Gleim Pilot Handbook

Eleventh Edition, Second Printing
Updates
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Study Unit 11 – Cross-Country Flight Planning

Pages 516-519, Subunit 11.2: This update reflects the FAA's implementation of ICAO Flight Plans for both domestic and international flights. Subunit 11.2 is reproduced in its entirety on the following pages.

11.2 FLIGHT PLAN (ICAO)

1. ICAO Flight Plan
   a. Flight plans contain specific information relating to the proposed flight of an aircraft, and controllers use them to provide air traffic services.
   b. For experienced pilots who have used the domestic FAA flight plan (which was discontinued on August 27, 2019), switching to the ICAO format is relatively simple because most of the fields in the domestic form are found in the international form.
   c. While some wording is slightly different, pilots experienced with filing domestic plans will see close similarities with most of the international fields, allowing them to file ICAO plans with ease. The table below illustrates the similarity between domestic and ICAO fields.

Domestic Fields	**ICAO Field Equivalents**
Aircraft Identification	Aircraft Identification
Type (of Flight)	Flight Rules
Aircraft Type	Type of Aircraft
Special Equipment*	Equipment (COM/NAV)*
Departure Point	Departure Aerodrome**
Departure Time	Time
True Airspeed	Cruising Speed
Cruising Altitude	Level
Route of Flight	Route**
Destination	Destination Aerodrome**
Est Time Enroute	Total EET
Remarks	Other Information/Remarks
Fuel on Board	Endurance
Number Aboard	Persons on Board
Color of Aircraft	Aircraft Color and Markings
Pilot’s Name & Other Information	Pilot in Command

*This field is optional
**ICAO IFR Flight Plans require 4 character location identifiers

   d. For additional guidance, refer to the *Aeronautical Information Manual (AIM)* paragraph 5-1-9.

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U.S Department of Transportation
Federal Aviation Administration

International Flight Plan

PRIORITY
<=FF

ADDRESSEE(S)

FILING TIME

ORIGINATOR

SPECIFIC IDENTIFICATION OF ADDRESSEE(S) AND / OR ORIGINATOR

3 MESSAGE TYPE
<=(FPL

7 AIRCRAFT IDENTIFICATION

8 FLIGHT RULES

TYPE OF FLIGHT

9 NUMBER

TYPE OF AIRCRAFT

WAKE TURBULENCE CAT.

10 EQUIPMENT

13 DEPARTURE AERODROME

TIME

15 CRUISING SPEED

LEVEL

ROUTE

TOTAL EET

16 DESTINATION AERODROME

HR MIN

ALTN AERODROME

2ND ALTN AERODROME

18 OTHER INFORMATION

SUPPLEMENTARY INFORMATION (NOT TO BE TRANSMITTED IN FPL MESSAGES)

19 ENDURANCE
HR MIN
E/

PERSONS ON BOARD
P/

EMERGENCY RADIO
R/ UHF [U] VHF [V] ELT [E]

SURVIVAL EQUIPMENT
[ ] / POLAR [P] DESERT [D] MARITIME [M] JUNGLE [J]

JACKETS
[ ] / LIGHT [L] FLUORES [F] UHF [U] VHF [V]

DINGHIES
D / NUMBER CAPACITY COVER [C] COLOR

AIRCRAFT COLOR AND MARKINGS
A/

REMARKS
N /

PILOT-IN-COMMAND
C/)<=

FILED BY	ACCEPTED BY	ADDITIONAL INFORMATION

FAA Form 7233-4 (7/15)

2. The ICAO flight plan form is shown on the previous page. Items preceding Item 7 are completed by ATC and COM services. Items that the pilot is required to complete are listed and described as follows:

   a. **Item 7: Aircraft Identification**

      1) Aircraft identification must not exceed seven alphanumeric characters and must be either

         a) An approved FAA/ICAO company or organizational designator, followed by the flight number, or

         b) An aircraft registration mark without any hyphens or blanks.

   b. **Item 8a/8b: Flight Rules and Type of Flight**

      1) Flight Rules

         a) One of the following may be selected:

            i) I -- IFR
            ii) V -- VFR

         b) If the flight requires both IFR and VFR flight rules in different phases of the flight, separate flight plans should be filed for each portion of the flight. Composite flight plans must not be filed because an IFR flight plan must be routed to ATC and a VFR flight plan must be routed to a Flight Service Station for search and rescue services.

      2) Type of Flight

         a) G -- General Aviation
         b) S -- Scheduled Air Service
         c) N -- Non-Scheduled Air Transport Operation
         d) M -- Military
         e) D -- DVFR
         f) X -- Other than any of the defined categories above

   c. **Item 9: Number of Aircraft, Type of Aircraft, and Wake Turbulence Category**

      1) Number of Aircraft

         a) This field is required when there is more than one aircraft in flight (up to 99).

      2) Type of Aircraft

         a) Provide the appropriate 2-4 character aircraft type designator listed in FAA Order 7360.1, *Aircraft Type Designators*.

         b) When there is no designator for the aircraft type, use “ZZZZ” and provide a description in Item 18, preceded with “TYP/.”

      3) Wake Turbulence Category

         a) H -- HEAVY, maximum certificated takeoff mass of 300,000 lb. or more.

         b) M -- MEDIUM, maximum certificated takeoff mass between 15,500 lb. and 300,000 lb.

         c) L -- LIGHT, maximum certificated takeoff mass of 15,500 lb. or less.

d. **Item 10a/10b: Equipment and Capabilities**

1) Navigation, Communication, and Approach Aid Capabilities

a) A list of codes appears in the table below.

Navigation, Communication, and Approach Aid Capabilities

A	GBAS Landing System	J7	CPDLC FANS 1/A SATCOM (Iridium)
B	LPV (APV with SBAS)	K	MLS
C	LORAN C	L	ILS
D	DME	M1	ATC SATVOICE (INMARSAT)
E1	FMC WPR ACARS	M2	ATC SATVOICE (MTSAT)
E2	D-FIS ACARS	M3	ATC SATVOICE (Iridium)
E3	PDC ACARS	O	VOR
F	ADF	P1	CPDLC RCP 400
G	GNSS – If any portion of the flight is planned to be conducted under IFR, it refers to GNSS receivers that comply with requirements of Annex 10, Volume I	P2	CPDLC RCP 240
		P3	SATVOICE RCP 400
		P4-P9	Reserved for RCP
		R	PBN Approved
		T	TACAN
H	HF RTF	U	UHF RTF
I	Inertial Navigation	V	VHF RTF
J1	CPDLC ATN VDL	W	RVSM Approved
J2	CPDLC FANS 1/A HFDL	X	MNPS Approved
J3	CPDLC FANS 1/A VDL Mode A	Y	VHF with 8.33 kHz Channel Spacing Capability
J4	CPDLC FANS 1/A Mode 2		
J5	CPDLC FANS 1/A SATCOM (INMARSAT)	Z	Other equipment carried or other capabilities
J6	CPDLC FANS 1/A SATCOM (MTSAT)		

b) For example, filing “O” in Item 10 means the aircraft is VOR capable. However, if your aircraft is equipped with VHF, VOR, and ILS, simply file “S.” If you also have an IFR-approved GPS, the letter “G” should be added to the box, along with the letter “R” if the aircraft is able to accept Performance-Based Navigation (PBN) routes and procedures.

i) PBN is the term now used to describe all services and routing that utilize RNAV or RNP technology. Therefore, code “R” is required in your flight plan if you are utilizing RNAV or RNP in any phase of your flight. If you do list “R” in Item 10, that only informs ATC that your onboard equipment is PBN-approved, but it does not describe its capabilities. You must then fill in the type of PBN equipment available onboard the aircraft in Item 18, Other Information.

2) Surveillance Capabilities

a) A list of codes appears in the table below.

Surveillance Capabilities

Insert "N" if no surveillance equipment for the route to be flown is carried, or the equipment is unserviceable, or

Insert one or more of the following descriptors, to a maximum of 20 characters, to describe the serviceable surveillance equipment and/or capabilities on board:

SSR Modes A and C

A Transponder	Mode A (4 digits – 4096 codes)
C Transponder	Mode A (4 digits – 4096 codes)

SSR Mode S

E Transponder	Mode S, including aircraft identification, pressure-altitude, and extended squitter (ADS-B) capability
H Transponder capability	Mode S, including aircraft identification, pressure-altitude, and enhanced surveillance
I Transponder	Mode S, including aircraft identification, but no pressure-altitude capability
L Transponder	Mode S, including aircraft identification, pressure-altitude, extended squitter (ADS-B), and enhanced surveillance capability
P Transponder	Mode S, including pressure-altitude, but no aircraft identification capability
S Transponder	Mode S, including both pressure-altitude and aircraft identification capability
X Transponder	Mode S, with neither aircraft identification nor pressure-altitude

NOTE: Enhanced surveillance capability is the ability of the aircraft to downlink aircraft-derived data via Mode S transponder.

ADS-B

B1	ADS-B with dedicated 1 090 MHz ADS-B "out" capability
B2	ADS-B with dedicated 1 090 MHz ADS-B "out" and "in" capability
U1	ADS-B with "out" capability using UAT
U2	ADS-B with "out" and "in" capability using UAT
V1	ADS-B with "out" capability using VDL Mode 4
V2	ADS-B with "out" and "in" capability using VDL Mode 4

ADS-C

D1	ADS-C with FANS 1/A capabilities
G1	ADS-C with ATN capabilities

Alphanumeric characters not included above are reserved.

NOTE:

1. *The RSP specification(s) if applicable, will be listed in Item 18 following the indicator SUR/, using the characters 'RSP' followed by the specifications value. Currently RSP180 and RSP400 are in use.*

2. *Additional surveillance equipment or capabilities will be listed in Item 18 following the indicator SUR/, as required by the appropriate authority.*

b) If your aircraft is Mode A or C capable, fill Item 10b with "A" or "C," respectively. If your aircraft is Mode S capable, there are seven options to choose from: E, H, I, L, P, S, or X.

e. **Item 13: Departure Airport**

1) The airport should be identified using the four-letter location identifier.
2) FSS- and FAA-contracted flight plan filing services will allow up to 11 characters in the departure field. This will permit entry of non-ICAO identifier airports and other fixes, such as an intersection, fix/radial/distance, and latitude/longitude coordinates. Other electronic filing services may require a different format.

f. **Item 15: Cruising Speed, Cruising Altitude/Flight Level, and Route**

1) Cruising Speed
   a) Enter “N” followed by the requested cruising speed as true airspeed in knots in 4 digits. If in Mach, use “M” followed by 3 digits.
2) Cruising Altitude/Flight Level
   a) Enter “F” followed by the requested flight level in 3 digits. If requesting a lower altitude, enter “A” followed by the altitude in 3 digits.
3) Route
   a) Provide the requested route of flight using a combination of published routes, latitude/longitude, and/or fixes.

g. **Item 16: Destination Airport, Total Estimated Elapsed Time, and Alternate Airport**

1) Destination Airport
   a) The airport should be identified using the four-letter location identifier.
   b) FSS- and FAA-contracted flight plan filing services will allow up to 11 characters in the departure field. This will permit entry of non-ICAO identifier airports and other fixes, such as an intersection, fix/radial/distance, and latitude/longitude coordinates. Other electronic filing services may require a different format.
2) Total Estimated Elapsed Time
   a) All flight plans must include the total estimated elapsed time (EET) from departure to destination in hours (H) and minutes (M), in the format HHMM.
3) Alternate Airport
   a) When necessary, specify an alternate airport in Item 16 using the 4-letter location identifier. When the airport does not have a 4-letter location identifier, include “ZZZZ” in Item 16c and file the non-standard identifier in Item 18, preceded with “ALTN/.”

h. **Item 18: Other Information**

1) Include all other necessary information relevant to your flight in this section in the approved format.

i. **Item 19: Flight-Specific Supplemental Information**

1) Supplemental information should not be transmitted as part of an IFR flight plan to ATC. The ATC system will reject an FPL message that contains Item 19.
2) The minimum required entries for Item 19 for a domestic flight are Endurance, Persons on Board, Pilot Name and Contact Information, and Color of Aircraft. Additional entries may be required by foreign air traffic services or at the pilot’s discretion.

3. For a more in-depth description of each item, FAA guidance is available in the *AIM* as "Appendix A: FAA Form 7233-4 – International Flight Plan."
4. VFR flight plans are not mandatory, but they are highly recommended as a safety precaution. In the event that you do not reach your destination as planned, the FAA will institute a search for you. This process will begin 30 min. after you were scheduled to reach your destination.
5. Flight plans can be filed in the air by radio, but it is best to file a flight plan prior to departing either by phone or online.
    a. After takeoff, contact the FSS by radio on the appropriate frequency and report your takeoff time so your flight plan can be activated, or opened.
6. When a VFR flight plan is filed, it will be held by the FSS until 1 hour after the proposed departure time and then canceled unless
    a. The actual departure time is received.
    b. A revised proposed departure time is received.
    c. At the time of filing, the FSS is informed that the proposed departure time will be met, but the actual time cannot be given because of inadequate communication.
        1) This procedure must be initiated by the pilot.
7. Your FSS specialist will be glad to assist you and answer any questions. Occasionally, you may have to file a flight plan without an ICAO form in front of you. Ask the specialist to prompt you for the required information.
8. ALWAYS CLOSE YOUR FLIGHT PLAN!
    a. Add "Close your flight plan" to your after-landing checklist.
    b. If you do not close your flight plan, the FAA will have to devote its limited and valuable resources attempting to determine if you did in fact arrive safely.
        1) If the FAA cannot locate you or your airplane, it will contact the appropriate Rescue Coordination Center, which will institute a search and rescue mission, the cost of which may be your responsibility.
    c. It is particularly important to notify an FAA (FSS or ATC) facility when you are late (over 30 min.) or have diverted to an alternate route or destination.
    d. While en route, you can identify yourself and your location to FSSs along your route (especially convenient if you are obtaining weather information), which will assist the FAA personnel if they have to look for you.
    e. If you cannot reach the FSS to close your flight plan, call FSS at 800-992-7433 or any ATC facility, which will relay the message.
    f. VFR flight plans require the pilot to call FSS or ATC to close them. When flying on an IFR flight plan to an airport with a control tower, ATC at the destination airport will automatically close the flight plan; no action by the pilot is required.