Flight plan suggestion

From Châlons Vatry (LFOK) to Paris Orly (LFPO)

Flightgear ATC

Table of contents

Picture from epsos.de

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Introduction

Are you interested in discovering new things about general aviation? Flight plan suggestions cover your needs : mixing interesting topics while practicing, they are intended to teach you more each flight!

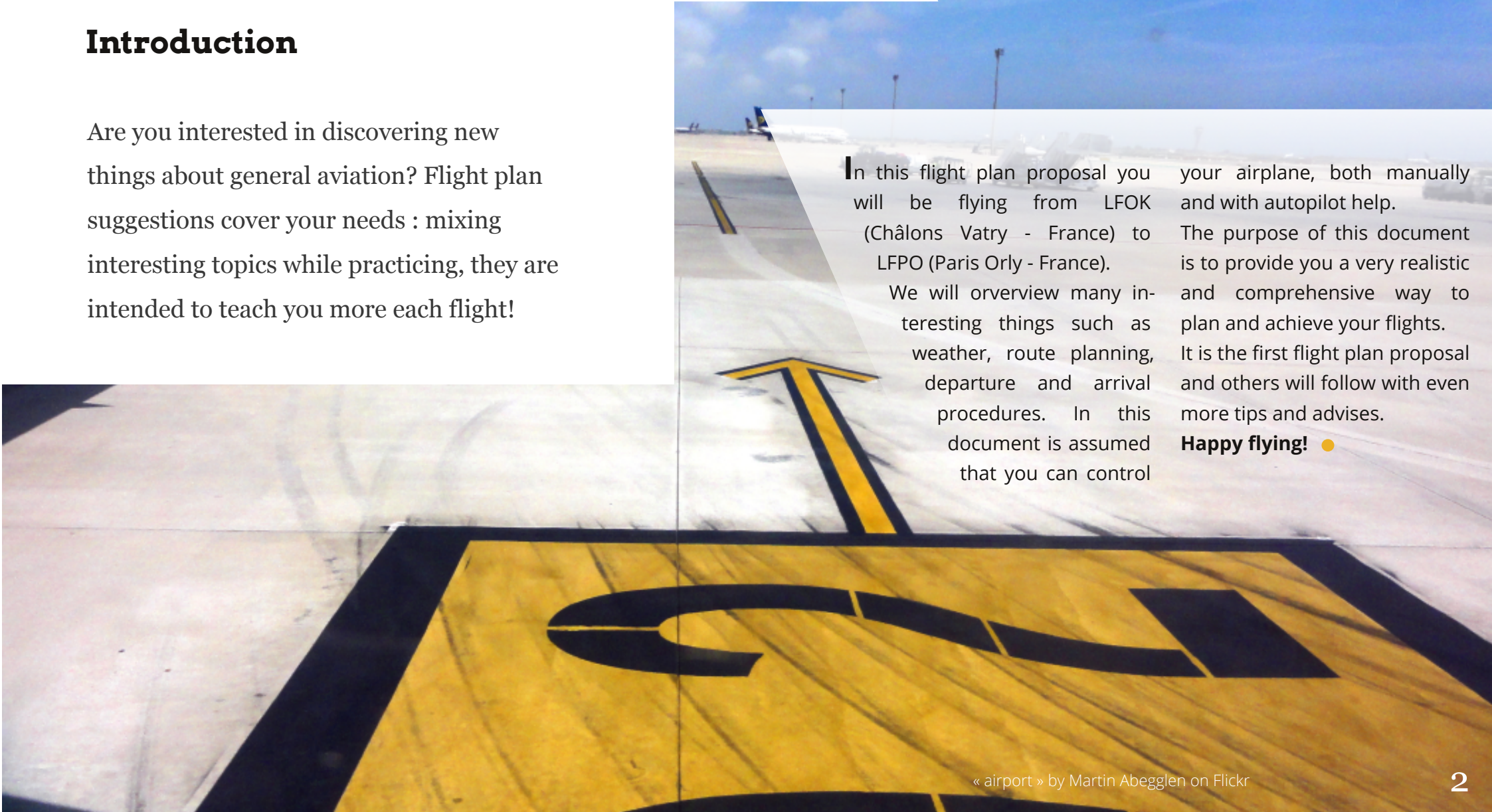
In this flight plan proposal you will be flying from LFOK (Châlons Vatry - France) to LFPO (Paris Orly - France).

We will orverview many interesting things such as weather, route planning, departure and arrival procedures. In this document is assumed that you can control your airplane, both manually and with autopilot help.

The purpose of this document is to provide you a very realistic and comprehensive way to plan and achieve your flights.

It is the first flight plan proposal and others will follow with even more tips and advises.

Happy flying!



« airport » by Martin Abegglen on Flickr

« Squawk four four zero three »

Have you ever heard about « Squawk » or « Transponder » ? Did you ever wonder what the four digits refer to? Our explainations about the transponder, how you can use it, why it is very important to use it.

What a transponder is?

The transponder is a tool used by Air Traffic Controllers to identify aircrafts appearing on the radar. Every aircraft has one and reports several information including a 4 digits code, the aircraft altitude and callsign. Every digit contained in the transponder code (also called « squawk ») can be between 0 and 7.

Mode A, mode C, mode S?

Alongside the 4 digits code you can select a transponder mode. Each mode will report different information. Mode A (the most simple) will only report your code. Using mode C (or mode ALT), the ATC sees your code and altitude. The mode S is mainly used on airliners, and displays the code, altitude and callsign.

Where is the transponder?

In Flightgear some aircrafts have the transponder working inside the cockpit (as of B747, Cessna c172p or Robin DR-400). If your aircraft doesn't, you can find it in Equipment > Radio settings. You can then put the transponder code and the mode (ON, ALT).

How should I put my transponder?

In any case, it is good practice to put it ON (mode A) to let

« Royal Navy Radar Operator. » by UK Min. of Def. on Flickr

ATCs see a point on their radar (see the blue box page 4). Every country has got regulated transponder codes.
If you enter into a controlled area, please make sure your transponder is set ON, no matter the 4 digits code. There will then be room for the controller to identify you.

Radar identification in three steps

1. Contact the Air Traffic Controller and give him : your callsign, your current position and your intentions.
   F-TEST « Vatry good evening, F-TEST at the parking, requesting to taxi for departure, destination LFPO. »

2. The Air Traffic Controller will give you a transponder code (squawk). Set it properly.
   ATC « F-TEST squawk 4403. »
   F-TEST « Squawk 4403 F-TEST. »

3. The Air Traffic Controller will confirm your transponder is set properly.
   ATC « F-TEST radar identified. »

Transponder & radar identification

You will find below what the ATC sees on the radar, depending the transponder mode.

Mode A - Only squawk appears
Mode C - Squawk + alt appear
Mode S - Squawk + alt + ident appear


Photo by ISAF media on Flickr

An ATC working with strips to regulate traffic. Most controllers still prefer working on paper.


« Waiting at the airport » by Lâm HUA on Flickr

Plan your flight well.

You probably don't want your flight to go wrong. Planning is the first step to avoid stress and confusion during your flight. Welcome onboard!

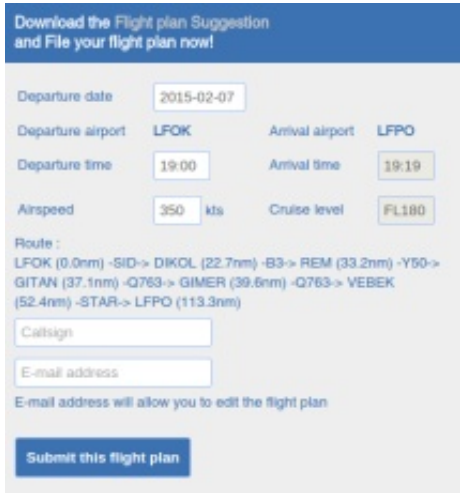
1 - Route

We will go through the planning of your flight from Châlons Vatry (LFOK) to Paris Orly (LFPO).
As the distance is short, you might not want to use an airliner and prefer a smaller aircraft such as a Beechcraft B1900D or a Bombardier CRJ700.

A nice website to plan your flight route is :
http://rfinder.asalink.net/free
Just specify departure (LFOK) and destination airport (LFPO). Select an enroute altitude between FL160 and FL180 and click on "Find route". The program will then give you a route to follow. You can enter it into your aircraft's FMS or into your flight planning manager. You can see

airport	SID indicator	waypoints airway name	STAR indicator	airport
LFOK	SID	**DIKOL** B3 **REM** Y50 **GITAN** Q763 **GIMER** Q763 **VEBEK**	STAR	**LFPO**

your route on a map using the skyvector.com website.
Once your route is ready, determine how much time it takes for you to fly from LFOK to LFPO by simulating your speed on the skyvector.com website.
If you file your flight plan on the **Flightgear-ATC** website, both ATCs will vector you more easily and efficiently.



To file your flight plan, you can go to the "School" section of the website and fill the flight plan information relative to the "LFOK to LFPO" flight plan suggestion.

2 - Radio

Communication at LFOK

Before any operation you should contact LFOK in order to get a clearance for your departure. The ATC will also give you the ATIS which includes QNH and the active runway.
If your flightplan has been filed online (see step 1 - Route), the ATC will know your intentions, will give you a transponder code and a clearance for DIKOL departure. DIKOL is a Standard Instrument Deparure (SID) procedure.

« F-TEST CLEAR FOR EDDF FL160, DIKOL DEPARTURE - EXPECT RADAR VECTORS TO DIKOL THEN AS FILED. QNH XXXX RUNWAY XX IN USE. SQUAWK XXXX. »

This departure guides you to DIKOL (the LFOK airspace ends here). The route is described in the next page and depends on the runway in use.

If you are unable to follow this route, tell to ATC who will guide you to DIKOL.

« F-TEST WINDS FROM XXX AT XX KNOTS - CLEAR TO TAKE OFF. »

After taxiing and taking off you will follow the DIKOL 1L or 1R departure. Once you are at DIKOL, contact ATC to leave the frequency.

« AT DIKOL, REQUESTING TO LEAVE FREQUENCY, F-TEST. »
« F-TEST, YOU ARE FREE TO LEAVE FREQUENCY - HAVE A GOOD FLIGHT BYE BYE. »

Communication at LFPO

« LFPO GOOD EVENING, F-TEST AT DIKOL FL160 INBOUND. »
« F-TEST GOOD EVENING ENTER VIA GITAN, RUNWAY XX IN USE, QNH XXXX. »

Radio frequencies

LFOK	LFPO
119.40	118.70

Right after leaving LFOK frequency you can contact LFPO and tell ATC you are on your way to Orly. Include your position when you make contact to ATC. After giving you a clearance to enter LFPO airspace, you will get runway in use and QNH.

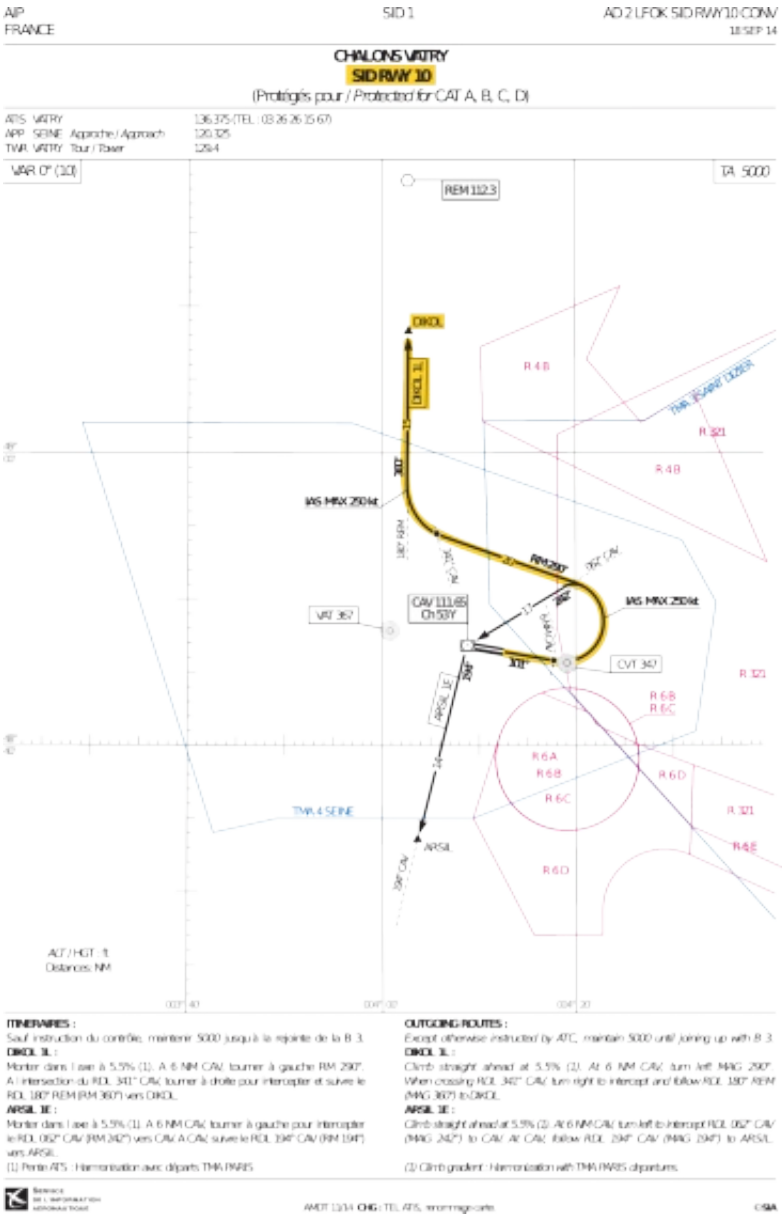
« F-TEST RUNWAY XX CLEARED FOR ILS APPROACH, REPORT ESTABLISHED. »
« CLEARED FOR ILS APPROACH, WILL CALL BACK ESTABLISHED, F-TEST. »

The ATC will assign you a runway and will ask you if you want to make an ILS approach.

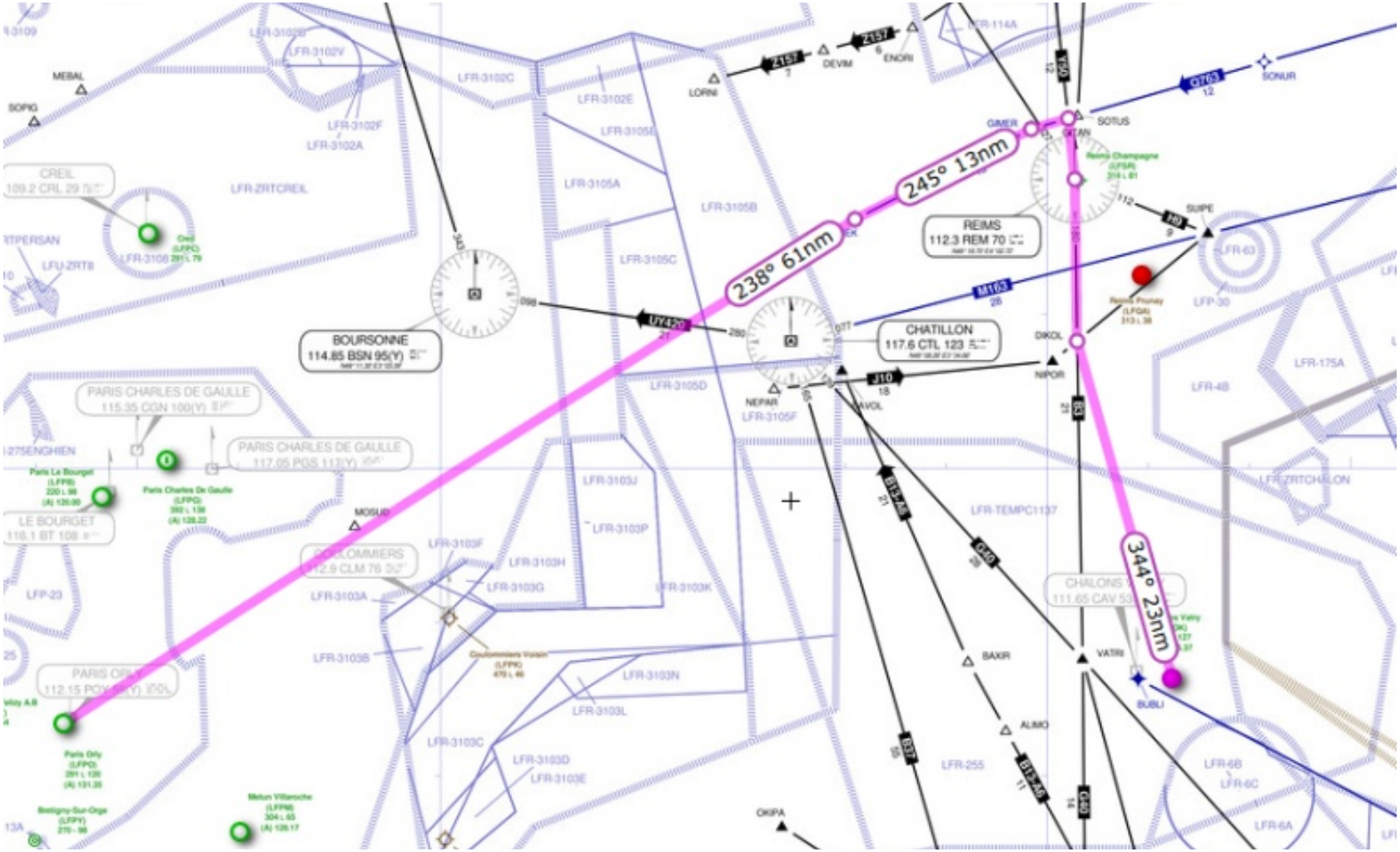
« F-TEST RUNWAY X CLEAR TO LAND, WINDS XXX AT XX KNOTS. »
« CLEAR TO LAND RUNWAY X F-TEST. »

Happy landing at LFPO!

LFOK Standard Instrument Departure (SID) procedures



LFOK to LFPO route



LFPO Standard Terminal ARrival (STAR) procedures