

Flight Plan Converter

Operating instructions

Overview

This programme/application has been written as, being inherently lazy, I hate duplicating work. So having spent effort in creating a route-plan (Using PlanG/LittleNavMap etc.) this programme will extract the required information to create an "IACO FPL" formatted text on the clipboard, and then open the VATSIM flight-plan webpage.

It can also be used to create route plans in the correct format of the other major route-planning applications.

It does this by firstly extracting the relevant information from a route plan, then uses a set of "blueprint" files to insert that information in the correct format for the IACO FPL text or other route-planning applications.

Installation

The main programme is called "Flight Plan File Converter" (Flight Plan File Converter.exe) but in order to function requires quite a number of "blueprint" files installed in the same location as the ".exe" file.

So create a folder in a convenient location, and copy (or move) *all* the downloaded files into this folder.

Locate the file called "Flight Plan File Converter.exe". "Right Click" on this and create a shortcut to the "Flight Plan File Converter". Move this shortcut to a convenient location. (Perhaps with your other flight sim programs/shortcuts?).

Layout description

The screenshot shows the 'Route-Plan Converter' application window. The title bar includes the application name and standard window controls. The menu bar contains 'Route Plan', 'Flight Plan', 'Preferences', 'Help', and a version number 'Version 3.00.01'. Below the menu bar, a status bar indicates 'Preference Data = Default'. The main area is divided into five panels:

- Aircraft data** (light blue background):
 - Callsign: G-ABCD
 - Aircraft Type: C172
 - Wake Category: Light (MTOW <= 7,000 kg) [dropdown]
 - Transponder: 7000
 - Fuel Endurance: 02:45 [spinners] hh:mm
 - Cruise Speed: 120 [spinners] knots
- Flight data** (light pink background):
 - Flight Type: VFR [dropdown]
 - Depart Time: 19:45 (UTC)
 - Cruise Altitude: 2000 [spinners] Feet
 - Remarks: CIX VFR CLUB \ Daylight \ Winds from local METARs \ CAVOK [text area]
- Route Data** (light grey background):
 - Departure Airport: EG##
 - Route: EG## to EG** [text area]
 - Destination Airport: EG**
 - Alternate Airport: [empty]
 - Time Enroute: 01:00 [spinners] hh:mm
 - (Enter Enroute time manually from Route-Planner data)
 - Note: "(", ")", and "." characters will automatically be replaced with " " on compiling an ICAO FPL
- Other (personal) Preferences** (light cyan background):
 - Depart in: 30 [spinners] minutes.
 - Time Zone: 0 [dropdown] Difference on UTC
 - Depart Time: 19:45 (Local)
 - Ground Elevation: 200 [spinners] Feet
 - Route separator: / Alphanumeric or "/"

Fig 1 – Converter layout

The converter is divided into five “panels” of data: -

- Preference data,
- Aircraft data,
- Flight Data,
- Route Data, and
- Other (personal) Preferences

1) Preference Data



Preference Data = Default

Fig 2 – Preference data panel

This panel indicates which “preference file” is loaded. On starting it will load the “default” file as per Fig 2 above.

2) Aircraft Data

Aircraft data	
Callsign:	G-ABCD
Aircraft Type:	C172
Wake Category:	Light (MTOW <= 7,000 kg) ▾
Transponder:	7000
Fuel Endurance:	02:45 ▴ ▾ hh:mm
Cruise Speed:	120 ▴ ▾ knots

Fig 3 – Aircraft data panel

The six items of data displayed on this panel can be adjusted as follows: -

a) Callsign:

This can be entered by typing directly into the text-box.

N.b. For clarity/readability a "-" in the callsign may be inserted (e.g. G-ABCD), this is automatically removed when compiling the ICAO FPL.

b) Aircraft Type:

The standard code for your aircraft can be entered by typing directly into the text-box.

c) Wake Category:

This data can only be adjusted by selecting from the drop-down list of options.

d) Transponder:

The transponder code can be entered by typing directly into the text-box.

e) Fuel Endurance:

This value can only be changed by use of the "spin-button" controls. It can be adjusted in steps of 1 hour, or 1 minute.

N.b. For clarity/readability a ":" is inserted between the hours and minutes, this is automatically removed when copying the value to the clipboard ready for pasting into the VATSIM flight-plan.

f) Cruise Speed:

This value can only be changed by use of the "spin-button" control. It can be adjusted in steps of 10 knots.

3) Flight Data:

Flight data	
Flight Type:	VFR
Depart Time:	19:45 (UTC)
Cruise Altitude:	2000 Feet
Remarks:	CIX VFR CLUB \ Daylight \ Winds from local METARs \ CAVOK

Fig 4 – Flight data panel

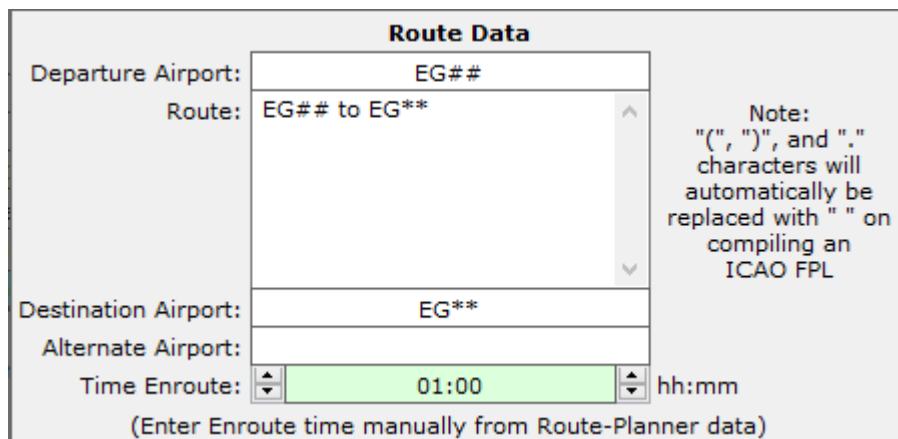
Three of the four items of data displayed on this panel can be adjusted as follows: -

- a) Flight Type:
This data can only be adjusted by selecting from the drop-down list of options.
- b) Cruise Altitude:
This value can only be changed by use of the “spin-button” controls. It can be adjusted in steps of 500 feet.
- c) Remarks:
This can be entered by typing directly into the text-box.

The fourth item of data is calculated from the current time, and the anticipated delay between filing the flight-plan and departure, the value cannot be directly altered. It can however be adjusted indirectly by adjusting the anticipated delay. (See the “Personal Data” notes.)

N.b. For clarity/readability a “:” is inserted between the hours and minutes, this is automatically removed when compiling the ICAO FPL.

4) Route Data:



The screenshot shows a 'Route Data' panel with the following fields and controls:

- Departure Airport:** A text box containing 'EG##'.
- Route:** A text box containing 'EG## to EG**' with a vertical scrollbar on the right.
- Destination Airport:** A text box containing 'EG**'.
- Alternate Airport:** An empty text box.
- Time Enroute:** A spin-button control showing '01:00' in a green box, followed by 'hh:mm'.

Below the Time Enroute field, there is a note: '(Enter Enroute time manually from Route-Planner data)'. To the right of the main form, there is a separate note: 'Note: "(, ", and ." characters will automatically be replaced with " " on compiling an ICAO FPL'.

Fig 5 – Route data panel

Only one item of data displayed on this panel should normally need adjusting: -

g) Time Enroute:

This value can only be changed by use of the “spin-button” controls. It can be adjusted in steps of 1 hour, or 5 minutes.

N.b. For clarity/readability a “:” is inserted between the hours and minutes, this is automatically removed when compiling the ICAO FPL.

The other items of data are all compiled from a route plan imported from one of the route-planning programmes: -

“PlanG”,

“LittleNavMap”, or

“SkyDeamon”

N.b. although these programmes will calculate the “Time Enroute” they do not save that value as part of their “Route-Plan” files, hence this value will need entering manually after “importing” a route plan.

If necessary the route can be edited by typing directly in the Route field.

5) Personal Data:

Other (personal) Preferences		
Depart in:	<input type="text" value="30"/>	minutes.
Time Zone:	<input type="text" value="0"/>	Difference on UTC
Depart Time:	<input type="text" value="19:45"/>	(Local)
Ground Elevation:	<input type="text" value="200"/>	Feet
Route separator:	<input type="text" value="/"/>	Alphanumeric or "/"

Fig 6 – Personal data panel

Four of the five items of data displayed on this panel can be adjusted as follows: -

a) Depart in:

This value is the “setting up delay” between filing the on-line flight plan, and being ready to fly. It can only be changed by use of the “spin-button” control. It can be adjusted in steps of 5 minutes between zero and 120 minutes (2 hours being the time that a flight plan is retained on the VATSIM system).

b) Time Zone:

The difference (Plus or Minus) in hours between the “local” time and UTC (Greenwich Mean Time / Zulu). This value can only be adjusted by selecting from the drop-down list of options.

c) Ground Elevation:

Some route-plan programmes do not include “ground elevation” as part of the route-plan file they produce, while others do. Hence this value is used where the data can’t be imported.

It can only be changed by use of the “spin-button” control, and can be adjusted in steps of 10 feet between -500 ft (Dead Sea) and 10000 ft.

d) Route separator:

This is the “symbol” used to separate the waypoint names when compiling the route from the imported route-plan data. The “Processing function” in the myVATSIM flightplan webpage can only accept alphanumeric characters or a “/” in the “route” part of an ICAO FPL, so this limitation applies to the character entered in this field.

The desired character can be entered by typing directly into the text-box.

The fifth item of data, the “local” departure time is calculated from the current time, the Time Zone, and the anticipated delay between filing the flight-plan and departure, the value cannot be directly altered. It can however be adjusted indirectly by adjusting the anticipated “Depart in:” delay.

Initial Set-up

Step 1 (Enter the aircraft's default data)

Fill in or amending the default data in the panels for: -

- 1) Aircraft data,
 - a) Callsign:
 - b) Aircraft Type:
 - c) Wake Category:
 - d) Transponder:
 - e) Fuel Endurance: and
 - f) Cruise Speed:
- 2) Flight Data,
 - a) Flight Type:
 - b) Cruise Altitude: and
 - c) Remarks:
- 3) Route Data,
 - a) Time Enroute:
- 4) Other (personal) Preferences
 - a) Depart in:
 - b) Time Zone:
 - c) Ground Elevation:
 - d) Route separator:

Step 2 (Save the aircraft's default data)

From the menu bar select "Preferences – Save" which opens a standard save window. Save the file (I find it useful to use part of the aircraft's call sign as the file name. E.g. my file for "D-CDLW" is called "Max(LW)")

Step 3 (Repeat for all your aircraft)

Repeat this process for each of your aircraft.

Step 4 (Create a "Default" data file)

From the menu bar select "Preferences – Load" which opens a standard "open" window. Open the file for the aircraft you use most frequently.

Now from the menu bar select "Preferences – Save Current as the Default", this overwrites the current "Default" file, and this set of data will now be loaded automatically on future occasions.

N.b. this data can be amended easily when using the programme to export route plans in the various planner formats, or when compiling an ICAO FPL.

Use of the programme: -

Step 1 (Create a Route Plan)

Use your favourite route-planner (PlanG/LittleNavMap/SkyDeamon) to create and save your route plan. (Make a note of/memorise the planner's estimate of the flight time.)

Step 2 (Open the Flight Plan Converter)

Run the "Flight Plan Converter", and select the preference file applicable to the aircraft you will be using / the type of flight you will be doing.

Step 3 (Import the Route plan into the Flight Plan Converter)

From the menu bar select "Route Plan", then "Import Route Plan" from the drop-down list of options. (Or use the short-cut key "Ctrl I") This opens a standard file-opening window that you can use to navigate to the file you saved at "Step 1".

N.b. the default file type is a PlanG file (*.plg), however the file type can be changed to either a LittleNavMap file (*.Inmpln) or a SkyDeamon file (*.gpx).

Step 4 (Adjust the flight time)

The "Time Enroute" entry line will be "flashing" red/yellow as a warning that this value needs entering manually (the value memorised at step 1 above). This warning will switch off as soon as the value is adjusted.

Adjusted by using the "up/down" spin buttons to adjust either the hours or minutes - displayed in hh:mm format.

Step 5 (optional) (Export the Route plan in other formats)

If you want to share this route-plan with friends who use a different route planning programme save the plan in the other formats: -

From the menu bar select "Route Plan", then "Export Route Plan" from the drop-down list of options. (Or use the short-cut key "Ctrl E") This opens a standard file-saving window that you can use to save the file in the desired format.

N.b. the default file type is a PlanG file (*.plg), however the file type can be changed to : -

- 1) a LittleNavMap file (*.lnmpln),
- 2) a SkyDeamon file (*.gpx), or
- 3) a "native" FSX file (*.pln)

Step 6 (Create a VATSIM Flight Plan)

- 1) If necessary adjust the "Depart in" time delay between now and your desired departure time to achieve that desired time in the flightplan.
- 2) From the menu bar select "Flight Plan", then "ICAO FPL (to Clipboard)" from the drop-down list of options.
(Or use the short-cut key "Ctrl F")
This places the text of an ICAO FPL onto the clipboard and then opens the "my.vatsim.net/pilots/flightplan" webpage.
- 3) Click on the blue button "Import ICAO FPL" in the top right corner of the flightplan webpage.
- 4) Highlight/delete any text that may already be in the window that "pops up", then "Ctrl V" to paste the new flight-plan text from the computer clipboard.
- 5) Now click on the blue "Process" button in the lower right corner of the "popup" window. All the relevant data gets automatically entered in the correct fields.
- 6) As the ICAO FPL does not contain the "Fuel endurance" also required for a VATSIM Flight plan, this must be entered manually on the webpage. This value is now highlighted in Yellow in the Converter programme, and clicking on this highlighted field will copy the value to the clipboard (and remove the highlighting). It can now be pasted (Ctrl-V) into the endurance field on the webpage.
- 7) Scroll to the bottom of the web-page and click on the green "Flight Plan (FPL)" button in the lower left corner.
- 8) You should get a momentary Green "enjoy your flight" note to indicate that the plan has been filed.
If there is a momentary red note then there will be some error in the data that needs identifying and correcting.

Step 7 (optional) (Save/retrieve a copy of the flight-plan)

If desired (e.g. because it is a frequently used route), the flight plan can be saved and retrieved without having to import a route plan and manually adjust the "time en-route".

From the menu bar select "Flight Plan", then "Load Flight Plan", or "Save Flight Plan" as required.

N.b. A flight plan that has been re-loaded this way into this programme can still be exported into any of the route-plan formats.

Step 8 (optional) (Copy data to a PIREP after the flight)

If you wish to enter PIREP data manually (rather than use the club's logger) this program can be used to quickly place data for the PIREP onto the clipboard.

- 1) Re-run the "Flight Plan Converter".
- 2) Re-import either the route or flight plan.
- 3) Click into the "Departure Airport" field. This places the depart airfield's ICAO code on the clipboard ready for pasting into the PIREP.
- 4) Click into the "Destination Airport" field. This places the destination airfield's ICAO code on the clipboard ready for pasting into the PIREP.
- 5) Click into the "Route" field. This places the Route on the clipboard ready for pasting into the PIREP.