item 19—Supplementary Information

Do not include Item 19 in an FPL submitted to the ERAS. It will cause rejection.

3.2.2 FPL Examples

Following are examples of FPLs. Each example illustrates filing for certain Items. These examples are not meant to provide guidance on route filing, so the routes shown are simplified.

Basic General Aviation Flight Plan

- *Unless excepted, ADS-B is mandated and should be filed for all flights in U.S. domestic airspace.*
- *Example shows how to file a destination when the airport identifier is not 4 letters, in this case a small U.S. airport with a 3-character airport identifier.*

```
(FPL -N99 -IG
-PA46/L-SG/CU1
-KBUF1930
-N0180F100 DCT ERI DCT
```

```
-ZZZZ0207 KDAY
-SUR/260B DEST/I66 CODE/A00000)
```

Highly Capable International Flight

- *EET/ entries for each FIR boundary crossing should be included*
- *Capabilities are included per instructions in Appendix B*

```
(FPL -TTT9850 -IS
-B78X/H-SADE3GHIJ1J2J4J5M1P2RWXYZ/LB2D1
-KDTW2300
-N0504F290  HHOWE3 LNCON DCT JHW DCT YSC DCT MIILS N155A PORTI
 NATZ SOMAX NATZ ATSUR DCT GAPLI M25 ANNET UM25 UVSUV UM25 INGOR
 UM25 LUKIP DCT
-LFPG0711 EBBR
-PBN/A1B1C1D1L1O1S2T1 NAV/Z1M1 SBAS GBAS DAT/1FANSER2PDC SUR/260B
 RSP180 DOF/220306 REG/N99 EET/CZYZ0003 KZOB0010 KZBW0040
 CZUL0103 KZBW0114 CZQM0128 CZQX0211 EGGX0426 EGTT0608 SEL/XXXX
 CODE/A00000 PER/D RALT/CYYT LPLA EGPK)
```

3.3 Modification (CHG) Message

The CHG message is used to revise any FPL Item, including an Estimated Off-Block Time (EOBT/Item 13b) that also requires a change to a previously filed Date of Flight (Item 18, DOF/). Use the Delay (DLA) message to change an EOBT that does not revise a previously filed DOF/. (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 Items 7, 8, 9, 10, 13, 15, 16 or 18.
3. A CHG cannot modify the same Item more than once in the same message.
4. If the aircraft identification (Item 7) is changed, it must be the only Item changed in that CHG message.
5. If Item 13a or 16a is changed, make sure the original departure or destination is included in Items 13a and 16a, and the new departure or destination is included in Item 22 of the CHG.
6. For a change only to EOBT, without a change in date of flight, use of DLA in lieu of CHG is recommended.
7. If Item 13 or 16 is modified to contain “ZZZZ”, a corresponding Item 18 entry following DEP/ or DEST/, as appropriate, must also be included.
8. If Item 15 is modified, always include Items 13 and 16 in the message.

***Note**: Items 7, 13, 16, and 18 in the CHG message must contain the entered information from the original FPL before the modification contained in Item 22.*

***Note:** If a flight plan was filed with a valid DOF/, then a change to the departure time that also changes the date of flight (i.e. delays past midnight) should **not** be communicated using the DLA message—a CHG message should be used to convey the Item 13 and Item 18 changes using Item 22. Remember that the Item 18 filed in CHG and DLA should always reflect the DOF/ that was previously filed.*

3.3.1 CHG Contents

CHG format is described in Order 7110.10 Appendix D, paragraph 2.

The CHG message consists of two parts:

- Identification of the flight to be modified; and
- The Items to be modified.

3.3.1.1 Flight Identification (Items 3, 7, 13, 16, 18)

Identification of the flight uses the following information as available. All of these fields should be populated with the data as it exists before the change being requested. For example, if the destination is being modified then the CHG should identify the original destination as submitted in the FPL in Item 16, and the new modified destination in Item 22.

a) Item 3 reference data, which refers to the message number of the FPL being modified. See section 2.1.2 for more on use of the optional Item 3 message number.

b) Aircraft ID (Item 7)

c) Departure point (Item 13a)

d) Departure time (Item 13b)

e) Destination (Item 16a)

f) Date of Flight (Item 18 DOF/) *Note: Remember to include only DOF/ and not the entire Item 18.*

3.3.1.2 Items to be modified (Item 22)

Each item 22 identifies an item from the FPL to be modified, and the amended contents of that field. (Multiple item 22's are permitted in a CHG message).

The items to be modified are complete items, e.g. Item 13 can be modified, but must include both 13a and 13b. A CHG cannot modify only 13a or only 13b. It is important to include all data for an item, including portions that did not change.

3.3.2 CHG Examples

Following are examples of CHG messages.

<u>Change to FPL departure aerodrome (Item 13a)</u>

- *Note: Always include Items 7, 13, 16a and Item 18, DOF/ in a CHG message as they were before the change.*

```
(FPL-TTT001-IS
-A310/M-SDE1GJ2RWZ/SB1
-KDTW0116
-N0462F360 DCT
-KBOS0045
-PBN/A1D1 SUR/260B DOF/221205 CODE/A00000 REG/N000XX)


(CHG-TTT001-KDTW0116-KBOS-DOF/221205-13/KLGA1200-15/N0485F310 DCT
 MERIT DCT ORW 16/KBOS0028)
```

Change to FPL equipment and capability (Item 10)

- *Note that the CHG must contain Item 18. Because there was no DOF/ filed in the original FPL, Item 18 in the CHG is simply -0.*

```
(FPL-TTT734-IS
-A310/M-SDE1GJ2RWZ/SB1
-KPIT0116
-N0462F360 EWC DCT WOMBT DCT PIGGZ DCT SLT FQM3
-KEWR0046
-PBN/A1D1 SUR/260B CODE/A00000 REG/N000XX)


(CHG-TTT734-KPIT0116-KEWR-0-10/SDE1GJ2RWZ/S)
```

Change to FPL EOBT over midnight, DOF/ was filed in the FPL

- *Note that a change to an Item 18 sub-field requires that the CHG contain all of Item 18.*
- *When the change of EOBT is on the same day, a DLA can be used instead of CHG.*
- *These examples show (1) a change of EOBT to the next day followed by (2) a further change to EOBT on the same day*

```
(FPL-N000XX-IG
-C550/L-SDE1GJ2RW/S
-KROC2344
-N0462F360 DCT HANKK DCT KODEY DCT HNK FLOSI4
```

-KEWR0112

-PBN/A1D1 DOF/121120 REG/N123A)

(CHG-N000XX-KROC2344-KEWR-DOF/121120-13/KINT0016-18/PBN/A1D1 DOF/121121 REG/N000XX)

Then a second delay on the same day. The CHG Item 13 and Item 18 references the last EOBT and DOF provided, which in this case is DOF/121121 and EOBT of 0016. Since DOF/ did not change, only Item 13 needs to be modified.

(CHG-N000XX-KROC0016-KEWR-DOF/121121-13/KINT0130)

Instead of the CHG above, a DLA could have been used since there is no date change:

(DLA-N000XX-KROC0130-KEWR-DOF/121121)

Change to FPL EOBT over midnight, DOF/ was not filed in the FPL

- *Because the FAA does not require a DOF/, if a flight plan is filed for today and then delayed after midnight, no reference to DOF/ is necessary.*

  (FPL-N999XX-IG

  -C550/L-SDE1GJ2RW/S

  -KPIT2344

  -N0462F360 DCT PIT DCT EWC DCT WOMBT DCT PIGGZ DCT SLT FQM3

  -KEWR0112

  -PBN/A1D1 REG/N999XX)

  (CHG-N999XX-KPIT2344-KEWR-0-13/KINT0016)

- *When no DOF/ was filed, DLA can be used. The automation will infer the date change.*

  (DLA-N999XX-KPIT0016-KEWR-0)

ERROR: Attempt to Change EOBT in Item 13 of a CHG

- *EOBT cannot be changed by using Item 13 in a CHG. Item 13 serves to identify the flight plan being modified; you must put the Item 13 change in a Item 22.*

  (FPL-N999XX-IG

  -C550/L-SDE1GJ2RW/S

  -KPIT2344

```
-N0462F360 DCT PIT DCT EWC DCT WOMBT DCT PIGGZ DCT SLT FQM3
-KEWR0112
-PBN/A1D1 REG/N999XX)

(CHG-N999XX-KPIT0016-KEWR-0)
```

This CHG would be rejected, with the error indicating that the flight plan was not found. The ERAS would be looking for a flight plan for N999XX departing KPIT at 0016. The flight plan on file for N999XX is departing KPIT at 2344.

3.4 Delay (DLA) Message

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

*Note: If a flight plan was filed with a valid DOF/, then a change to the departure time that also changes the date of flight (i.e. delays past midnight) should **not** be communicated using the DLA message—a CHG message should be used to convey the Item 13 and Item 18 changes using Item 22. Remember that the Item 18 filed in CHG and DLA should always reflect the DOF/ that was previously filed. If a DLA message is used to process a delay over midnight the message will be accepted; however, ERAS will not update DOF/. Any further changes to the flight plan after the DLA message is processed would require the original DOF/ be referenced.*

3.4.1 DLA Contents

The DLA message format/content is not currently described in Order 7110.10.

Table 3-4-1 below contains the format and content requirements for the DLA message.

Table 3-4-1. DLA Instructions

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

Item	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 (Item 3b) of the FPL message being modified by the DLA. If a DLA message is submitted without the Optional Reference Data, the FAA automation system will attempt to amend that flight if no ambiguity exists; however, if multiple FPLs exist which meet the criteria of that DLA message, the DLA message will be rejected.	Optional	NTD/KZLA347
07	(a) Aircraft Identification This Item must contain the 2 to 7 character aircraft identification that matches the FPL previously sent.	Required	N123W DAL32 SWA1142
	Oblique Stroke (b) Beacon Mode (c) Beacon Code	Prohibited Prohibited Prohibited	
13	(a) Departure Airport LOCID that matches the LOCID previously sent. ***Note***: ERAS does not accept "AFIL" in Item 13a.	Required	KORD KFNB ZZZZ
	(b) Time The revised proposed time of departure.	Required	

Item	Element	Required/ Optional/ Prohibited	Examples
16	(a) Destination Airport LOCID that matches the LOCID previously sent.	Required	KLAX ZZZZ KTLH
	(b) Time of Arrival	Prohibited	
	(c) Alternate Airport	Prohibited	
18	Other Information, DOF/ portion if available, else -0 The DOF/ sent should match what was previously sent in the FPL (or last CHG that affected the DOF/). If no DOF/ was included in Item 18 then include -0.	Required	-DOF/121205 -0

3.4.2 DLA Examples

Following is an example of a DLA message with no message numbers and no previously filed DOF/.

```
(DLA-TTT003-KBOS1230-KIAD-0)
```

Note: If a DOF/ is stored in the FPL, use the following format...

```
(DLA-TTT003-KBOS1230-KIAD-DOF/121121)
```

3.5 Cancellation (CNL) Message

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

3.5.1 CNL Contents

CNL format is described in Order 7110.10 Appendix D, paragraph 5.

The CNL is similar to the first part of a CHG, containing the same information to identify the flight. There is no other data, as the content only serves to identify the flight to be canceled.

3.5.2 CNL Examples

Following are examples of a CNL messages.

This is an example of a CNL with no Optional Message Number and no previously filed DOF/:

```
(CNL-TST004-KJFK1815-KMSP-0)
```

Note: If a DOF/ is stored in the FPL, use the following format...

```
(CNL-TST004-KJFK1815-KMSP-DOF/121121)
```

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

```
(CNLISP/KZNY037ISP/KZNY025-TST005-KLGA0845-KDEN-0)
```

3.6 ACK and REJ Responses

There are no acknowledgement messages defined in the PANS-ATM that allow a receiving ATS unit to respond to flight planning messages filed without message numbers. FAA has therefore defined ACK message responses which are returned for successfully processed FPL, CHG, DLA, and CNL messages; and REJ messages which are returned for FPL, CHG, DLA, and CNL messages which could not be processed.

3.6.1 How to receive ACK and REJ Messages

An ACK or REJ message is returned to the sender **only** if the sending AFTN address is identified in the ERAS as "answerable".

In order to receive responses, the originator must coordinate with the FAA to have their originating AFTN address set as "answerable". If not set as answerable, ACK and REJ messages are referred to the local Flight Data position for handling and are not sent back to the filer. Contact the FAA via flightplanquestions@faa.gov to have an address set to answerable.

3.6.2 Address to which the FAA sends a response

There are two possible addresses to which a response may be sent, depending on whether the FPL was filed with an Optional Message Number (Item 3b as described in 2.1.2) and whether the message number contains an identifier mapped to a response address.

When the FPL was filed with an Optional Message Number:

If the "from" portion of the message number is associated with an AFTN address in the ERAS database then the response is sent to that address.

Otherwise the response is sent to the AFTN address that sent the original message.

When the FPL was NOT filed with an Optional Message Number:

When the 3b message number is not used, the response is always sent to the originating AFTN address.

3.6.3 Address from which the response is received

The address from which an ACK or REJ is received is not the AFTN address to which the FPL or other message was sent. The center addresses for ACK and REJ responses are shown in Table 3.6-1 below.

Table 3-6-1. Center AFTN addresses for ACK and REJ

Center	AFTN address from which ACK and REJ will be received	Center	AFTN address from which ACK and REJ will be received
KZAB Albuquerque	KZCAZQZX	KZLA Los Angeles	KZCLZQZX
KZAU Chicago	KZCGZQZX	KZLC Salt Lake City	KZCUZQZX
KZBW Boston	KZCBZQZX	KZMA Miami	KZCRZQZX
KZDC Washington	KZCHZQZX	KZME Memphis	KZCMZQZX
KZDV Denver	KZCDZQZX	KZMP Minneapolis	KZCPZQZX
KZFW Fort Worth	KZCFZQZX	KZNY New York	KZCNZQZX
KZHU Houston	KZCHZQZX	KZOA Oakland	KZCOZQZX
KZID Indianapolis	KZCIZQZX	KZOB Cleveland	KZCCZQZX
KZJX Jacksonville	KZCJZQZX	KZSE Seattle	KZCSZQZX
KZKC Kansas City	KZCKZQZX	KZTL Atlanta	KZCTZQZX

3.6.4 ACK Content

The ACK message format is defined in FAA Order JO 7110.10 Appendix D, Paragraph 9.

3.6.4.1 Example ACK Messages

Operator with 3-letter ID XXX, and AFTN address at Miami has also coordinated a second address in Atlanta to receive responses:

- Address from which FPL is sent: KMIAXXXD
- Address to which ACK/REJs are desired: KATLXXXD
- 3-letter NADIN address coordinated with FAA to map to KATLXXXD: XXX

ACK for FPL with optional message number

Input

```
FF KZDCZQZX
231411 KMIAXXXD
(FPLXXX/KZDC004-XXX603-IS
-A319/M-SDIW/C
```

```
-KBWI1230
-N0291F090 SWANN3 SWANN V214 DQO DCT
-KPHL0017
-RMK/DVRSN)
```

Output to XXX (Adapted in NADIN as KATLXXXD)

```
ACK FPL/004 KZDC XXX603 KBWI 1230 KPHL
```

ACK for FPL without optional message number

If there is no Optional Message Number in Item 3b, the Aircraft ID, departure airport, departure time and destination airport are used to identify the flight.

Input

```
FF KZDCZQZX
101714 KMIAXXXD
(FPL-XXX1447-IS
-A320/M-SDGIRWZ/S
-KIAD2130
-N0360F360 DCT DAILY J61 HUBBS DCT KEMPR DCT ILM
AR21 CRANS FISEL2
-KFLL0206
-PBN/A1B1C1D1 SUR/280B)
```

Output to KMISXXXD

```
ACK FPL KZDC XXX1447 KIAD 2130 KFLL
```

3.6.5 REJ Content

The REJ message format is defined in FAA Order JO 7110.10 Appendix D, Paragraph 10.

3.6.5.1 Example REJ messages

Operator with 3-letter ID XXX, and AFTN address at Miami has also coordinated a second address in Atlanta to receive responses:

- Address from which FPL is sent: KMIAXXXD
- Address to which ACK/REJs are desired: KATLXXXD
- 3-letter NADIN address coordinated with FAA to map to KATLXXXD: XXX

ACK for FPL with invalid speed

Item 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

```
FF KZDCZQZX
101714 KMIAXXXD
(FPLDCA/KZDC015-XXX99-IG
-C500/L-SDGWZ/C
-KDAN1530
-K0300F210 DCT FVX DCT
-KCHO0020
-PBN/A1B2B3  SUR280B)
```

Output

```
REJ FPL KZDC SPD K0300F210 DCT FVX DCT FORMAT
FPLDCA/KZDC015-N57FC-IG-C500/L-SDGWZ/C-KDAN1530-K0300F210 DCT FVX
DCT-KCHO0020-PBN/A1B2B3 SUR280B RMK/PTP PATTERN WORK)
```

3.6.5.2 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

```
FF KZDCZQZX
231411 KMIAXXXD
(CNL-XXX1964-KDCA2125-KLGA-0)
```

Output to KMIAXXXD

```
REJ CNL KZDC MULTIPLE FLIGHT PLANS MANUAL COORDINATION REQUIRED
CNL-XXX1964-KDCA2125-KLGA-0
```

3.6.6 Common reasons for REJ

The REJ message generated in response to an erroneous FPL, CNL, CHG or DLA message provides feedback on the reason for the REJ. Please see Table 5-1-2 for a list of abbreviations used in REJ messages.

3.6.6.1 FORMAT errors

The system will reject a flight plan if the format of a field does not match the requirements. In this case the reject message will indicate FORMAT, provide the data in error, and a 3-letter identifier of the field in error. These field identifiers are listed in Table 5-1-2.

Example:

```
FF KZZZYXYX  031745 KZCRZQZX   REJ FPL KZMA RTE OLAHS2 DCT FORMAT
FPL-N99-IG -C525/L-SBDFGHRWYZ/PB1V2 -MBPV1800 -N0369F320 DCT ZQA OLAHS2
DCT -KFLL0136 KFXE -PBN/A1B2C2C3D2D3S2T2 NAV/SBAS SUR/260B CODE/A00000
```

In the above example, the RTE field (Item 15c per Table 5-1-2) is flagged with a format error. The data in error is identified as OLAHS2 DCT.

In this case, DCT follows the name of a STAR which is an incorrect route format.

3.6.6.2 Exact Duplicate Flight Plan

When the REJ contains "REJ FPL Kxxx EXACT DUPLICATE FP IN SYSTEM" then the system found an existing filed flight plan with the same departure, destination, departure time and route. This subject is discussed in Section 2.1.3.

A frequent cause of this problem is the operator attempting to perform a cancel and refile. If a CNL is sent within the lockout period (see Section 2.2.1), the CNL will be rejected. If a new FPL is sent anyway, if the key items are the same then the FPL is rejected as an exact duplicate. Note that if the route is changed, or the departure time changed even slightly, the flight plan will not be rejected as an exact duplicate and could cause an issue if the pilot receives "cleared as filed". There are some flags to ATC to indicate when more than one flight plan is on file but ATC then has to work with the pilot to determine which is the correct flight plan.

It is important to watch for an ACK when sending a CNL, and to call flight data to have the plan removed if a REJ is received before sending a new FPL.

3.6.6.3 Invalid EET Data

When the REJ contains "REJ FPL Kxxx OTH INVALID FPL EET DATA" it means that the system could not find a valid EET entry for the center that received the flight plan. OTH is the mnemonic for Item 18 (OTHer information). No "data in error" is listed because in this case, the error was not finding needed data.

Example:

```
FF KZZZYXYX   031000 KZCGZQZX   REJ FPL KZAU OTH INVALID FPL EET DATA
FPL-XXX3787-IS -CRJ2/M-SDE3GRWZ/SB1 -CYOW1045 -N0440F320 DCT    LETAK
Q824 FNT WYNDE2 -KORD0139 -PBN/B2B3B4C2D2 NAV/RNVD1E2A1    REG/N99
```

In this case KZAU received an FPL for a flight from CYOW to KORD. This flight enters the U.S. in Minneapolis Center (KZMP) and then transits to Chicago Center (KZAU). Note that in this case sending an FPL to KZAU is not required (the AIP indicates that no flight plan is required for flights from Canada; and from other locations only the first penetrated center would be sent an FPL). That said, to get a flight plan accepted in any center that is not the departure center, it is important that:

- The route enters the subject center; and
- There is a valid EET entry for the subject center in Item 18 (See Appendix B.3)

Example (fields were reformatted a bit for readability):

```
FF KXXXYXYX   031106 KZCPZQZX   REJ FPL KZMP OTH INVALID FPL EET
DATA   FPL-XXX81-IS -B77W/H -SDE1E3FGHIJ1J4J5M1P2RWXYZ/B1D1L

-EGLL1415

-N0487F300 UMLAT T418 WOBUN DCT WELIN T420 TNT UN57 POL UN601
ABEVI UN590 LORTA DCT CLYDE DCT EVBEV DCT BALIX/M083F330 DCT
62N020W 63N030W 63N040W 62N050W DCT PIDSO/N0480F340 N838A PEPKI
DCT LOPVI DCT HELMO DCT PEMLU/N0486F360 DCT BAFAL DCT RANGR DCT
TVC DCT BAE DCT BDF/N0480F380 DCT WELTS DCT SGF DCT RZC DCT  FSM
DCT RRNET SEEVR4

-KDFW0931 KAUS

-PBN/A1B1C1D1L1O1S2T1 NAV/RNVD1E2A1  DAT/1FANSE2PDC SUR/260B
RSP180  DOF/220703 REG/N733AR EET/LORTA0042 EGGX0121 BIRD0150
020W0207 030W0245 CZQX0311 040W0322 050W0400  PIDSO0432 CZUL0448
HELMO0546 PEMLU0630 TVC0724 SEL/XXXX  CODE/A00000 RALT/EINN BIKF
CYFB
```

In this case the FPL was filed coming from Europe to the U.S. The first penetrated center should be KZMP (Minneapolis), and an FPL was sent to them (once again, not needed in this case since it comes from Canada, but O.K. if done properly).

The FPL has EET/ entries, but there is no entry for KZMP so the flight plan is rejected.

3.6.6.4 Flight does not enter center airspace

When a flight plan is received and the center did not find any portion of the route entered center airspace, the flight plan is rejected with "REJ FPL KZxx RTE FLIGHT DOES NOT ENTER CENTER AIRSPACE".

The most common cause of this problem is the mismatch between the complex nature of the actual center boundaries, and the simplified boundaries that are published on High and Low altitude charts.

Example:

```
FF KXXXYFYX   030046 KZCBZQZX   REJ FPL KZBW RTE FLIGHT DOES NOT
ENTER CENTER AIRSPACE   FPL-XXX1447-IS -E190/M-SDE3GHIRWZ/LB1 -
KHPN0140 -N0456F360 DCT    WHITE J209 SBY DCT KEMPR DCT ILM AR15
HIBAC/N0410F240 DADES9    -KTPA0228 -PBN/A1B1C1D1O1S2T1
NAV/RNVD1E2A1 SUR/260B DOF/220703     REG/N99 EET/KZNY0003
KZDC0012 KZJX0107 KZMA0137 SEL/XXXX     CODE/A00000
```

In this case the flight departed from KHPN. The relevant low and high altitude charts both show KHPN as being within ZBW airspace. As described in Section 2.1, Order 7350.9 should be consulted to determine the center responsible for the departure airport. In this case 7350.9 indicates that KHPN is handled by New York Center (KZNY).

Note- the complexity that causes these issues is known as shelving. A center may own a block of airspace only between two altitudes, typically to streamline arrival and departure handling

between adjacent centers. In this case ZBW owns a "shelf" of airspace that extends out over the top of KHPN but only between the altitudes of 22,100 and 23,000 feet. Everything at 22,000 feet and under and over 23,000 feet belongs to KZNY. The published boundaries on the charts show the extent of ZBW that includes this shelf.

Example:

```
FF KXXXYFYX 030030 KZCNZQZX REJ FPL KZNY RTE FLIGHT DOES NOT
ENTER CENTER AIRSPACE  FPL-N99-IG-C172/L-SDGZ/C-CU1-ZZZZ1200-
N0110A040 DCT MRB DCT -ZZZZ0042 -SUR/282B CODE/A00000 DEP/EMI
DEST/W35
```

In this case the flight is picking up a clearance at the fix EMI in ZDC. According to the published low and high altitude charts, EMI is in ZNY. Filing to ZNY as the departure center produces this error, as the flight is entirely in ZDC.

To determine the correct center airspace for a fix at ground level, neither the published charts nor the 7350.9 will be of help. So there is another source (as indicated in Section 2.1).

This data is a resource for flight planning service providers to determine the correct center with which to file a departure flight plan.

3.6.6.5 Invalid Date of Flight

When a flight plan is received the system evaluates the date of flight and the EOBT. If the proposed departure date and EOBT do not fall into the time window defined in section 2.1.1, then the flight plan is rejected with "INVALID DATE OF FLIGHT"

Examples:

```
FF KXXXYXYX   031446 KZCJZQZX   REJ FPL KZJX INVALID DATE OF
FLIGHT   FPL-XXX2729-IS -A320/M-SDFGHIRWY/SB1 -KVPS1200 -
N0456F360 DCT CEW    DCT PIGON DCT VUZ DCT BETIE DCT ENL ENL2 -
KBLV0127    -PBN/A1B1C1D1O1S1 NAV/RNVD1E2A1 SUR/260B DOF/220703
REG/N99     SEL/EFDP CODE/A00000 PER/C
```

In this case the flight plan is sent on 3 July at 14:46. The EOBT is 1200 and DOF/ is 3 July. This is more than 2 hours in the past, and so is rejected.

```
FF KXXXYXYX  030001 KZCDZQZX   REJ FPL KZDV INVALID DATE OF
FLIGHT   FPL-XXX17-IG -SDGW/L-SDGRW/SB1 -KAPA0435 -N0380F390
ECHOO1 SHAYK DCT JHAWK JHAWK6 -KMKC0127 -PBN/B2C2D2 SUR/260B
DOF/220704    REG/N99 EET/KZKC0047 CODE/A00000
```

In this case the flight plan is sent on 3 July at 00:01. The EOBT is 04:35 and the DOF/ is 4 July. The EOBT is more than 28 hours in the future and therefore the flight plan is rejected.

3.6.6.6 No Coordination Fix

When the flight originates outside of domestic U.S. airspace, the receiving center will look for a place in the route where the flight begins being of interest to the U.S., and complete aeronautical data is available in the system. The system then identifies a coordination fix, which is typically a fix just outside the center airspace boundary and becomes the beginning of trajectory calculations.

If this error is received, then there may be some problem with the route outside U.S. airspace. It is also possible that there is a problem with the receiving system aeronautical data.

These errors can be difficult to diagnose, and it is best to contact Flight Data for assistance should this error be seen. If Flight Data is unable to resolve it then send the details to for the flightplanquestions@faa.gov and they will coordinate with the appropriate automation office to investigate.

3.6.6.7 Some Common Route Issues

There are a number of issues that can cause the ERAS to be unable to process the route. Here are some that are regularly seen with suggestions for resolution. In any case, if difficulty persists then you can also contact us at flightplanquestions@faa.gov and we will try to assist.

- Improper use of DCT can cause a rejection if the DCT is perceived as being preceding or following a route identifier.
    - The system does not have complete aeronautical data far outside the U.S. Automated processing of the route is most accurate when the PANS-ATM conventions for use of DCT are followed. Therefore, filers are strongly encouraged to always follow the standard conventions regarding DCT use.
- Vector SIDs are not always intended to be filed. Charts do not always provide this information. If a published SID is not recognized in a flight plan then contact Flight Data at the appropriate center to determine filing requirements for that case.
- In some cases the “Computer Code” published on a SID or STAR chart is erroneous, identifying a non-existent fix or a non-relevant fix. The cases where this occurs are almost always due to an incorrect assumption that the procedure is named for a fix on the route. If the published route shows the computer code as “STRNM.STRNM2” where STRNM is the name of the procedure, and STRNM is not a fix on the route, then the computer code is not valid. There is an effort to identify and fix such naming issues, but it will take a long time to work through them so the problem persists. When there is an invalid computer code on a chart and there is difficulty in determining a valid entry (or exit) fix then contact Flight Data at the appropriate center.
- Depending on how the system is configured at a particular site, filing a route for which the flight is not eligible could result in a rejection (e.g. “STAR NOT ELIGIBLE”) or could result in a revised route in the pre-departure clearance (with the ineligible route replaced). For example, a route that is restricted to jets may not have that restriction published. If the “STAR NOT ELIGIBLE” or “SID NOT ELIGIBLE” rejection is received and you cannot determine the cause, contact Flight Data at the relevant center for assistance in determining the requirements for use of the route.

4. FAA Guidance for Equipment and Capabilities

Equipment and capabilities are filed in several Items within the flight plan:

- Item 10a contains Navigation, Communications (voice and data), and Approach Aids.
- Item 10b contains transponder, ADS-B, and ADS-C capabilities.
- Item 18 PBN/ contains Performance Based Navigation capabilities.
- Item 18 NAV/ contains navigation and PBN capabilities which do not have codes in Items 18a or 18 PBN/. In particular, there are some codes defined for advanced capabilities and for PBN standards that do not have codes in PBN/.
- Item 18 DAT/ contains data communication capabilities which do not have codes in Item 10a. In particular, there are FAA-specific entries to indicate pre-departure clearance and en route CPLDLC capabilities.
- Item 18 SUR/ contains surveillance capabilities which do not have codes in Item 10b. In particular, there are codes for ADS-B applications and for ADS-B certifications.
- Item 18 COM/ contains communications capabilities which do not have codes in Item 10a.

File each of the capabilities that are applicable to the flight, as instructed. Filing a capability indicates that the equipment is installed, serviceable, certified and meets all applicable standards. Inclusion of a specific capability also implies the crew is trained as required, and any data required by the airborne system is current and available.

A mapping from capability to required approvals to the corresponding flight plan entries is provided in an Operational Specification Guidance Table at https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/air_traffic_services/flight_plan_filing .

The AIM and AIP also contain tables that outline filing requirements for a number of common advanced services.

4.1 Reduced Vertical Separation Minimum (RVSM)

File RVSM capability as a “W” in Item 10 in accordance with the ICAO PANS-ATM (Doc. 4444) and the United States AIP Section ENR 1.1, paragraph 38.4.2:

> 38.4.2 The operator will annotate the equipment block of the FAA or ICAO Flight Plan with an aircraft equipment suffix indicating RVSM capability only after the responsible civil aviation authority has determined that both the operator and its aircraft are RVSM−compliant and has issued RVSM authorization to the operator.

Non-RVSM flights authorized for operation in RVSM airspace should follow procedures in the AIM Section 4.6.10 and in the AIP section ENR-1.1 paragraph 38.10.

A flight authorized to request Non-RVSM operations in RVSM airspace may file STS/NONRVSM to indicate this, but filing NONRVSM in STS/ does not substitute for the coordination required in the AIM and AIP.

Note: STS/NONRVSM should **never** be filed in combination with a 'W' equipment qualifier in ICAO Item 10a.

Note: A flight that is not authorized for RVSM operations should **never** file a 'W' equipment qualifier in ICAO Item 10a.

4.1.1 RVSM Flight Plan Examples

4.1.1.1 Non-RVSM Operation in RVSM Airspace

If one of the exceptions in AIM Section 4-6 is met, the aircraft may request an altitude in RVSM airspace when not RVSM capable. When filing into RVSM airspace under one of these exceptions, the flight plan must never include a W in Item 10a. This flight plan shows proper filing.

```
(FPL-LN000XX-IG
-C550/L-SDG/SB1
-KAOO1245
-N0380F320 TATES3 TATES V469 NESTO DCT
TVT KEATN5
-KCLE037
-STS/MEDEVAC NONRVSM SUR/260B CODE/A00000)
```

4.1.1.2 Error: Inconsistent filing of RVSM Capability

The following flight plan is incorrect because Item 10a indicates the flight is RVSM approved, and Item 18 STS/ indicates that it is Non-RVSM and requesting operation in RVSM airspace.

Note: The ERAS will reject a flight plan containing a W in Item 10a and NONRVSM in STS/.

```
(FPL-LN12345-IG
-C550/L-SGDW/CU1
-KAOO1245
-N0380F320 TATES3 TATES V469 NESTO DCT
-KCLE037
-STS/MEDEVAC NONRVSM SUR/282B CODE/A00000)
```

4.1.1.3 Error: Non-RVSM indicated in the wrong place

The following flight plan is incorrect because it indicates NONRVSM in RMK/. A non-RVSM flight is indicated simply by omitting the 'W' from Item 10a. Requesting Non-RVSM operations in RVSM airspace should be done using an entry in STS/.

```
(FPL-LN12345-IG
-C550/L-SGD/CU1
-KAOO1245
```

```
-N0380F320 TATES3 TATES V469 NESTO DCT
TVT KEATN5
-KCLE037
-STS/MEDEVAC SUR/282B CODE/A0A669 RMK/NONRVSM)
```

4.2 Navigation Capability

4.2.1 General Guidance

Navigation capabilities in Item 10, Item 18 PBN/ and Item 18 NAV/ relate to authorized capabilities in Op Specs, LOAs, MOAs, and other approvals. Guidance on appropriate codes to file are contained in the Operational Approval Guidance Table posted at https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/air_traffic_services/flight_plan_filing.

4.2.2 Navigation Requirements for Specific Route Types

The AIM (Appendix 4) and AIP (Appendix 2) each contain detailed information regarding required navigation capabilities in the flight plan for various routings. Many routes require Performance Based Navigation (PBN), involving entries in Item 10a, Item 18 PBN/, and Item 18 NAV/.

4.2.3 ERAS processing of Item 18 PBN/ codes

The ERAS processes codes in Item 18 PBN/ to determine eligibility for automated preferred routings and for SIDs and STARs. The general processing looks for the following:

- Any PBN capability is sufficient for general RNAV capability, i.e. the ability to fly direct from one navaid or waypoint to another.
- Codes C1, C2, or C4 are sufficient for RNAV 2 capability
- Codes D1, D2, or D4 are sufficient for RNAV 1 capability
- Codes O1 or O2 are sufficient for RNP 1 capability

Other codes filed (e.g. A1, L1, T1, S1, S2, and B1-B5) indicate RNAV capability but are not otherwise used by the En Route Automation (Oceanic systems use the L1 and A1 codes; and Terminal Services may care about the T1, S1, and S2 approach capability codes).

At this time the primary ATC view of PBN capability is a summary display that indicates whether a flight is eligible for RNP 1, RNAV1, RNAV 2, and/or general RNAV. The controller does not normally see the exact PBN/ code that was filed (they can do so via a query). A future update will add a view of all the PBN/ codes filed in addition to the summary PBN display.

4.2.4 PBN capabilities for Arrivals only or Departures only

When a valid RNAV 1 or RNP 1 is filed, the ERAS will assume that the flight is eligible for both departure and arrival routes. If a flight is capable of RNAV 1 (or RNP 1) but only on arrivals or only for departures there is a way to specify this, but use of the method has several

considerations and therefore contact us at flightplanquestions@faa.gov for assistance in setting this up properly and to ensure understanding of the limitations.

4.3 Communications/Data Link Capability

Data link services include those for automated pred-departure clearances, en route Controller Pilot Data Link Communications (CPDLC) and oceanic CPDLC.

Guidance for flight plan filing can be found in:

- AIM Appendix 4 and AIP Appendix 2 (identical)
- Operational Approval Guidance Table
- FAA Data Communications User Information at https://www.l3harris.com/datacomm for detailed guidance. This site has detailed documentation on flight plan filing requirements for departure clearance (DCL and PDC) and en route CPDLC services.

4.4 Transponder Capabilities

Follow the guidance in the AIM Appendix 4 and AIP Appendix 2 regarding specification of transponder capability in Item 10b.

Remember to file only one transponder letter in Item 10b.

4.5 ADS-B Capabilities

Follow the guidance in the AIM Appendix 4, AIP Appendix 2, and the Operational Approval Guidance Table (see 4.2 for link) regarding specification of ADS-B capability. Operators should file relevant codes in Item 10b, and indication that the capability is U.S. authorized in Item 18 SUR/. For further information, also see https://www.faa.gov/air_traffic/technology/adsb/ and Advisory Circular 90-114, section 4.4.

The ICAO aircraft address (also known as the Mode S Code or the 24 bit address) should be included in CODE/ to enhance tracking accuracy in FAA systems. Note that for U.S. registered aircraft, the address is listed in the FAA registration database at https://registry.faa.gov/AircraftInquiry. Look for “Mode S Code (Base 16 / Hex)” which will be six characters. **Do not use** the “Mode S Code (base 8 / Oct)” which is eight digits.

Applications that rely on ADS-B, e.g. Interval Management, also are addressed and rely on codes in SUR/ as specified in the AIM and AIP.

4.6 Reduced Oceanic Separation

A flight may be eligible for reduced separation in oceanic airspace depending on Navigation, Communication, and Surveillance capabilities of the flight. See the AIP ENR-7.1, paragraph 2 for detailed flight planning requirements. The AIP Appendix 2 and AIM Appendix 4 also contain summaries.

5. Reference Material

5.1 Acronyms

The following acronyms are used throughout this Reference Guide.

Table 5-1-1. Acronyms

Term	Description
AC	Advisory Circular
ACK	Acknowledgement Message
AFTN	Aeronautical Fixed Telecommunications Network
AIP	Aeronautical Information Publication
ANSP	Air Navigation Service Provider
ARTCC	Air Route Traffic Control Center
ATC	Air Traffic Control
ATS	Air Traffic Service
CDM	Collaborative Decision Making
CDR	Coded Departure Routes
CHG	Modification Message
CNL	Cancellation Message
DLA	Delay Message
DP	Departure Procedure
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)

Term	Description
FPL	Filed Flight Plan
IAW	In Accordance With
ICAO	International Civil Aviation Organization
LOCID	Location Identifier
NADIN	National Airspace Data Interchange Network
NAR	North Atlantic Route
NAS	National Airspace System
NAVAID	Navigational Aid
NFDC	National Flight Data Center
NM	Nautical Mile(s)
PBN	Performance Based Navigation
PTP	Point-to-Point
REJ	Rejection Message
RNAV	Area Navigation
RNP	Required Navigation Performance
RVSM	Reduced Vertical Separation Minimum
SID	Standard Instrument Departure
STAR	Standard Terminal Arrival Route
VOR	VHF (Very High Frequency) Omni directional Range

Table 5-1-2 Abbreviations Used in REJ Messages

Item 7a	AID	Aircraft Identification
Item 7c	BCN	Beacon Code
Item 8a	FLR	Flight Rules
Item 8b	FLT	Type of Flight
Item 9a	ACT	Type of Aircraft
Item 9c	WAK	Wake Turbulence Category
Item 10a	EQP	Communications & Navigation Equipment
Item 10b	SRV	Surveillance Equipment
Item 13a	DEP	Departure Aerodrome
Item 13b	TIM	Departure Time
Item 15a	SPD	Cruising Speed
Item 15b	RAL	Requested Altitude
Item 15c	RTE	Route
Item 16a	DST	Destination Aerodrome
Item 16b	ETE	Estimated Time En route
Item 16c	ALA	Alternate Aerodrome
Item 18	OTH	Other Information
Item 22	AMD	Amended Data

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), Doc. 4444	Describes ICAO standards for FPL, CHG, DLA, and CNL messages and their use.	https://store.icao.int/ See PANS-ATM Appendix 2, Appendix 3
ICAO Location Identifiers Doc. 7910	International location indicators beyond what is included in FAA Order JO 7350.9	https://store.icao.int/
ICAO Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services, Doc. 8585	International 3-letter operating designators beyond what is included in FAA Order JO 7610.12	https://store.icao.int/
ICAO Regional Supplementary Procedures Doc. 7030	Can contain instructions for flight plan content in specific regions and circumstances.	https://store.icao.int/
ICAO Aircraft Type Designators Doc. 8643	International aircraft type designators. FAA Order 7360.1 is generally consistent but updates are not always synchronized.	https://www.icao.int/publications/DOC8643/Pages/default.aspx
Aeronautical Information Publication (AIP)	Describes FAA exceptions to The PANS-ATM. Includes instructions for FAA international flight plan form. Includes special instructions for RVSM and Oceanic Operations.	https://www.faa.gov/air_traffic/publications/ See ENR 1.10, ENR 1.11, ENR 7.2, Appendix 2, ENR 1.1 par. 38.
Aeronautical Information Manual (AIM)	Describes basic flight information and ATC procedures for use in the U.S. National Airspace System.	https://www.faa.gov/air_traffic/publications/ See 5-1-6, 4-6-10, Appendix 4.
FAA Orders		https://www.faa.gov/air_traffic/publications/#orders
FAA Order JO 7110.10, Section 6-2 IFR Flight Plan Handling	Describes FPL, CHG, and CNL message formatting, addressing for domestic centers, key parameters that define allowable time windows for flight plans and changes.	

Reference	Relevancy to ICAO FPL filing:	Internet Availability
FAA Order JO 7350.9, Location Identifiers	Defines valid fix identifiers for NAVAIDs, waypoints, intersections, etc., that can be filed in FPLs.	
FAA Order JO 7610.12, Assignment and Authorization of Call Sign Designators and Associated Telephonies	Describes valid flight identifiers for use in Item 7.	
FAA JO 7110.127, National Airspace System (NAS) Processing of Foreign Aircraft Identifications with a Numeric Nationality Mark	Describes FAA procedures for handling aircraft whose registration number starts with a number	
FAA Order JO 7360.1, Aircraft Type Designators	Defines aircraft type designators that can be used in flight plans.	
Military Flight Plan and Flight Movement Data Communications AFMAN11-213 AR95-11 NAVAIR00-80T-114	Details flight plan content specific to military flights	https://www.e-publishing.af.mil/Product-Index/
FAA Data Communications User Information	Includes instructions for flight planning for PDC, DCL, and En Route CPDLC.	https://www.l3harris.com/datacomm
FAA Aircraft Registry	Look up the aircraft address for an aircraft.	https://registry.faa.gov/AircraftInquiry
Operations Specifications to Flight Plan Mapping Table	For each significant capability, identifies a mapping from Operations Specifications to flight plan codes.	https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/air_traffic_services/flight_plan_filing

Reference	Relevancy to ICAO FPL filing:	Internet Availability
Advisory Circulars	Defines requirements for filing certain capabilities or exceptions. *Note: The Operations Specifications to Flight Plan mapping table identifies relevant Advisory Circulars.*	http://www.faa.gov/regulations_policies/advisory_circulars/
Notices to Airmen	Defines requirements for filing certain capabilities or exceptions.	https://www.notams.faa.gov/PilotWeb/ http://www.faa.gov/air_traffic/publications/notices/
RVSM Guidance	Provides documentation for RVSM operations in U.S. airspace	https://www.faa.gov/air_traffic/publications/ See AIP ENR 1.1 Paragraph 38 https://www.faa.gov/air_traffic/separation_standards/rvsm/documentation/
Oceanic and Offshore Operations	Provides documentation for operations in FAA-controlled Oceanic airspace.	https://www.faa.gov/air_traffic/publications/ See AIP ENR-7 https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/afs410/oceanic_remote Links to relevant Advisory Circulars and guidance documents.
Flight Planning Guidance	Provides supplementary guidance to the AIM and AIP • Includes the Operational Approval Guidance Table	https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/air_traffic_services/flight_plan_filing
Pilot Controller Glossary	Provides definitions of common terms	https://www.faa.gov/air_traffic/publications/#pubs
Center Surface Boundaries	Defines center boundaries at ground level.	https://www.faa.gov/air_traffic/flight_info/aeronav/Aero_Data/Center_Surface_Boundaries/
FAA Data Comm User Information	Describes flight planning requirements to access enroute CPDLC and automated departure clearance services.	https://www.l3harris.com/datacomm
FAA ADS-B Implementation	General information on ADS-B implementation; links to relevant Code of Federal Regulations sections; Advisory Circulars; and Technical Standard Orders.	https://www.faa.gov/air_traffic/technology/adsb/
Departure and Arrival Procedures	Find departure and arrival procedures for use in flight plans.	https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/

Reference	Relevancy to ICAO FPL filing:	Internet Availability
FAA Route Management Tool	Find preferred routings as published by the command center.	https://www.fly.faa.gov/rmt/coded_departure_routes.jsp
National Search and Rescue Supplement	Indicates use of altitude reservations for SAR; relates to use of ALTRV in STS/	https://www.dco.uscg.mil/Portals/9/CG-5R/manuals/Natl_SAR_Supp.pdf

Appendix A. Route (Item 15) FAA Specific Entries

A.1 Item 15b – Cruising Level

Some non-ICAO altitude formats are permissible in Item 15b for FPLs with routes of flight entirely in U.S. domestic airspace. These are described below. Do not use these formats in an International FPL.

- **VFR/ddd –** The letters "VFR" followed by a slant and expected VFR cruising altitude

  Example: *VFR/045*

- **OTP –** The letters "OTP" optionally followed by a slant and the requested "VFR on top" altitude.

  Examples: *OTP*
  OTP/125

- **Block Altitude** – in the format "dddBddd" where the first "ddd" is the lowest altitude in the block and the second "ddd" is the highest altitude in the block. The block altitude follows 'F' or 'A' for flight level or altitude, as with a standard requested cruising level.

  Example: *F210B290*

Note: Information in this Item 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.

A.2 Item 15c – Basic Route Formatting

The first element of the route should be either:

- A published Departure Procedure (DP) *or*
- DCT followed by the first fix in the route.

Remaining elements should follow the normal sequence as described in the PANS-ATM, with some additional non-standard entries permitted as described below in "Non-Standard Route Elements". Note that all non-standard entries should be used only in domestic U.S. airspace.

Separate alternating fix and route entries with a space; on a segment direct from a fix to the next fix insert "DCT". Note that while the system will attempt to resolve names when a DCT is not included, this can lead to errors due to naming ambiguities across the globe. Best practice is to always use DCT as specified in the PANS-ATM.

Item 15c1, Standard Departure Route

File a published Standard Departure Route in Item 15c1 of an FPL. FAA departure (and arrival) routes are available at
https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/

Note that some published departure routes have special instructions for filing, these are typically what are known as "vector SIDs" where the route of flight is not fully published, and the chart indicates that vectors will be issued. Some such routes have published instructions on how to file and others do not. If a reject is received for a published SID indicating that it does not exist, contact flight data at the relevant center for guidance.

Item 15c2 – ATS route

File published ATS Route designators in Item 15c2 of an FPL.

Item 15c3 – 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. 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 ID, followed by a three digit direction in degrees magnetic, followed by 3 digits in NM.
- 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.

Item 15c4 – Change of speed or level

Entries in Item 15c4 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."

Note: For processing purposes and controller displays, ERAS uses only the speed and altitude information filed as the first element in Item 15 (i.e. Initial Cruise). This element should reflect data at 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.

> ***Note:*** While ERAS does not accept metric speed and altitude in Items 15a and 15b, they are accepted in Item 15c4.

Item 15c5 – Change of flight rules (Composite Flights)

Flight plans that combine VFR operation for one portion of a flight and IFR for another, sometimes known as a composite flight plan, cannot be accepted or processed by current automation. File separate flight plans for the VFR and IFR portions of flight as instructed as instructed in the AIM section 5-1-9 and the AIP ENR 1.10 paragraph 8.

Item 15c6 – 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.

A.3 FAA Unique Route Entries

A.3.1 Radial Routes

The AIM describes circumstances where an aircraft can be cleared along a NAVAID radial, e.g. as part of a departure procedure; as a substitute airway; or during vectoring.

In some cases preferred routes are published with such routes, e.g.

```
ALB ALB CTR PVD PVD167 NEWBE DEEPO ACK
LAX LAX320 CANOG VNY
```

The automation system will process routes expressed as a navaid name followed by a 3-digit radial direction as a route.

A.3.2 Delay at a Fix

Delay at a fix may be specified in Item 15c in a domestic U.S. flight.

Delay at a fix may be requested using the format “[fix id]/Dh+mm”. This is the same format as used in a domestic FP message.

Example: `KORRY/D0+25`

A.3.3 Coded Route Re-entry Indicator

The coded route re-entry indicator is for use only with special routes that have relevant loops defined, generally Military IFR and VFR training routes.

Coded Route Re-entry Indicator using the format “[route id]+Rd”. This is the same format as used in a domestic FP message.

Example: `IR107+R1`

A.3.4 Route-to-Route Transition

When a transition is planned between two (2) routes in U.S. domestic airspace, the point of transition should normally be inserted in Item 15c as described in the PANS-ATM. The point of transition may be omitted in the following cases:

- When filing published Preferred Routes or Coded Departure routes from https://www.fly.faa.gov/rmt/coded_departure_routes.jsp that include a route-to-route segment.

- When the intersection between the two (2) airways is not published and is unambiguous, i.e. there is one and only one intersection between the two airways.

When omitting the point of transition in the portion of the route in U.S. domestic airspace, file the two (2) route names separated by a space. Transition between any combinations of the following types of routes will be supported:

- Published High altitude airways (J- or Q-Routes); Published Low altitude airways (V- or T-Routes); and
- Radial Routes.

Note: *Do not use this format/convention in the portion of the route outside domestic U.S. unless directed by the appropriate Air Traffic Services Provider.*

Note: *Be very careful when using this construct to ensure there is a single point of intersection between the routes. If the automation finds more than one intersection, it will reject the flight plan.*

Do not use this convention for transition between combinations of the following routes:

- SIDs;
- STARs;
- Atlantic Routes;
- Aerial Refueling Routes;
- Military IFR and VFR training routes (IR and VR routes);
- LF/MF "colored" airways (e.g., Amber airways, Blue airways); and
- North Atlantic Routes (NAR).

Examples are shown in Table A-1.

Table A-1 Route-to-Route Transition Examples

Type(s) of Route Transition	Route as published	Route as filed in ICAO Item 15c
Radial route to radial route	Published IFR Preferred Route: MYF MZB293 **SLI148 VTU114 SLI251** TANDY LAX	DCT MYF MZB293 SLI148 SLI251 TANDY DCT
Radial route to airway	Published IFR Preferred Route: HHR SLI **SLI148 V25** PACIF V208 OCN CRQ	DCT SLI SLI148 V25 PACIF V208 OCN DCT CRQ DCT
Victor airway to Victor airway	Published IFR Preferred Route: KAJO PDZ **V186 V66** MZB KMYF	DCT PDZ **V186 V66** MZB

Appendix B. Other Information (Item 18)

B.1- Standard Other Information Indicators

The required order of indicators within Item 18 is specified in the PANS-ATM, and some ATS units may enforce the order or may truncate information in Item 18. While the FAA ERAS accepts Item 18 indicators defined in the PANS-ATM in any order filers are urged to file in the order specified in the ICAO PANS-ATM to ensure world-wide compatibility and proper processing.

Any indicator not defined in The PANS-ATM should not be used, except those published in Regional Supplementary Procedures (Doc. 7030) or an AIP. See item 4 below for additional details.

File only one instance of each indicator. Multiple instances of an indicator (e.g. RMK/TEXT RMK/OTHER TEXT) may cause rejection of the flight plan—this will vary by ATS unit.

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

- The first column lists the indicators.
- The second column describes the FAA requirements for filing the indicator. Note that these reflect the FAA requirements. International flights need to be aware of any other ANSP requirements with respect to Item 18. The FAA ERAS should accept information filed in these indicators for other ANSPs.
- The third column provides any applicable references.
- The fourth column provides examples for each indicator.

Table B-1. Item 18 Filing Guidance for Flight Plans to the FAA

Indicator	FAA Requirements/Guidance	References (See Section 5.2 for links)	Examples

STS/	File codes per guidance in the AIM, Appendix 4 or AIP, Appendix 2. See guidance for use with FAA in table B-2 below.	AIM App. 4
		AIP App. 2
			`STS/STATE`
			`STS/HOSP`
			`STS/STATE NONRVSM`

PBN/	File codes per guidance in the AIM, Appendix 4 or AIP, Appendix 2. Guidance on understanding which codes relate to specific Operational Approvals When more than 8 codes are applicable, use guidance in Appendix 3. *Note: Use of PBN/ requires 'R' in Item 10a.*	AIM App. 4 AIP App. 2 Operational Approval Guidance Table	`PBN/A1B2B4L1C1D1O1T1` `PBN/A1L1`

Indicator	FAA Requirements/Guidance	References (See Section 5.2 for links)	Examples
NAV/ COM/	Include codes as instructed by an ATS authority. The FAA documents relevant codes in the AIM and AIP. *Note: Use of NAV/ or COM/ requires 'Z' in Item 10a.*	AIM App. 4 AIP App. 2 Operational Approval Guidance Table	NAV/P1Z1
DAT/	File codes for PDC, DCL, and en route CPDLC as indicated in the AIM, AIP, and Datacomm guidance materials *Note: Use of DAT/ requires 'Z' in Item 10a.*	AIM App. 4 AIP App. 2 FAA Data Communications User Information	DAT/1FANSE2PDC
SUR/	Flights that comply with FAA CFR requirements for ADS-B should file SUR/260B for 1090ES capability, and SUR/282B for UAT capability. *Note that no SUR/ entry is necessary for other ADS-B equipment (e.g. RTCA DO 260A or 282A equipment).*	AIM App. 4 AIP App. 2	SUR/260B SUR/260B 282B
DEP/	If ZZZZ is filed in Item 13, include the departure point as the first text following DEP/ as follows: 1. If there is a location identifier for the airport but it is not four letters (e.g. it includes numerals), include only the location identifier as published in 9. 2. If the departure point is not an airport or there is no location identifier for the airport, include a significant point as described in the PANS-ATM (fix name, fix/radial/distance, or Lat/Lon).	AIM App. 4 AIP App. 2 FAA JO 7350.9 ICAO Doc. 7910	DEP/S20 DEP/MD21 DEP/JACOX DEP/ERI090012
DEST/	If ZZZZ is filed in Item 16, include the destination as as the first text following DEST/ as follows: 1. If there is a location identifier for the airport (but it is not four letters), include only the location identifier as published in FAA Order JO 7350.9. 2. If the destination is not an airport or there is no location identifier for the airport, include a significant point as described in the PANS-ATM (fix name, fix/radial/distance, or Lat/Lon).	AIM App. 4 AIP App. 2 FAA JO 7350.9 ICAO Doc. 7910	DEST/S20 DEST/MD21 DEST/JACOX DEST/ERI090012

Indicator	FAA Requirements/Guidance	References (See Section 5.2 for links)	Examples
DOF/	Use of DOF/ is optional in flight plans sent to the FAA. Use of DOF/ is recommended when the flight will leave the U.S. to ensure compliance with other air traffic authority rules. Flight plans sent to En Route ATC must have an EOBT and date of flight that fall within the time window described in Section 2.1.1. *Note that operators using a flight planning service generally can file more than a day in advance. The service will hold flight plans and submit to the ERAS at an appropriate time.*	PANS-ATM	`DOF/230125` (25 January 2023)
REG/	File when the callsign is not the registration number as indicated in the PANS-ATM or in regional supplementary procedures. *Note: See AC 91-85, paragraph B.3.1 concerning use of REG/ for RVSM flight monitoring.* *Note: REG/ number is required for flights that desire CPDLC or ADS-C services; see FAA Data Communications User Information* *Note: See paragraph 2.1.2 for use of REG/ when aircraft ID is a registration that starts with a number.*	AIM App. 4 AIP App. 2 AC 91-85 ICAO PANS-ATM ICAO Doc. 7030 FAA Data Communications User Information	`REG/N23721`
EET/	Information after EET/ must contain the FIR identifier from of each FIR boundary crossed and the estimated time to that boundary. See Appendix B.3 for details. ***Note:** EET/ information is not required for a domestic flight in the FPL filed with the departure center.*	AIP GEN 1.7 FAA JO 7110.10 ICAO Doc. 7910	`EET/KZMA1234`
SEL/	File SELCAL code as required by the AIP and other applicable instructions.	AIP AIM FAA JO 7110.65 para. 10-4-4	`SEL/CKAS`

Indicator	FAA Requirements/Guidance	References (See Section 5.2 for links)	Examples
TYP/	If ZZZZ is filed in Item 9, include a description of the type of aircraft when there is no type designator in FAA JO 7360.1, or there is a formation flight with multiple aircraft types. *Note: Occasionally there can be a lag between publication of a new aircraft type designator in JO 7360.1 and inclusion in the automation system. Contact flightplanquestions@faa.gov or the relevant flight data unit if there is a question regarding a type designator.*	FAA JO 7360.1 ICAO Doc. 8643	TYP/EXPERIMENTAL TYP/2F16 2K35R
CODE/	File the aircraft's Mode S address, when one has been assigned. *Note: See Section 4.5 for further guidance.*	AIM App. 4 AIP App. 2	CODE/23A16C
DLE/	The FAA currently has no requirements for any information to be filed in DLE/. The FAA can accept DLE/ information, but it is not processed or presented to controllers. Do not use DLE/ for fixes in U.S. airspace at this time. *Note: Within U.S. airspace, delay information can be included in the route field of an FPL using legacy FAA format; see Appendix A.3.2 for guidance.*	AIM App. 4 AIP App. 2 PANS-ATM	DLE/VSA0130
OPR/	As of publication of this guidance, the FAA has no requirements for inclusion of OPR/ in the flight plan. Follow guidance in the AIP and AIM.	AIM App. 4 AIP App. 2	OPR/FLEXJET
ORGN/	As of publication of this guidance, the FAA has no requirements for inclusion of ORGN/ in the flight plan. Follow guidance in the AIP and AIM.	AIM App. 4 AIP App. 2	ORGN/EDDTBERX
PER/	As of publication of this guidance, the FAA has no requirements for inclusion of PER/ in the flight plan. Follow AIM, AIP, and PANS-ATM guidance. Categories are as defined in the AIP ENR 1.5 paragraph 11.1.5. The categories are also defined in the Pilot Controller Glossary under "Aircraft Approach Categories" ***Note:** If filed, the ERAS will accept only a single letter that matches one of the defined categories.*	AIM App. 4 AIP App. 2 AIP 1.5, 11.1.5 Pilot Controller Glossary	PER/C

Indicator	FAA Requirements/Guidance	References (See Section 5.2 for links)	Examples

ALTN/
RALT/
TALT/
	As of publication of this guidance, the FAA has no requirements for inclusion of ALTN/, RALT/, or TALT/ in the flight plan.
	Follow AIM and AIP guidance.
	Note: All requirements for alternate airports must be followed, there is just no requirement to include them in the flight plan to ATC.
		AIM App. 4
		AIP App. 2
			`ALTN/5AR2`
			`RALT/KEWR KRDU KTPA`
			`TALT/KEWR`

RIF/	As of publication of this guidance, the FAA has no requirements for inclusion of RIF/ in the flight plan and will make no use of it. File as indicated in the PANS-ATM.	AIM App. 4 AIP App. 2	`RIF/ESP G94 CLA APPH`

RMK/	Any FAA requirements or guidance that indicates information should be filed in "Remarks" should be filed in an FPL after RMK/.
	See "Filing Remarks" in Appendix B.4.
		AIM App. 4
		AIP App. 2
		FAA JO 7210.3
		Other FAA documents requiring information in remarks section of the flight plan.
			`RMK/NRP`
			`RMK/PTP`
			`RMK/CDR CAPABLE`
			`RMK/NO STAR`
			`RMK/DVRSN`

B.2- Reasons for Special Handling (STS/)

The PANS-ATM defines a set of 13 possible "reasons for special handling". Some of these reasons conflict with current FAA practices and others are not relevant to current FAA practice (i.e. there is no equivalent filing). The following table indicates the recommended filing practices for these items.

Table B-2. Filing Reason for Special Handling with the FAA

STS/ Item	FAA Requirements	Flight Planning References
ALTRV	Follow all current procedures for ALTRVs. Optionally file ALTRV in STS/ to indicate intention to operate in an ALTRV, however including this item will not be cause for special handling and does not substitute for any existing requirements for coordination.	Military Flight Data Telecommunications (Army Regulation 95–11, AFR 11-213, OPNAVINST 3722.8L) National SAR Supplement

STS/ Item	FAA Requirements	Flight Planning References
ATFMX	File only as required by other ATS Authorities. As of publication of this guidance, the FAA has no requirements for this item.	N/A
FFR	Follow all current procedures for coordination of Fire Fighting flights. Optionally include this item to indicate involvement in firefighting, however including this item will not be cause for special handling and does not substitute for any existing requirements for coordination.	N/A
HEAD	Follow all current procedures for coordination of Head of State flights. Optionally include this item as appropriate, however including this item will not be cause for special handling and does not substitute for any existing requirements for coordination.	N/A
HUM	Follow all current procedures for coordination of Humanitarian flights. Optionally include this item as appropriate, however including this item will not be cause for special handling and does not substitute for any existing requirements for coordination.	N/A
MARSA	Follow procedures in relevant Letter of Agreement (LOA) or military/FAA document.	Applicable LOA or other documented procedures
STATE	Follow all current procedures for law enforcement and military flights. Optionally include this item for flights that meet the definition of State Aircraft in the Pilot/Controller Glossary. However including this item will not be cause for special handling and does not substitute for any existing requirements for coordination.	FAA Pilot Controller Glossary (PCG)
FLTCK	File FLTCK in STS/ of an ICAO flight plan. If a fix and action need to be specified then additionally put that information in RMK/.	Order JO 7110.65
HAZMAT	Include HAZMAT when carrying hazardous materials per CFR Part 175, or when instructed to include remarks in a flight plan pertaining to hazardous materials.	CFR Part 175 AF Joint Instr. 11-204 Army Reg. 95-27

STS/ Item	FAA Requirements	Flight Planning References
HOSP	File HOSP for a medical flight that does not meet the criteria for MEDEVAC. No operational priority is given solely due to filing of HOSP; priority will be given when requested from ATC.	AIM Section 4-2-4 AIP GEN 3.4, ENR 6.2
MEDEVAC	File MEDEVAC for a life-critical medical emergency flight. Operational priority will be given to MEDEVAC flights. ***Note:*** Use of MEDEVAC replaces previous use of the term "Lifeguard".	AIM Section 4-2-4 AIP GEN 3.4
NONRVSM	File NONRVSM in STS/ when the flight is eligible for NONRVSM operations in RVSM airspace per the guidance in AIM Section 6. *Note that including NONRVSM does not substitute for any required coordination with ATC described in the AIM.*	AIM, Section 6 AIP ENR 1.1 Paragraphs 38.3, 38.10
SAR	Follow all current procedures for Search and Rescue operations. Optionally include this item for informational purposes when appropriate. Inclusion of SAR in STS/ does not substitute for any current requirements for coordination with FAA Air Traffic Control.	AIM, Section 6-2-5 AIP, GEN 3.6 National Search and Rescue Supplement

B.2.1 MEDEVAC example

MEDEVAC is used for Life-Critical flights (and has replaced the term Lifeguard). The prefix used for the aircraft of a MEDEVAC flight is "L".

```
(FPL-LN99-IG
-C550/L-SDGW/CU1
-KAOO1245
-N0380F320 TATES3 TATES V469 NESTO DCT
TVT KEATN5
-KCLE037
-STS/MEDEVAC SUR/282B CODE/A00000)
```

B.2.2 HAZMAT example

```
(FPL-N12345-IG
-LJ35/L-SGW/C
-KADS1245
```

```
-N0440F400 WORTH5 TXO DCT
-KBUR0300
-STS/HAZMAT REG/N000XX RMK/HAZARDOUS CARGO
RADIOACTIVE PHARMACEUTICALS)
```

B.2.3 Invalid STS/ content example

Do not put any information in STS/ other than one of the approved keywords. Any additional information must be put in RMK/ as shown above. The following flight plan will be rejected:

```
(FPL-N12345-IG
-LJ35/L-SGW/CB1
-KADS1245
-N0440F400 WORTH5 TXO DCT
-KBUR0300
-STS/HAZARDOUS CARGO RADIOACTIVE
PHARMACEUTICALS SUR/260B REG/N000XX CODE/A00000)
```

B.3- Filing EET/

FIR boundary crossings should be included in EET/ as follows:

- Flights that remain within the domestic U.S. do not need any EET/ entries, although they are permitted. (Note: A flight plan for a domestic flight should be filed only with the departure center)
- An EET/ entry for the departure center is never required.
- Any FPL submitted to an FAA center other than the departure center requires an inbound FIR boundary crossing for that center in EET/ to be accepted. Use the four-letter ICAO location identifier for the responsible center, e.g. KZDC for Washington ARTCC.
    - The four-letter identifiers for each center can be found in order JO 7110.10, table 5-3-2. The first four letters of the Computer address shown corresponds to the FIR identifier to use in EET/. For example, for Albuquerque KZABZQZX is the address and the FIR identifier is KZAB.
- Include EET/ entries as required by other ATS authorities whose FIRs will be traversed by the flight

Note: The FAA ERAS uses the EET entry to determine an approximate time of entry to the center. When a flight originates from outside the center, the route often cannot be fully processed (the ERAS does not have a world-wide database of nav data). Therefore, the system takes the EET/ for the receiving center, adds it to the filed EOBT and uses that time as the time of entry to the center <u>while the flight is proposed</u>. When the flight makes its way towards the center, coordination by the previous center provides an accurate time typically 30-60 minutes before arriving. So the EOBT/EET times are used only for advanced planning; not for any control purposes.

B.4- Filing Remarks with the FAA (RMK/)

FAA instructions to file information in the remarks section of the flight plan or in Field 11 of an FP should be included in Item 18 RMK/ when filing an FPL. As stated in the AIM and the AIP, the FAA instructs filers to "Enter only those remarks pertinent to ATC or to the clarification of other flight plan information".

Remarks to be filed for specific purposes are directed in the AIM, the AIP, FAA Order 7210.3 and other documents such as Advisory Circulars and NOTAMs. All of these items apply to RMK/ in an ICAO flight plan.

B.5- Non-Standard Other Information Indicators

With the advent of Amendment 1, non-standard indicators in Item 18 are strongly discouraged if not banned outright, and in particular, "reasons for special handling" are mandated to be filed in STS/ or, if no appropriate code exists there, in RMK/.

Therefore no non-standard indicators should be filed in Item 18 except for limited cases that are documented in Doc. 7030 or an AIP.

The known non-standard indicators right now include:

1. RVR/, defined by Eurocontrol. RVR/ contains a 3-digit Runway Visual Range expressed in meters.
2. RFP/, defined by Eurocontrol. RFP/ contains a replacement flight plan number (a type of version number).

Appendix C. Guidance when more than 8 PBN Codes are Applicable

Item 18 PBN/ is limited to 8 designators; each two characters. This appendix recommends a prioritization approach to determining which designators may be omitted from PBN/.

C.1- Designators that can always be omitted (never needed or used by the FAA)

Designators that are redundant

When filing B1, C1, D1, or O1 do not include any other codes in the same series; e.g. do not file C1C2C4; just include the C1.

Designators that do not correspond to applicable authorizations

Some designators do not correspond to any authorizations issued by the FAA or represent capabilities no longer in use and therefore are always irrelevant. These include:

1. C3, D3, O3- DME/DME alone is never adequate for RNAV 2, RNAV 1, or RNP 1
2. O4- DME/DME/IRU alone is not adequate for RNP 1
3. T2- All current authorizations for RNP AR APCH include RF capability; and a coming change will make it a requirement to have RF capability, so T2 should never be applicable.
4. B6- LORAN C service is discontinued, so RNAV 5 using LORAN C is not a relevant capability in the U.S.

Special instruction for B1

Because of the status of LORAN C, ICAO has agreed that B1 can be filed when B2, B3, B4, and B5 are present (i.e. do not need B6 to file B1).

C.2- Designators that can be omitted when the limit of 8 is exceeded

This list can be worked through one item at a time until the limit of 8 is achieved.

1. When any other code is included, can omit RNAV 5 codes. Inclusion of any PBN capability will infer the ability to fly direct to a fix, which is the only capability inferred by RNAV 5. Therefore RNAV 5 does not specifically need to be identified.
2. When RNP 1 is included (O1 or O2), can omit RNAV 1 and/or RNAV 2. A flight with RNP 1 capability will be eligible for all RNAV 1 and RNAV 2 routes.
3. When RNAV 1 is included (D1, D2, or D4), can omit RNAV 2. A flight with RNAV 1 capability will be eligible for all RNAV 2 routes.
4. When RNP AR APCH with RF (T1) is included, can omit RNP APCH (S1)
5. When multiple codes are included for a single capability (e.g. RNAV 5), select one of the capabilities and omit others (giving preference to GNSS when applicable).

C.3- Handling of omitted codes

While not necessary for FAA processing, any applicable PBN designators omitted from PBN/ for space reasons can be included in NAV/. Include these if needed for other ANSPs.