1. Introduction

The purpose of a Filed Flight plan (FPL) is to provide specified information to air traffic services (ATS) units about:

- The type of aircraft used and some of its characteristics.
- An intended flight or portion of a flight of an aircraft and its flight rules.
- The equipment according to the operation the crew is going to conduct.

2. ICAO Flight plan

In the IVAO network, the format chosen for building the flight plan is the ICAO standard. This ICAO flight is presented like the figure below.

All pilots in IVAO must complete this flight plan before any flight.

The Flight plan shall include all information relevant to that specific planned flight. This includes:

- Item 7 - Aircraft identification (Note: Aircraft identification means the radio call sign!)
- Item 8 - Flight rules and type of flight
- Item 9 – Number of aircraft, type(s) of aircraft and wake turbulence category
- Item 10 - Equipment on board
- Item 13 - Departure aerodrome ICAO code and planned time of departure
- Item 15 – First cruising speed and first cruising level or altitude
- Route to be followed
- Item 16 - Destination aerodrome ICAO code and total estimated elapsed time (EET)
- Item 17 - Alternate aerodrome(s)
- Item 18 – Remarks and other equipment (emergency and survival)
- Item 19 - Fuel endurance and total number of persons on board

In IVAO a flight plan MUST ALWAYS be filed before any flight.
3. Explanation of ICAO Flight Plan

To know each part of the Flight Plan (FPL), we will go through all the items in the FPL.

The following is a sample Flight plan form with full explanation of all the possible fields.
The picture shows the layout used in IVAO based on the ICAO real flight plan.

3.1. Aircraft Identification (up to 7 characters) – Field 7

This item is the identification of the aircraft.

This identification is your chosen unique call sign on IVAO Network.

It can be as follows:

- A **registration marking** of the aircraft *as pronounced* on the frequency: N704YA, OONZA
- An **ICAO designator** (trigram) of an *operating company*, followed by the *flight number* (plus letters): BCS777, SLR05K
- A **special military** call sign given by authorities: BAF54, USAF112, FAF020

- (dash) must not be used in the call sign in an ICAO flight plan.
A national registration marking is usually used for a general aviation VFR flight.
3.2. Flight Rules (1 character) – Field 8

This item is the flight rules chosen for the flight.

This one letter type must be chosen in the following list:

- **I** when the whole flight will be under **IFR**
- **V** when the whole flight will be under **VFR**
- **Y** when the first part of the flight will be under **IFR** and later changed into **VFR**
- **Z** when the first part of the flight will be under **VFR** and later changed into **IFR**

Short explanation of VFR and IFR:

- **V** = **VFR**: Visual Flight Rules means the pilot is required to be able to see ground reference except where the local authorities allow differently. It is the rule of "see and be seen". The ceiling and the visibility shall be compatible with the flight.
- **I** = **IFR**: Instrument Flight Rules means the aircraft instrumentation and the pilot abilities have to be certified. Instrument flight rules allow pilots to fly through clouds and in poor visibility. In most of the cases separation is provided by ATC in controlled airspace.

The pilot should specify in the appropriate route item the point or points where the change of flight rules is planned.

**Example:** GIBAL W616 LXR VFR DCT. This means the flight will depart IFR and remain IFR till LXR, after LXR the flight will continue VFR.

**Example:** GIBAL/N0260F120 IFR W616 LXR. This means the flight will depart VFR and remain VFR till GIBAL, after GIBAL the flight will continue at a speed 260 kts at FL120, IFR.
3.3. Type of flight (1 character) – Field 8B

This item is the type of flight.

This one letter type must be chosen in the following list:

- **S** if scheduled services (commercial flight according time-table)
- **N** if non-scheduled Air Transport Operations (occasional commercial flight)
- **G** if General Aviation (non-commercial flight)
- **M** if Military
- **X** if other than any of the defined categories above (State Flight, Search And Rescue, …)

3.4. Number of aircraft (1 or 2 characters) – Field 9

This item is the number of aircraft in the formation.

In IVAO, this number shall be 1 except for formation flight with multiple aircraft.

Be careful, do not mix, fly with other aircraft, perform own navigation and make a visual separation between each other and a formation flight that all the aircraft must be close to each other and doing the same thing at the same moment.
3.5. Type of aircraft (up to 4 characters) – Field 9B

This item is the code of the aircraft you use in the IVAO Network. The aircraft is coded using the ICAO table given by IvAp.

If an aircraft type has no ICAO code, you must use ZZZZ in the type of aircraft cell and you must specify in Remarks (item 18) the full name of the used aircraft type preceded by TYP/
3.6.  Wake Turbulence Category (1 character) – Field 9C

This item is the wake turbulence category of the aircraft chosen in the flight plan.

It is coded using one chosen letter with the following possibilities:

- **H** = heavy: for an aircraft type with a MTOM of 136,000 kg (300,000 lb.) or more.
- **M** = medium: for a MTOM less than 136,000 kg but more than 7,000 kg (15,500 lb.).
- **L** = light: for a MTOM of 7,000 kg or less.

For each aircraft type, the wake turbulence category is determined by its MTOM = Maximum Take-Off Mass. The actual mass of an aircraft does not change its wake turbulence category.

Although the Boeing 757 belongs to the “Medium” wake turbulence category, because of the dangerous wake turbulence it produces, it is considered as a “Heavy” to aircraft flying behind it.

There is actually a fourth category called “super” which was established for the Airbus A380.
3.7. Equipment – Field 10A

Preceding the oblique stroke, this item is the equipment used, carried and serviceable for the current flight.

<table>
<thead>
<tr>
<th>Eq</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ground-Based Augmentation System (GBAS) is a safety-critical system that augments the GPS Standard Positioning Service (SPS) and provides enhanced levels of service. It supports all phases of approach, landing, departure, and surface operations within its area of coverage.</td>
</tr>
<tr>
<td>B</td>
<td>Localizer Performance with Vertical guidance (LPV). Approach with Vertical guidance (APV-SBAS). Space Based Augmentation System (SBAS). The purpose of LPV is to fly ILS look-alike procedures published as RNAV GNSS with LPV minima, by using SBAS. These procedures with vertical guidance constitute a progress to approach safety.</td>
</tr>
<tr>
<td>C</td>
<td>LOng RAnge Navigation (LORAN) C is a terrestrial radio navigation system using low frequency radio transmitters to determine the location and speed of the receiver (i.e. the aircraft in aviation context).</td>
</tr>
<tr>
<td>D</td>
<td>Distance Measuring Equipment (DME) is a transponder-based radio navigation technology that measures distance between the equipment on ground and an aircraft by timing the propagation delay of VHF or UHF radio signals.</td>
</tr>
<tr>
<td>E1</td>
<td>Flight Management Computer (FMC) WayPoint Reporting (WPR) Aircraft Communications Addressing Reporting System (ACARS). A number of airlines routinely receive ACARS* position reports from their aircraft via satellite as part of their Airline Operational Control (AOC) flight monitoring. These position reports can be forwarded to an ATS provider and used to replace HF voice position reports. This method of delivery for aircraft position reports is known as FMC WPR. (*)ACARS is a digital datalink system for transmission of short, relatively simple messages between aircraft and ground stations via radio or satellite.</td>
</tr>
</tbody>
</table>
E2 Data link (D)-Flight Information Services (FIS) Aircraft Communications Addressing Reporting System (ACARS). (*). The flight information services provided can be weather reports and operational data. (*ACARS is a digital datalink system for transmission of short, relatively simple messages between aircraft and ground stations via radio or satellite.

E3 Pre-Departure Clearance (PDC) Aircraft Communications Addressing Reporting System (ACARS). Pre-departure clearance from ATC can be received in the cockpit via the ACARS. (*)ACARS is a digital datalink system for transmission of short, relatively simple messages between aircraft and ground stations via radio or satellite.

F Automatic Direction Finder (ADF) is a radio-navigation instrument that automatically and continuously displays the relative bearing from the aircraft to a suitable radio station.

G Global Navigation Satellite System (GNSS). The term GNSS encompasses all the satellite navigation systems such as GPS, GLONASS, GALILEO.

H High Frequency (HF) RadioTelephone (RTF). (Mainly used during oceanic flight)

I An Inertial Navigation System (INS) or Inertial Reference System (IRS) or Inertial Reference Unit (IRU) is a navigation aid that uses a computer, motion sensors (accelerometers) and rotation sensors (gyrosopes) to continuously calculate the position, orientation, and velocity (direction and speed of movement) of a plane without the need for external references.

J1 Controller Pilot Data Link Communications (CPDLC) Aeronautical Telecommunication Network (ATN) VHF Digital Mode 2 (VDL2). The ICAO VDL Mode 2 is the VDL version most commonly used. It was chosen for the Eurocontrol Link 2000+ program and is specified as the primary link in the EU Single European Sky rule adopted in January 2009 requiring all new aircraft flying in Europe after January 1, 2014 to be equipped with CPDLC.

J2 Controller Pilot Data Link Communications (CPDLC Future Air Navigation Services (FANS) 1/A High Frequency Data Link (HFDL). FANS 1/A provides controller-pilot data link communications (CPDLC) and include air traffic control clearances, pilot requests and position reporting. FANS 1/A typically operates over satellite communications (SATCOM) and is mostly used in Oceanic airspace. FANS 1/A over HFDL provides air traffic control (ATC) communication coverage in the Polar region.

J3 Controller Pilot Data Link Communications (CPDLC Future Air Navigation Services (FANS) 1/A VHF Data Link (VDL) Mode A. FANS 1/A provides controller-pilot data link communications (CPDLC) and include air traffic control clearances, pilot requests and position reporting. FANS 1/A typically operates over satellite communications (SATCOM) and is mostly used in Oceanic airspace. VDL Mode A is also known as POA (Plain Old ACARS).

J4 Controller Pilot Data Link Communications (CPDLC Future Air Navigation Services (FANS) 1/A VHF Data Link (VDL) Mode 2. FANS 1/A provides controller-pilot data link communications (CPDLC) and include air traffic control clearances, pilot requests and position reporting. FANS 1/A typically operates over satellite communications (SATCOM) and is mostly used in Oceanic airspace. The ICAO VDL Mode 2 is the VDL version most commonly used. It was chosen for the Eurocontrol Link 2000+ program and is specified as the primary link in the EU Single European Sky rule adopted in January 2009 requiring all new aircraft flying in Europe after January 1, 2014 to be equipped with CPDLC.

J5 Controller Pilot Data Link Communications (CPDLC Future Air Navigation Services (FANS) 1/A. FANS 1/A provides controller-pilot data link communications (CPDLC) and include air traffic control clearances, pilot requests and position reporting. FANS 1/A typically operates over satellite communications and is mostly used in Oceanic airspace. This indicator specifies that the data is...
Controller Pilot Data Link Communications (CPDLC) Future Air Navigation Services (FANS) 1/A. FANS 1/A provides controller-pilot data link communications (CPDLC) and includes air traffic control clearances, pilot requests and position reporting. FANS 1/A typically operates over satellite communications and is mostly used in Oceanic airspace. This indicator specifies that the data is transiting via the MTSAT satellite network.

Controller Pilot Data Link Communications (CPDLC) Future Air Navigation Services (FANS) 1/A. FANS 1/A provides controller-pilot data link communications (CPDLC) and includes air traffic control clearances, pilot requests and position reporting. FANS 1/A typically operates over satellite communications and is mostly used in Oceanic airspace. This indicator specifies that the data is transiting via the Iridium satellite network. It allows worldwide voice and data communications including the poles, oceans and airways.

Microwave Landing System (MLS) is an aviation approach and landing system providing most accurate and reliable information for safe landings. This system overcomes the possible limitations of the ILS.

Instrument Landing System (ILS) is a ground-based instrument approach system that provides precision guidance to an aircraft approaching and landing on a runway.

Air Traffic Control (ATC) RadioTelephone (RTF) SATellite COMmunications (SATCOM) with data transiting via the INMARSAT satellite network.

Air Traffic Control (ATC) RadioTelephone (RTF) SATellite COMmunications (SATCOM) with data transiting via the MTSAT satellite network.

Air Traffic Control (ATC) RadioTelephone (RTF) SATellite COMmunications (SATCOM) with data transiting via the Iridium satellite network.

It shall be specified if no COM/NAV approach aid equipment for the route to be flown is carried, or the equipment is unserviceable.

VHF Omni directional Range (VOR) is a type of radio navigation system for aircraft. The system relies on ground based transmitters which emit signals to a VOR receiver inside the aircraft. The navigation signal allows the aircraft receiving equipment to determine a magnetic bearing from the station to the aircraft.

P1 to P9 is reserved for Required Communication Performance (RCP). Similar to the Required Navigation Performance but for communication, these descriptors are not yet defined but are reserved for future use.

R indicates the Performance Based Navigation (PBN) levels that can be met. It is used by ATC for clearance and routing purposes. The insertion of R in the field 10a requires PBN/ to be present in field 18. The PBN sub-field contains the RNAV and/or RNP certifications and operational approvals applicable for the flight.

It shall be specified if standard COM/NAV/approach aid equipment for the route to be flown is carried and serviceable. If the letter S is used, standard equipment is considered to be VHF RTF, VOR and ILS unless another combination is prescribed by the appropriate ATS authority. \( S = O + L + V \)

Tactical Air Navigation (TACAN) is a navigation system in UHF, giving the air crew continuous information as to its range and bearing from a beacon. It is similar to VOR but in UHF instead of VHF. TACAN is primarily used by military aircraft.

Ultra High Frequency (UHF) RadioTelephone (RTF). Radio equipment onboard the aircraft.

Very High Frequency (VHF) RadioTelephone (RTF). Radio equipment onboard the aircraft.

Reduced Vertical Separation Minima (RVSM) of 300m (1000ft) separation between aircraft was
introduced on 24 January 2002 by 41 European and North African countries. RVSM provides six additional cruising levels between FL 290 and FL 410, resulting in substantial reductions in fuel costs and in-flight delays.

**X** Minimum Navigation Performance Specification (MNPS) :
a set of standards which require aircraft to have a minimum navigation performance capability in order to operate in MNPS designated airspace. The airspace is vertically defined between FL285 and FL410 and horizontally includes the following control areas: REYKJAVIK, SHANWICK, GANDER and SANTA MARIA OCEANIC plus the portion of NEW YORK OCEANIC which is North of 27N but excluding the area which is west of 60°W & south of 38°30’N.

**Y** Very High Frequency (VHF) with 8.33 kHz spacing channel:
it was decided in 1994 to introduce a further channel split from 25 to 8.33 kHz. Subsequently, 8.33 kHz was introduced above FL245 in the ICAO EUR Region from October 1999 and above FL195 from the 15 March 2007. At the time of writing Eurocontrol is working on the second phase of the mandate contained in the Commission Regulation (EC) No 1265/2007 which is the deployment of 8.33 kHz channel spacing to the airspace below FL195. The current date planned for the deployment in 2018.

**Z** It indicates that other equipment or capabilities which are not specified in that Item, apply to that flight. These additional equipment or capabilities shall be specified in Item 18 preceded COM/, NAV/, DAT/

---

### 3.8. Equipment SSR – Field 10B

After the oblique stroke, this item is the SSR (transponder) equipment used, carried and serviceable for the current flight.

![](image)

IvAp shall be considered as mode S transponder equipment in IVAO.

If you do not know which transponder type is serviceable on your aircraft, please use “S” type as the default one.
<table>
<thead>
<tr>
<th>Eq</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Transponder - Mode A (4 digits - 4096 codes)</td>
</tr>
<tr>
<td>B1</td>
<td>Automatic Dependent Surveillance-Broadcast (ADS). ADS-B makes use of GPS technology to determine and share precise aircraft location information, and streams additional flight information to the cockpits of properly equipped aircraft. ADS–B consists of two different services: ADS–B Out and ADS–B In. B1 has the &quot;out&quot; capability only. ADS–B Out periodically broadcasts information such as aircraft identification, current position, altitude, and velocity, through an onboard transmitter. ADS–B Out provides air traffic controllers with real-time position information that is, in most cases, more accurate than the information available with current radar-based systems.</td>
</tr>
<tr>
<td>B2</td>
<td>Automatic Dependent Surveillance-Broadcast (ADS). ADS-B makes use of GPS technology to determine and share precise aircraft location information, and streams additional flight information to the cockpits of properly equipped aircraft. ADS–B consists of two different services: ADS–B Out and ADS–B In. B2 has both &quot;in&quot; and &quot;out&quot; capabilities. ADS–B Out periodically broadcasts information such as aircraft identification, current position, altitude, and velocity, through an onboard transmitter. ADS–B Out provides air traffic controllers with real-time position information that is, in most cases, more accurate than the information available with current radar-based systems. ADS–B In is the reception by aircraft of data which displays all aircraft in the area. Location information, and streams additional flight information to the cockpits of properly equipped aircraft. ADS–B consists of two different services: ADS–B Out and ADS–B In. B2 has both &quot;in&quot; and &quot;out&quot; capabilities. ADS–B Out periodically broadcasts information such as aircraft identification, current position, altitude, and velocity, through an onboard transmitter. ADS–B Out provides air traffic controllers with real-time position information that is, in most cases, more accurate than the information available with current radar-based systems.</td>
</tr>
</tbody>
</table>
radar-based systems. ADS-B In is the reception by aircraft of data which displays all aircraft in the area.

| C | Transponder - Mode A (4 digits - 4096 codes) and Mode C |
| D1 | Automatic Dependent Surveillance-Broadcast (ADS) Future Air Navigation System (FANS). The basic concept of the ADS-C application is that the ground system will set up a contract with the aircraft such that the aircraft will automatically provide information obtained from its own on-board sensors, and pass this information to the ground system under specific circumstances dictated by the ground system (except in emergencies). Contracts are INITIATED BY THE GROUND (ATC or Airlines Centre) and CAN NOT be modified by the pilot. |
| E | Transponder Mode S, including aircraft identification, pressure-altitude and extended squitter (ADS-B) capability. Mode S: Whilst traditional Secondary Surveillance Radar (SSR) stations interrogate all aircraft within their range, Mode S (Select) establishes selective and addressed interrogations with aircraft within its coverage. Such selective interrogation improves the quality and integrity of the detection, identification and altitude reporting. |
| G1 | Automatic Dependent Surveillance-Broadcast (ADS) Aeronautical Telecommunication Network (ATN). The basic concept of the ADS-C application is that the ground system will set up a contract with the aircraft such that the aircraft will automatically provide information obtained from its own on-board sensors, and pass this information to the ground system under specific circumstances dictated by the ground system (except in emergencies). Contracts are INITIATED BY THE GROUND (ATC or Airlines Centre) and CAN NOT be modified by the pilot. |
| H | Transponder Mode S, including aircraft identification, pressure-altitude and enhanced surveillance capability. Mode S: Whilst traditional Secondary Surveillance Radar (SSR) stations interrogate all aircraft within their range, Mode S (Select) establishes selective and addressed interrogations with aircraft within its coverage. Such selective interrogation improves the quality and integrity of the detection, identification and altitude reporting. |
| I | Transponder Mode S, including aircraft identification, but no pressure-altitude capability. Mode S: Whilst traditional Secondary Surveillance Radar (SSR) stations interrogate all aircraft within their range, Mode S (Select) establishes selective and addressed interrogations with aircraft within its coverage. Such selective interrogation improves the quality and integrity of the detection, identification and altitude reporting. |
| L | Transponder Mode S, including aircraft identification, pressure-altitude and extended squitter (ADS-B) and enhanced surveillance capability. Mode S: Whilst traditional Secondary Surveillance Radar (SSR) stations interrogate all aircraft within their range, Mode S (Select) establishes selective and addressed interrogations with aircraft within its coverage. Such selective interrogation improves the quality and integrity of the detection, identification and altitude reporting. |
| N | It indicates that no surveillance equipment for the route to be flown is carried or the equipment is unserviceable. |
| P | Transponder Mode S, including pressure-altitude, but no aircraft identification capability. Mode S: Whilst traditional Secondary Surveillance Radar (SSR) stations interrogate all aircraft within their range, Mode S (Select) establishes selective and addressed interrogations with aircraft within its coverage. Such selective interrogation improves the quality and integrity of the detection, identification
and altitude reporting.

**S** Transponder Mode S, including both pressure-altitude and aircraft identification capability. Mode S: Whilst traditional Secondary Surveillance Radar (SSR) stations interrogate all aircraft within their range, Mode S (Select) establishes selective and addressed interrogations with aircraft within its coverage. Such selective interrogation improves the quality and integrity of the detection, identification and altitude reporting.

**U1** Automatic Dependent Surveillance-Broadcast (ADS) Universal Access Transceiver (UAT). ADS-B makes use of GPS technology to determine and share precise aircraft location information, and streams additional flight information to the cockpits of properly equipped aircraft. ADS–B consists of two different services: ADS–B Out and ADS–B In. U1 has the "out" capability only. ADS–B Out periodically broadcasts information such as aircraft identification, current position, altitude, and velocity, through an onboard transmitter. ADS–B Out provides air traffic controllers with real-time position information that is, in most cases, more accurate than the information available with current radar-based systems.

**U2** Automatic Dependent Surveillance-Broadcast (ADS) Universal Access Transceiver (UAT). ADS-B makes use of GPS technology to determine and share precise aircraft location information, and streams additional flight information to the cockpits of properly equipped aircraft. ADS–B consists of two different services: ADS–B Out and ADS–B In. V2 has both "in" and "out" capabilities. ADS–B Out periodically broadcasts information such as aircraft identification, current position, altitude, and velocity, through an onboard transmitter. ADS–B Out provides air traffic controllers with real-time position information that is, in most cases, more accurate than the information available with current radar-based systems. ADS–B In is the reception by aircraft of data which displays all aircraft in the area.

**V1** Automatic Dependent Surveillance-Broadcast (ADS) VHF Data Link (VDL). ADS-B makes use of GPS technology to determine and share precise aircraft location information, and streams additional flight information to the cockpits of properly equipped aircraft. ADS–B consists of two different services: ADS–B Out and ADS–B In. V1 has the "out" capability only. ADS–B Out periodically broadcasts information such as aircraft identification, current position, altitude, and velocity, through an onboard transmitter. ADS–B Out provides air traffic controllers with real-time position information that is, in most cases, more accurate than the information available with current radar-based systems.

**V2** Automatic Dependent Surveillance-Broadcast (ADS) VHF Data Link (VDL). ADS-B makes use of GPS technology to determine and share precise aircraft location information, and streams additional flight information to the cockpits of properly equipped aircraft. ADS–B consists of two different services: ADS–B Out and ADS–B In. U2 has both "in" and "out" capabilities. ADS–B Out periodically broadcasts information such as aircraft identification, current position, altitude, and velocity, through an onboard transmitter. ADS–B Out provides air traffic controllers with real-time position information that is, in most cases, more accurate than the information available with current radar-based systems. ADS–B In is the reception by aircraft of data which displays all aircraft in the area.

**X** Transponder Mode S, with neither pressure-altitude nor aircraft identification capability. Mode S: Whilst traditional Secondary Surveillance Radar (SSR) stations interrogate all aircraft within their range, Mode S (Select) establishes selective and addressed interrogations with aircraft within its coverage. Such selective interrogation improves the quality and integrity of the detection, identification and altitude reporting.
3.9. Departure Aerodrome and planned time of departure (4 + 4 characters) – Field 13

This item is the ICAO code of the departure aerodrome. The ICAO code is noted using maximum 4 letters.

In IVAO, the ICAO code is mandatory. No IATA or Airfield names are allowed.

If no location identifier is assigned, you must use the special code ZZZZ and the exact name of your airfield in plain language should be specified in the 'other information' item, preceded by DEP/ text.

The Estimated Off-Block Time (known as departure time) is the estimated time at which the aircraft will commence ground movement associated with departure. It is coded using 2 digits for the hour followed by 2 digits for the minutes.

All hours must be calculated in UTC time for all countries.
3.10. Cruising Speed (maximum 5 characters) – Field 15

This item is the cruising speed for the first or whole portion of the flight.

The cruising speed is the **True Air Speed** expressed in one of the three possible units:
- **N** = Knots: N followed by 4 digits which will be the speed in knots (N0220 = 220KT)
- **M** = Mach: M followed by 3 digits which will be the mach number without the dot character (M079 = 0.79 Mach)
- **K** = km/h : K followed by 4 digits which will be the speed in kilometre per hour (K0350 = 350km/h)

ICAO provision is to apply a Mach number notation only above FL250.

The speed value K or N is selected for the first part of the flight. If the required value changes en-route, the speed/level field for level changes should be stated in the route next to a fix.

Mach number is only given for flights in those airspaces where ATC prescribes (big example: North Atlantic.) There is no Flight Level above which Mach must be filed.
3.11. Cruising Level or altitude (maximum 5 characters) – Field 15B

This item is the cruising altitude or flight level for the first or whole portion of the flight.

The cruising altitude or flight level is expressed in one of the three possible units:

- **F** = flight level: followed by 3 digits expressed in hundreds of feet above transition altitude. (Example: F130 = 13000ft).
- **A** = altitude: followed by 3 digits expressed in hundreds of feet below transition altitude. (Example: A025 = 2500ft).
- **S** = standard metric level: followed by 4 digits expressed in tens of meters above transition altitude (Example: S1130 = 11300m)
- **M** = metric altitude: followed by 4 digits expressed in tens of meters below transition altitude (Example: M1130 = 11300m)
- **VFR** = VFR level: it is used when no specific VFR altitude chosen.

The letters S and M are used only in some countries. It depends of the local regulations.

Note that “VFR” level is usually set when a VFR flight is performed below 3000ft where altitude is free to use.
3.12. Route

This item is the route followed by the aircraft during its flight.

Aircraft routing types used in flight planning are:

- Airways
- Navigational Aids
- Direct.
- SIDs and STARs

A route may be composed of segments of different routing types.

The route can include:

- **Fixes** (5 character points) overflown (LOTEE,KATHY)
- **Airways** (UN741, R66, UG38) which are pre-defined pathways
- **Navaids** (short for Navigational Aids)
- **SIDs** and **STARs** which are procedures and checkpoints used to enter and leave the airway system by aircraft operating on IFR flight plans
- **Changes of speed and level/altitude** (N0250F180)
- **Changes of flight rules**
- **Geographic Coordinates** (55N030W)

For a flight outside designated routes, points should be shown normally not more than 30 minutes flying time apart, or 200 nm apart, including each point where a change of speed, level, and track or flight rules is planned.

Between all these points, **DCT** shall be inserted, meaning that the pilot will fly direct between these two points (example: BEBLA DCT RIMET DCT BIRKA)

For **VFR**, commonly used visual reference points are inserted to indicate the intended flight path. (See the appropriate VFR navigation charts.)
3.13. Arrival Aerodrome and Estimated En-Route Time (4 + 4 characters)

This item is the ICAO code of the arrival aerodrome. The ICAO code is stated using maximum 4 letters.

In IVAO, the ICAO code is mandatory. No IATA or Airfield names are allowed.

If no location identifier is assigned, you must use the special code ZZZZ and the exact name of your airfield in plain language should be specified in the ‘other information’ item, preceded by DEST/ text.

The Estimated Elapsed Time (EET) is the time calculated:

- Between take-off time and the estimated time overhead the arrival aerodrome calculated for VFR flight rules
- Between take-off time and the estimated time at the expected IAF for IFR flight

It is coded using 2 digits for the hour followed by 2 digits for the minutes.

All hours must be calculated in UTC time for all countries.

This item is the ICAO code of the alternate aerodrome. The ICAO code is stated using maximum 4 letters. The alternate aerodrome is used when your aircraft cannot land in the destination airport.

In IVAO, the ICAO code is mandatory. No IATA or Airfield names are allowed.

If no location identifier is assigned, you must use code ZZZZ and the exact name of your airfield in plain language should be specified in item 18, the ‘other information’ item, preceded by ALTN/ text. An alternate is optional for VFR flight rules unless local authorities require such.
3.15. Other Information – Field 18

This item includes all other information needed for the flight which is not present in the other items.

Example of some important remarks:
- If you have no FMC, please insert “RMK/NOFMC”
- If your aircraft has no RNAV capabilities, please insert “STS/RNAVINOP”
- If your aircraft is not RVSM, please insert “STS/NONRVSM”

If any other necessary information is required, then in the preferred sequence shown below, the form of an appropriate indicator should be stated, followed by an oblique stroke and the information to be recorded.

Be advised that the following remarks have very little use on IVAO.

**IVA0 recommended practices (NOT applicable for IVAO exams):**
- If you are a Newbie in the IVAO network, please insert “RMK/IVA0 Newbie” in this item.
- If your call sign of your company is not well known to ATC, please insert “CS/company_radio_call”

Here are the options for items to be inserted for a flight:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STS/</td>
<td>Reason for special handling by ATS, e.g. a search and rescue mission, as follows: ATFMX, FFR, FLTCK, HAZMAT, HEAD, HOSP, HUM, MARSA, MEDEVAC, NONRVSM, SAR and STATE. Other reasons for special handling by ATS shall be denoted under the designator RMK/.</td>
</tr>
<tr>
<td>PBN/</td>
<td>The PBN sub-field contains the RNAV and/or RNP certifications and operational approvals applicable for the flight. Include as many of the descriptors below, as apply to the flight, up to a maximum of 8 entries, i.e. a total of not more than 16 characters, inside an single occurrence of PBN/. Duplicate entries for the sub-field PBN/ is not permitted.</td>
</tr>
<tr>
<td>NAV/</td>
<td>Significant data related to navigation equipment, other than specified in PBN/, as required by the appropriate ATS authority. Indicate GNSS augmentation under this indicator, with a space between two or more methods of augmentation, e.g. NAV/GBAS SBA Ex: RNAVX: RNAV exempted Ex: RNAVINO: RNAV inoperable</td>
</tr>
<tr>
<td>COM/</td>
<td>Indicate communications applications or capabilities no specified in Item 10a. Ex: EXM833: Exemption of 8.33 carriage</td>
</tr>
<tr>
<td>DAT/</td>
<td>Indicate data applications or capabilities not specified in Item 10a. Ex: CPDLCX: CPDLC Exempted</td>
</tr>
<tr>
<td>SUR/</td>
<td>Include surveillance applications or capabilities not specified in Item 10b.</td>
</tr>
<tr>
<td>DEP/</td>
<td>Name and location of departure aerodrome, if ZZZZ is inserted in Item 13, or the ATS unit for which supplementary flight plan data can be obtained if AFIL is inserted in Item 13.</td>
</tr>
<tr>
<td>DEST/</td>
<td>Name and location of destination aerodrome, if ZZZZ is inserted in Item 16.</td>
</tr>
<tr>
<td>DOF/</td>
<td>Date Of Flight departure in a six figure format: YYMMDD.</td>
</tr>
</tbody>
</table>
| REG/ | The nationality or common mark and registration mark of the aircraft, if different from the
<table>
<thead>
<tr>
<th>Short Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET/</td>
<td>Significant points or FIR boundary designators and accumulated estimated elapsed times from take-off to such points or FIR boundaries, when so prescribed on the basis of regional air navigation agreements, or by the appropriate ATS authority. Ex: EET/CAP0745 XYZ0830 and EET/EINN0204</td>
</tr>
<tr>
<td>SEL/</td>
<td>SELCAL Code, for aircraft equipped.</td>
</tr>
<tr>
<td>TYP/</td>
<td>Type(s) of aircraft preceded if necessary without a space by number(s) of aircraft and separated by one space if ZZZZ is inserted in Item 9. Example: Ex: TYP/2F15 5F5 3B2</td>
</tr>
<tr>
<td>CODE/</td>
<td>Aircraft address (expressed in the form of an alphanumerical code of six hexadecimal characters) when required by the appropriate ATS authority. Example: “F00001” is the lowest aircraft address contained in the specific block administered by ICAO.</td>
</tr>
<tr>
<td>DLE/</td>
<td>Enroute delay or holding: insert the significant point(s) on the route where a delay is planned to occur, followed by the length of delay using four figure time in hours and minutes (hhmm).</td>
</tr>
<tr>
<td>OPR/</td>
<td>ICAO designator or name of the aircraft operating agency, if different from the aircraft identification in item 7.</td>
</tr>
<tr>
<td>ORGN/</td>
<td>The originator’s 8 letter AFTN address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, as required by the appropriate ATS authority</td>
</tr>
<tr>
<td>PER/</td>
<td>Aircraft performance data, indicated by a single letter. (see ICAO Doc 8168 Vol I Flight procedures)</td>
</tr>
<tr>
<td>ALTN/</td>
<td>Name of destination aerodrome alternate aerodrome(s), if ZZZZ in inserted in Item 16.</td>
</tr>
<tr>
<td>RALT/</td>
<td>ICAO four letter indicator(s) for en-route alternate(s), as specified in Doc 7910, Location Indicators, or name(s) of en-route alternate(s), if no indicator is allocated.</td>
</tr>
<tr>
<td>TALT/</td>
<td>ICAO four letter indicator(s) for take-off alternate(s), as specified in Doc 7910, Location Indicators, or name(s) of take-off alternate(s), if no indicator is allocated.</td>
</tr>
<tr>
<td>RIF/</td>
<td>The route details to the revised destination aerodrome, following by the ICAO four-letter location indicator of the aerodrome. The revised route is subject to reclearance in flight. Ex: RIF/DTA HEC KLAX and RIF/ESP G94 CLA YPPH</td>
</tr>
<tr>
<td>RMK/</td>
<td>Any other plain language remarks when required by the appropriate ATS authority or deemed necessary.</td>
</tr>
<tr>
<td>RFP/</td>
<td>Replacement Flight Plan. ICAO Doc 7030 Regional Supplementary Procedures, EUR region.</td>
</tr>
<tr>
<td>RVR/</td>
<td>Runway Visual Range. It indicates the minimum RVR requirement of the flight. ICAO Doc 7030 Regional Supplementary Procedures, EUR region.</td>
</tr>
</tbody>
</table>
The new PBN sub-field contains the possible equipment:

<table>
<thead>
<tr>
<th>Sub-field</th>
<th>RNAV 10</th>
<th>RNAV 5</th>
<th>RNAV 2</th>
<th>RNAV 1</th>
<th>RNAV</th>
<th>RNP 1</th>
<th>RNP APCH</th>
<th>RNP APCH with BARO-VNAV</th>
<th>RNP AR APCH with RF</th>
<th>RNP AR APCH without RF</th>
</tr>
</thead>
<tbody>
<tr>
<td>All sensors</td>
<td>A1</td>
<td>B1</td>
<td>C1</td>
<td>D1</td>
<td>D1</td>
<td>O1</td>
<td>S1</td>
<td>S2</td>
<td>T1</td>
<td>T2</td>
</tr>
<tr>
<td>GNSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DME/DME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOR/DME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DME/DME/IRU (or INS/IRS for B5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LORAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B-RNAV capabilities are RNAV5
P-RNAV capabilities are RNAV1

4. Supplementary Information

This information is not filed with the flight plan, but is kept at the unit where the plan was filed. In case of emergency, the supplementary information will be transmitted to the appropriate rescue agencies.

4.1. Endurance

After E/ group, you fill the fuel endurance in hours and minutes (4 digits). It means the range of your aircraft in terms of flight hours.
4.2. Persons on Board (POB)

After P/ the total number of persons (passengers and crew included) on board, when required by the appropriate ATS authority.

4.3. Pilot in Command (PIC)

After C/ Pilot in command), you must fill in your real name and surname. The same name that you provided when you completed your IVAO registration form.

4.4. Aircraft colour and markings (MTL) – IVAO specific

After A/ aircraft type, you must choose the closest representation of your aircraft (texture with significant markings). This representation will be seen by the other members in the IVAO Network.

Note that you never see this graphical representation; It is just for other members in order to enjoy all the simulation.
5. Example of flight plan

5.1. Flight AFR2063 with A321 from ESSA to LFPG

(FPL-AFR2063-IS
-A321/M-SDE2E3FGIRWY/H
-ESSA1325
-N0447F340 DCT DKR N872 SVD/N0446F360 N872 DEMIR UN872 EEL UP174
WOODY UN872 NIK UY131 MOPIL DCT
-LFPG0225 LFPO
-PBN/A1B1C1D1S2 DOF/121115 REG/FGTAD EET/EKDK0047 EDWW0104 EHAA0124
EBUR0145 LFFF0155 OPR/AFR)

5.2. Flight AFR006 with A388 from LFPG to KJFK

(FPL-AFR006-IS
-A388/H-SDE2E3GHIJ4J5M1RWXYZ/LB1D1
-LFPG1305
-N0484F380 DCT EVX UT300 SENLO UN502 JSY UN160 LIZAD/M085F380 UL739
GAPLI DCT SOMAX/M085F380 DCT 49N020W 46N030W/M085F390 44N040W
42N050W 42N060W/M085F400 DCT DOVEY/N0483F400 N18C SAILE DCT ACK DCT
SEY PARCEL
-KJFK0737 KBDL
-PBN/A1B1C1D1S1 NAV/RNVD1E2A1 DOF/121115 REG/FHPJE EET/LFRR0020
EGTT0041 EISN0100 EGGX0135 020W0201 CZXQ0156 LPPQ0029 KZNY0355
050W0458 42N060W0559 KZBW0651 KZNY0727 SEL/CPHQ OPR/AFR RALT/KBGR
RMK/NRP)

5.3. Flight AF156EK with A321 from LFPO to LFBO

(FPL-AF156EK-IS
-A321/M-SDE2E3FGIRWY/H
-LFPO1515
-N0447F350 DCT ERIXU UN860 VEGOB UN859 NARA DCT
-LFBO0100 LFNB
-PBN/A1B1C1D1S2 DOF/121115 EET/LFBB0018 OPR/AFR RVR/075)

5.4. Flight AFR3583 with B77W from FMEE to LFPO

(FPL-AFR3583-IS
-B77W/H-SDE2E3GHIJ3J5M1M2RWXY/LB1D1
-FMEE1800
-N0505F300 DCT UVENA UR780 DENLI DCT 0700S04837E DCT ANTSI UM665
MITCH/N0504F320 UM665 MAV UG300 TIKAT UR611 ATMUL/N0493F340 R2
DITAR/N0490F340 R2 BNA M621 OLMAX/N0487F340 UM621 AMANO UN982
MALOG/N0487F360 UM729 DJL DCT
-LFPO1043 LFPG
-PBN/A1B1C1D1S1 DOF/121115 REG/FGSQP EET/FMMM0025 FSSS0134 HCSM0247
HKNA0329 HAAA0330 HSSS0444 HECO0611 HLLL0659 LMMO0812 LIRR0831
LIM0396 LSAS1000 LFMM1004 LSAS1005 LFEE1008 LFFF1020 SEL/FLCK
OPR/AFR RALT/LMCO)
5.5. Flight AF513UJ with A319 from LFTH to LFPO

(FPL-AF513UJ-IS
- A319/M-SDE2E3FGIRWY/H
- LFTH0820
- N0435F320 JULEE DCT MRM UM976 PIBAT
- LFPO0110 LFQQ
- PBN/A1B1C1D1S2 DOF/121115 EET/LFFF0037 RVR/075 OPR/AFR ORGN/LFPGYEXX)

5.6. Flight AF506KO with CRJX from LFPO to LFTH

(FPL-AF506KO-IS
- CRJX/M-SDE2E3FGIRWY/H
- LFPO1255
- N0430F270 LATRA UM133 LERGA UY30 MTL/N0420F200 UY30 XATE
- LFTH0046
- PBN/B1D1 DOF/121115 RVR/200 OPR/BZH ORGN/RPL)

5.7. Flight REU974 with B77L from LFPG to FMEE

(FPL-REU974-IS
- B77L/H-SDE1E2E3GFHJ4J5M1RWXYZ/LB1D1
- LFPG1845
- N0490F310 OKASI UL612 MILPA UM730 TOP UL50 ELB UL12 VELAD UM728 NERAR UP3
RCA/N0489F350 UR611 TIKAT UG300 MAV UM665G ITLOX UM665 UVESO/N0486F370 DCT DENLI
UR780 MIDRI UR780 GUVENA
- FMEE1036 FIMP
- PBN/A1D1L1S1 NAV/RNP10 DOF/121114 REG/FOLRA EET/LSAS0039 LFFF0039 LIMM0048 LIRR0111
LMMM0218 HLLL0237 HECC0343 HSSS0245 HAAA0545 HKNA0700 HCSM0701 FSSS0745 FMMM0900
SEL/CGFR ORGN/RUKOUU PER/C SRC/RQP RMK/ADS ACARS EQUIPPED TCAS EQUIPPED)

5.8. Flight AFR3041 with A332 from DNMM to LFPG

(FPL-AFR3041-IS
- A332/H-SDE2E3FGHJ3J5M1RWXY/LB1D1
- DNMM2240
- N0468F400 DCT LAG UR981 NY/N0461F410 UM608 TERAS/N0463F410 UM608
BAY/N0463F400 UA604 MOS UA34 HAMRA/N0462F400 UN608 GIROM UN863 AGN
UL873 FOUCO UT181 POI/N0450F280 UT182 KEPER/N0448F270 DCT
- LFPG0600 LFPO
- PBN/A1B1C1D1S1 DOF/121115 REG/FGZCN EET/DGAC0025 DRRR0040 DAAA0156
LECB0411 LFBB0456 LFFF0530 SEL/JKAP OPR/AFR RALT/LFBO RMK/NIGERIA
FIR EXIT UR981 TENTU)

5.9. Flight VFR from Calais to Kortrijk-Wevelgem with DR400

(FPL-FWBTS-VG
- DR40/L-S/S
- LFAC1600
- N0120VFR DCT LEQ DCT OKT DCT
- EBT0120 LFQQ
- OPR/PVT REQ/1 TOUGH AND GO AT LFQQ RMK/TRAINING FLIGHT)