

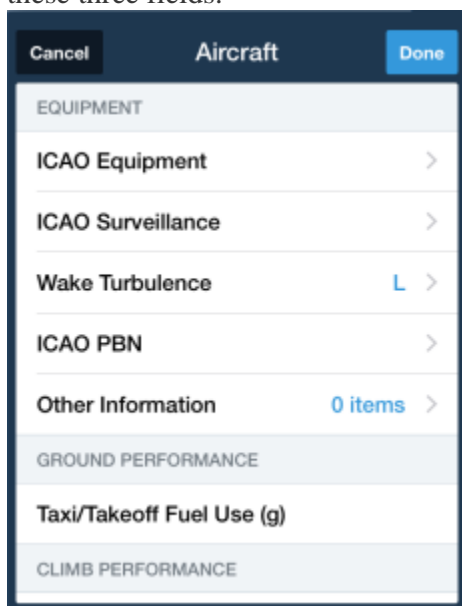
Filing ICAO Flight Plans in ForeFlight

With the removal of the FAA domestic flight plan format coming later this year, all pilots currently filing both VFR and IFR domestic flights will need to switch to the ICAO format.

In this article, I recommend some simple tips that make it easy for someone who currently files with the domestic format to switch to the ICAO format. My main suggestion here is that you only file what is actually needed and can affect a clearance or availability of an ATC service in the US.

Essentially, this approach allows you to replicate the clearances you would receive when using the domestic format.

If you currently use ForeFlight to file flight plans using the domestic flight plan format, there are just a few simple steps to get set up to file ICAO. The first is to set up the ICAO specific codes for your aircraft. Navigate to your aircraft's profile in More > Aircraft and tap the blue 'i', and set up at least these three fields:



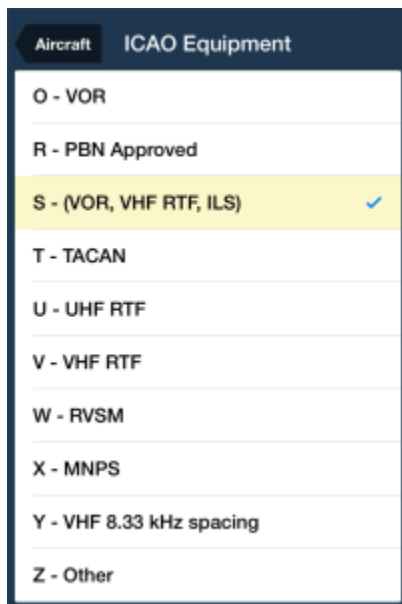
1. ICAO Equipment
2. ICAO Surveillance
3. Wake Turbulence

The Wake Turbulence is the easiest to set up because the default value of 'L' fits the majority of GA aircraft. You would only change this if the max gross weight of your aircraft exceeds 15,500 pounds.

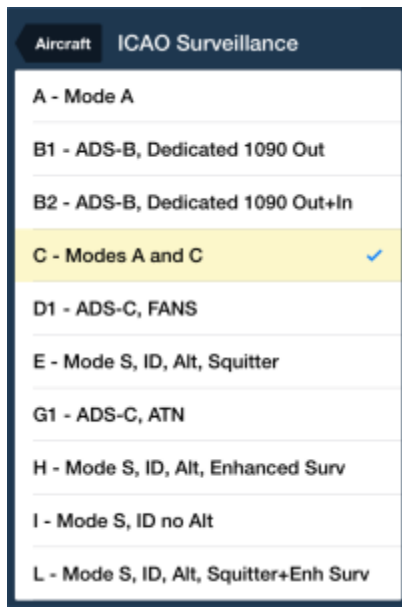
Next, let's look at equipment codes. The three most common FAA/Domestic Equipment codes are:

- /G (GPS and mode C transponder),
- /A (DME and Mode C transponder), and
- /U (No DME and a Mode C transponder).

Tap ICAO Equipment to view the list of codes. ICAO equipment codes are more specific and many types of equipment have their own code. Since almost all aircraft have VOR, localizer capability (ILS), and a VHF COM, a standard code of 'S' is used to specify the combination of this equipment. Pretty much every aircraft is going to select 'S'. If for some reason your aircraft does not have one of the standard avionics systems, then you can specify the individual codes for what you do have instead of using S. For example, select 'O' if you have a VOR, 'L' if you have an ILS or localizer, and 'V' if you have a VHF Com radio.



Other codes that are common in GA aircraft are 'G' for GPS, 'D' for DME, and 'F' for an ADF. Some aircraft will have a WAAS GPS and are capable of flying LPV approaches, so can also specify 'B' for LPV. There are many codes you can specify if you have the equipment, but to keep things simple I only specify something if it makes a difference. In line with that, my advice for an aircraft that is currently filing with domestic code /G is to specify ICAO equipment codes 'G,S'. If you currently file /U, then ICAO equipment 'S' is all you need. If you currently file with /A, then file ICAO equipment 'D,S'. Feel free to add the B (LPV), D (DME), or F (ADF) if you have the equipment, but they will not make a difference in terms of your flight plan being accepted or ATC providing a service. Once you have entered the ICAO equipment codes that reflect your aircraft, tap the 'Aircraft' back arrow to return to the main Aircraft Profile view.



Next, tap ICAO Surveillance to select the transponder type. Assuming you have a transponder with an altitude encoder, you can specify 'C'. If it is of the mode S variety, you can change that to 'S', but it will not make any difference in your ability to file or use the ATC system, so specifying 'C' is the simplest way to do it.

That's all you have to do to set up your aircraft profiles for ICAO filing. You can make ICAO the default flight plan format by tapping More > Settings, scrolling down to the File & Brief section, tapping 'New Plan Format' and selecting ICAO.

Now you can move to the Maps view to set up your route. Enter your route the same way you always have using the Route Editor. When you are done, use the 'Send To' File & Brief button to create and review the flight plan. Before you hit the 'File' button, here are a few additional considerations when entering information about your flight using the ICAO format.

File & Brief

New Flight Plan

FLIGHT PLAN TYPE

Form Type ICAO

Flight Rules VFR

Flight Type G

AIRCRAFT

Aircraft N011FF (C172/S)

True Airspeed 120

Airspeed Units Knots

Number of Aircraft 1

DEPARTURE

Airport KHOU

Time Today, 3:15 PM CST

Souls aboard 1

ENROUTE

Route DREWZ V68 CRAYS

Altitude 8500

Time Enroute 1h 16m

Fuel Aboard 4h 30m

STS Special Handling

other documents, you will read about the need to specify certain information in *Field 18 – Other Information*. ForeFlight automatically fills out this field for you based on flight plan and aircraft profile data. This ensures the formatting is correct for what ATC expects. Even so, there are some considerations to take into account regarding Field 18 that can ensure your flight plans are filed as efficiently as possible.

The FAA guidance on filing ICAO states that if the airport identifier is not a four character ICAO identifier, then “ZZZZ” needs to be placed in the departure and/or destination airport fields of the flight plan, and the non ICAO identifier must be specified in Field 18 preceded by “DEP/” for the departure airport and “DEST/” for the destination airport. You don’t need to worry about this with ForeFlight as it does all this for you automatically. All ICAO identifiers consist of 4 alphabetic characters, and in the US they start with the letter K, in Canada with C, in the Bahamas with MY, and in Mexico with MM. Examples of non-ICAO identifiers are 60J, 35A, K60J, and SFO.

Remember that SFO is not the ICAO format for San Francisco International, KSFO is the correct code. Either SFO or KSFO will work, but if you use the three letter identifier form, then ForeFlight will place “ZZZZ” in the departure or destination field and DEP/SFO or DEST/SFO into Field 18, although you won’t see these changes in the app itself. This plan will be accepted, but it is wasteful. In other words, specify the destination and departure airport identifier as a four character ICAO code whenever you can.

ICAO flight plans provide an ability to enter primary and secondary alternate airports. In the US, only a single alternate needs to be supplied on IFR flight plans that require one.

If you use the remarks field for domestic flight plans, with ICAO it will be moved to Field 18 automatically and follow the REM/ keyword. So there is no real difference in how remarks are specified, with one caveat. These special characters may not be used in ICAO remarks: the forward slash “/”, the dash “-”, and the left and right parentheses “(” and “)”.

The ICAO format also allows you to add specifications for emergency equipment such as dinghies, their capacity, their color, and if they are covered. Life jackets, portable radios, types of survival equipment, and any survival equipment remarks that you would wish search and rescue to be aware of can also be specified. Again, the remarks can’t include the special characters “/ – ()”.

Finally, if your flight qualifies for special handling, you can optionally specify it on the ICAO form in the STS Special Handling field. A few that may be of interest are: FFR for firefighting, HOSP for medical flights, HUM for humanitarian flights, and SAR for search and rescue. Any special handling codes will automatically be included in Field 18 and formatted as required.

Although the final switch to ICAO filing is still months away, I recommend you try this now so you can work out any kinks and get a feel for the format.