External Flight Plan Settings

There are some utilities that enhance your flight simulator. Unfortunately some of them do not “want” to work with the simulator database, but instead keep their own navaid databases and flight plan format.

In this short tutorial, I’ll explain how to set up Mission-X to write to the RealityXP GTN 75x “flight plan” folder and how to import it.

Disclaimer

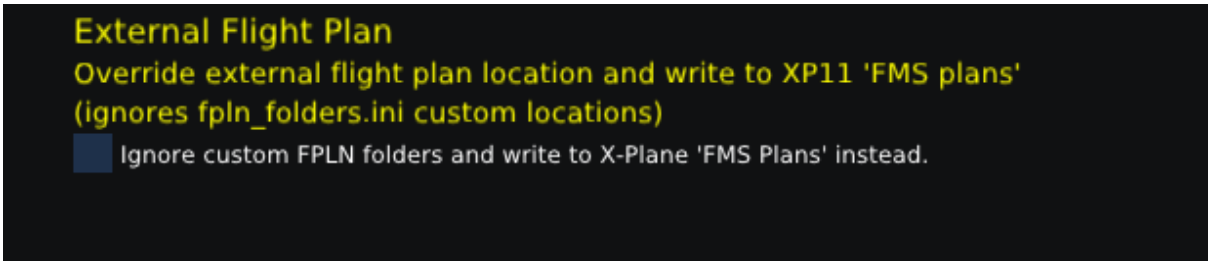
Mission-X currently supports RealityXP GTN 75x, LittleNavMap and X-Plane 11 formats.
I have also added support to GNS 5xx products with the assistance of the community.
In the GNS5x case, only lat/long are injected to the file, no ICAOs due to lack of information from the plugin part.

I’m open for other format requests though.

Where flight plans are being created by the plugin

The default flight plan folder for Mission-X is “***{X-Plane}/Output/FMS plans***” folder.
The best practice is to create a ***symbolic link*** to this folder from your external application. If it does not work then read below for other options.

If you want to write to custom locations, make sure the following “setup” option is **unchecked**.



How it all works

The “fpln_folders.ini” file holds the supported file formats.
The plugin will need the “FORMAT TYPE” and “{output folder}”. If the folder is not listed then it will use the default location, which is: “{XP11}/Output/FMS plans”.

For example, for LittleNavMap, we can use the “LTLNAV” format with no folder location.
This will create the “***missionx_fpln.lnmpln***” file which you can import from LittleNavMap.

```
; Write Reality XP GTN format into X-Plane FMS output f
;GTNRXP
;GNSRXP
LTLNAV

; Reality XP - GNS/GTN default location
GTNRXP|C:/ProgramData/Garmin/Trainers/Databases/FPLN
;GNSRXP|C:/ProgramData/Garmin/GNS Trainer Data/GNS/FPL
```

In this file snippet we produce two different flight plans in different formats and different output folders.

Only when you start a mission, the flight plan file will be generated

Supported Formats			
Utility	Type Code	Extension	Example/Comment
RealityXP 75x/6x	GTNRXP	gfp	“missionx_fpln.gfp” Tested on GTN75x
Reality XP G530	GNSRXP	fpl	“missionx_fpln.flp” Not fully tested on G530
LittleNavMap	LTLNAV	lnmpln	“missionx_fpln.lnmpln”
X-Plane 11 FMS	XPLN11	fms	“missionx_fpln_xp11.fms”

How to Configure For GTN 75x

Step 1: Where is the custom FPLN folder located

This is probably the ***most important part of the setup***, and can be confusing for some utilities. RealityXP GTN is one of those and I will explain it in a minute.

When reading RealityXP GTN 75x manual regarding "custom flight plan folder" the default one is in:

Preparing the virtual datacard

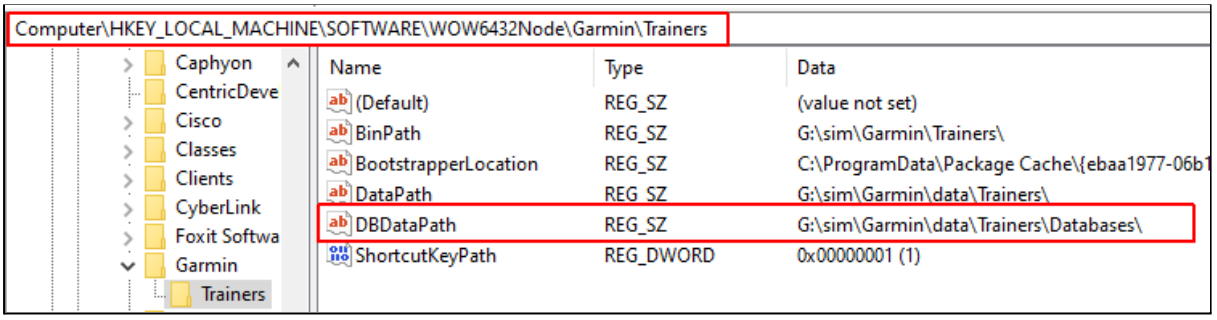
The first step is to create a virtual datacard folder where to store the flight plans and the user waypoints. This folder must be named **FPLN** and be located in the GTN Trainer Data folder, typically[1][2]:

```
"C:\ProgramData\Garmin\Trainers\Databases\FPLN"
```

For GNS utilities, the default folder should be: "***C:/ProgramData/Garmin/GNS Trainer Data/GNS/FPL***" or "**C:\ProgramData\Garmin\Trainers\GTN\FPLN**" (trainer v3.00)

This might be true, if you installed RealityXP + Trainer programs in their default locations. But, if not (like myself) then placing files in that folder ***won't*** work.

In the next page we will discuss the "best practice" of how to save your flight plans. Based on a thread in the Vatsim forum and relevant for GTN 75x.
In Garmin Trainer v3.0x I could not find the "DBDataPath" this might be because I used the default folders during installation.



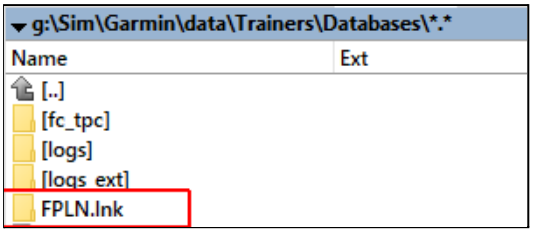
- **Open your registry**, and search for the Garmin/Trainers node.
- Check the "**DBDataPath**" value.
  This is where you need to create your FPLN folder (for the GTN75x utility).

Default folder might be: "**C:\ProgramData\Garmin\Trainers\GTN\FPLN**" if none is listed in the registry.

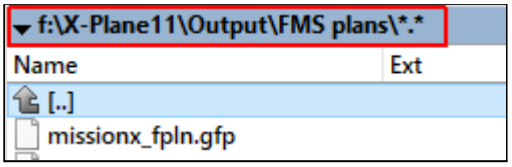
In this example, I did not use the original location to store the Garmin Trainer, so the best way to be sure is to check the registry.

Instead of creating a new folder, you should create a symbolic link to the X-Planes FMS folder and Mission-X will create the flight plan in X-Plane folder (Can be flagged in the plugin options menu).

Here is the FPLN symbolic link.

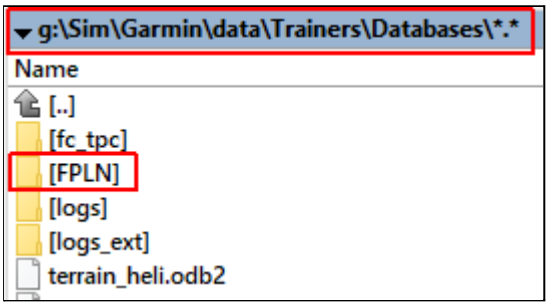


Here is X-Plane FMS folder with the flight plan file

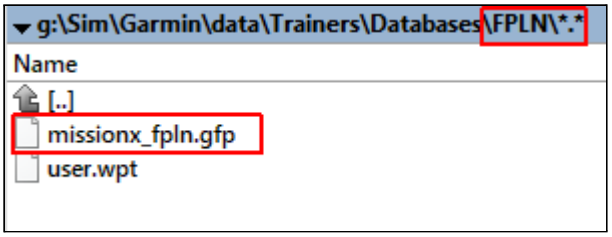


Other options

Here is the FPLN folder in File Explorer.



Here is the FPLN folder content.

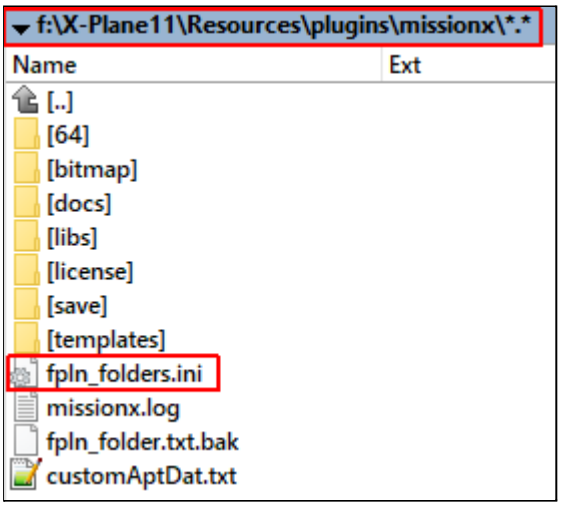


Mission-X plugin creates only one flight plan based on the FMS data. The file name starts with "***missionx_fpln***" and the file extension depends on the utility format.

Step 2: Let Mission-X know where the Flight Plan folder is located

Since Mission-X is not aware of the external folder locations, we will have to:

1. Create an "ini" file by the name: "***fpln_folders.ini***".
   The file must be located in the root folder of "Mission-X" plugin.



2. Add a row that describes the “type” of external utility and optionally its expected flight plan folder location.
   You can define multiple locations for different supported formats.
   Comment out formats you do not need (use: “**#**” or “**;**” to comment out lines).

```
; Reality XP - GNS/GTN default location
;GTNRXP|C:/ProgramData/Garmin/Trainers/Databases/FPLN
;GNSRXP|C:/ProgramData/Garmin/GNS Trainer Data/GNS/FPL

; Example: Write Reality XP GTN format into X-Plane FMS
GTNRXP
```

In this example the plugin will create a flight plan file for Reality XP GTN75x format. The location will be - X-Plane own “FMS plans” folder.

Importing Custom Flight Plan - RXP 75x

Mission-X will only create a custom flight plan if X-Plane G530/G1000 will have flight plans in them and only after “starting” a mission (in the future I might add a menu option to generate the FMS content on the fly).

Create a random mission and load it

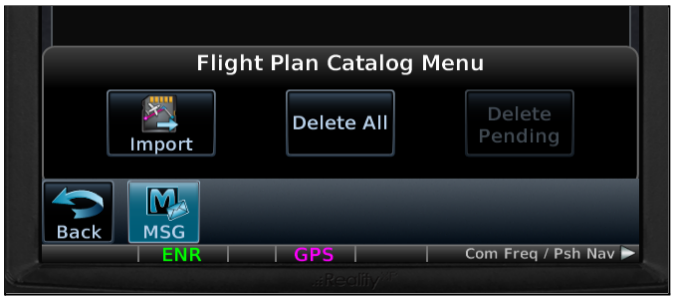
- Open Mission-X window and pick the **[Generate a Mission]** button.
- Pick a template, and generate a mission.
- Press the [start] button.

Here is an example of a flight plan generated by the plugin.
It should automatically be written to “all” external flight plan folders.

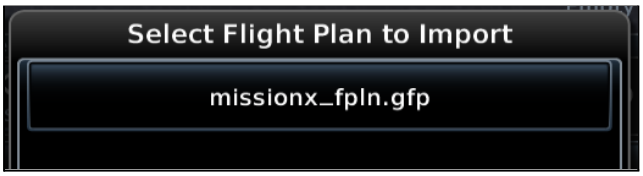
Import the flight plan - RXP GTN 75x

Open your Reality XP GTNxxx screen, and press:

- Flight Plan
- Menu
- Catalog
- Menu (again)
- Import (you should see it if you created the folder correctly, see step 1).



You should pick the custom flight plan, in this case: “missionx_fpln.gfp”

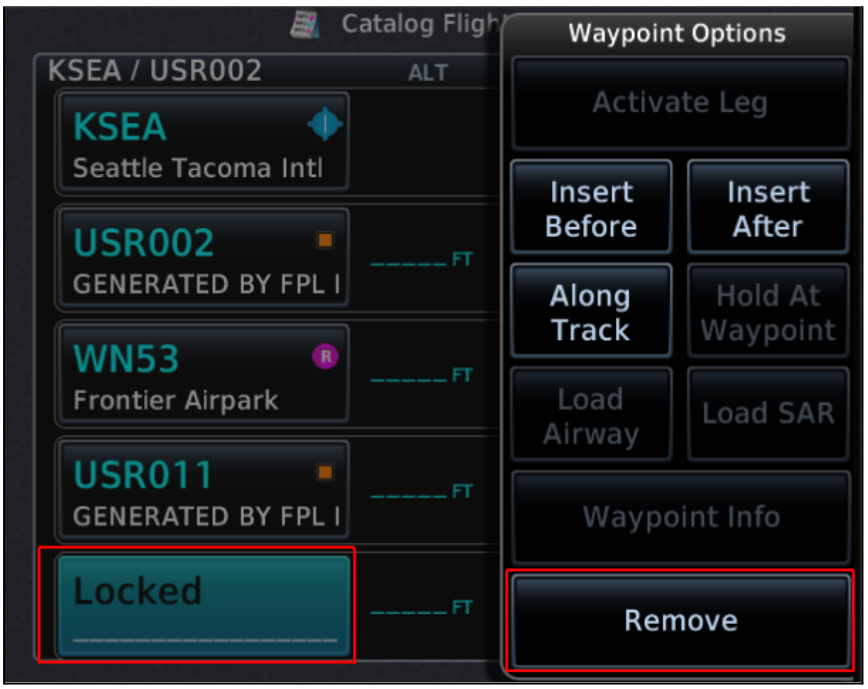


If the custom flight plan has some conflicts/locks we will deal with them after storing the flight plan:

Press **[OK]** and then **[Store]** button.

Once the flight plan is stored, press the **[Edit]** button…

Pick and Remove all "**Locked**" waypoints.



You can further modify the flight plan and store it in the catalog.

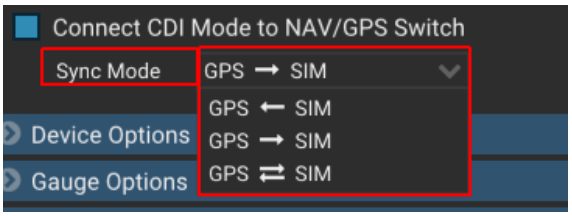
Once done, **[Activate]** the "new" flight plan. You might need to manually fix the first "flight leg".

You can now display the **[Map]** and the flight plan in it.
Here is a visual representation of the mission on the GTNxxx screen. Once you make it active, it will reset the X-Plane G530/G1000 FMS and will inject the active leg.

Some observations

When working with Reality XP GTN utility, you should set up the way the product interacts with X-Plane.
When I opened it, it cleared my G530 flight plan. I believe there is a way to control this, but you should carefully read why and how to set up this interaction.

This is just an example of the setting options.



When activating a custom flight plan, the activated “flight leg” might not be the expected one. I suggest manually fixing the active leg, by clicking on it and pressing the **[Activate Leg]** button.

The following screenshot displays the wrong active flight leg. It is the end of the flight before we even started it.

Here is an example of a flight plan that has been imported into the GTNxxx.
In most cases, GTNxxx will delete all your flight legs in your G530, and will only inject the active one.

G530 flight plan on the right, and the representation on the left in the G75x.

Summary

I hope this brief tutorial helped you configure your external GTN folder.
For any issues/suggestion please send me an e-mail to:

E-mail: snagar.dev@protonmail.com

Blue skies
Saar