

Flight Assistant – Quick Start Guide

v. 2022-02

Fiona BENEDITO, Dinh-Viet-Toan LE, Claire RAULIN, Maxime SABBAH

Flight Assistant - PIE 2021

Developer mode ☐

Last update : 2022-02-12 [17:14:23 >> 17:14:45]

Flight

FOLLOW A FLIGHT :

DESCRIPTION :
Callsign : AFR52PR ; **Registration :** F-HBNA ; **Model :** A320 (Airbus A320-214)
Route : Toulouse Blagnac Airport → Paris Orly Airport ; **Last contact :** 17:14:44
Position : (43.626, 1.3167) ; **Altitude :** 10050 ft ; **Vg :** 288 kt ; **Vz :** 3200 ft/min ; **Heading :** 355

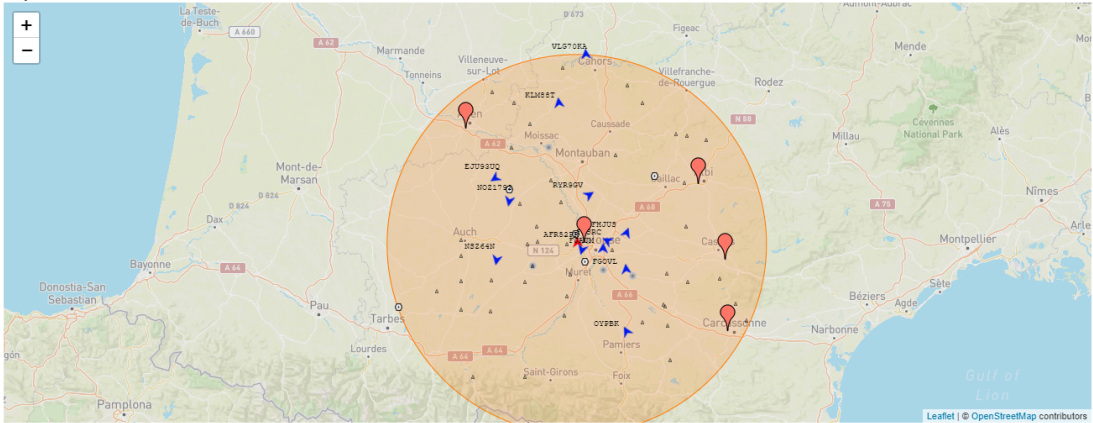
Query

SPEECH RECOGNITION

START

RESPONSE :
The nearest airport is Toulouse Blagnac Airport (LFBG) at 2.49 nm.

Map :



Introduction

Blabla Dire qu'on se met à la place d'un avion

The app is available here:

<https://pie2021-testapp-v17.herokuapp.com/>

Contents

| | | |
|----------|---------------------------------------|----------|
| 1 | Quick start | 3 |
| 1.1 | Required tools | 3 |
| 1.2 | App launch | 3 |
| 1.3 | Flight following | 3 |
| 1.4 | Queries | 3 |
| 2 | Overview of the user interface | 4 |
| 3 | Queries | 4 |
| 3.1 | Static queries | 4 |
| 3.2 | Dynamic queries | 5 |
| 3.3 | Checklists | 5 |
| | Available queries | 6 |

1 Quick start

This section will guide you to select a flight, and give instructions on asking queries.

1.1 Required tools

- **Chrome** web browser is needed
- Microphone

1.2 App launch

- Go to the following webpage :

<https://pie2021-testapp-v17.herokuapp.com/>

- Allow access to the microphone

1.3 Flight following

- Select a flight to follow it. The easiest way is to click on one of the blue cursors representing the flights on the map (Figure 2). Else, you can search a flight by its callsign in the “Follow a flight” field (Figure 1)

The screenshot shows a web application titled "Flight". It features a search bar labeled "FOLLOW A FLIGHT :" with a "Callsign" input field containing "af5". Below the input field, a list of flight descriptions is displayed, including "AFR565 : Beirut (BEY) → Paris (CDG)", "AFR596 : Paris (CDG) → Freetown (FNA)", "AFR57ZZ : Tenerife (TFS) → Paris (CDG)", "AFR54YC : Madrid (MAD) → Paris (CDG)", "AFR54KT : Oslo (OSL) → Paris (CDG)", "AFR52PR : Toulouse (TLS) → Paris (ORY)", and "AFR53PU : Paris (ORY) → Nice (NCE)". The flight "AFR52PR : Toulouse (TLS) → Paris (ORY)" is highlighted with a blue background. At the bottom, there is a "Query" section and a "Speech Recognition" section.

Figure 1: Flight search by callsign

- On the map you may see that the orange zone in the map is centered on the selected flight
- The “START” button in the Speech Recognition section is also activated.

1.4 Queries

Once a flight is selected, you can ask queries to the flight assistant using the push-to-talk button, set to the 'A' key of the keyboard. Queries can be asked either in natural language with plain sentences, or with sequence of specific words.

- Push the push-to-talk button ('A' key) and maintain it.
- Ask your question. A transcript is also displayed in real-time.
- Release the push-to-talk button to send your query.

The exhaustive list of implemented queries with a list of possible questions are available at the “Available queries” section of this document.

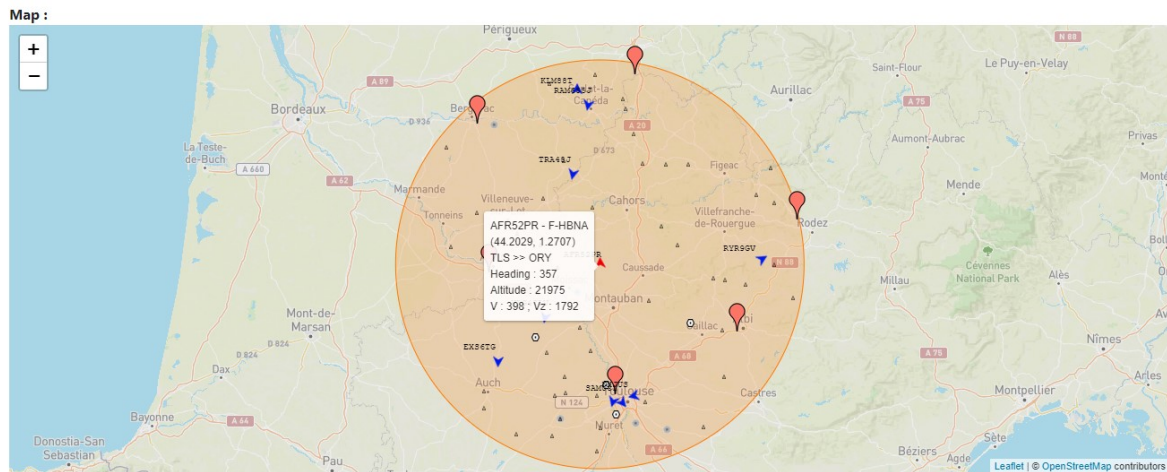


Figure 2: Map after selection of a flight

2 Overview of the user interface

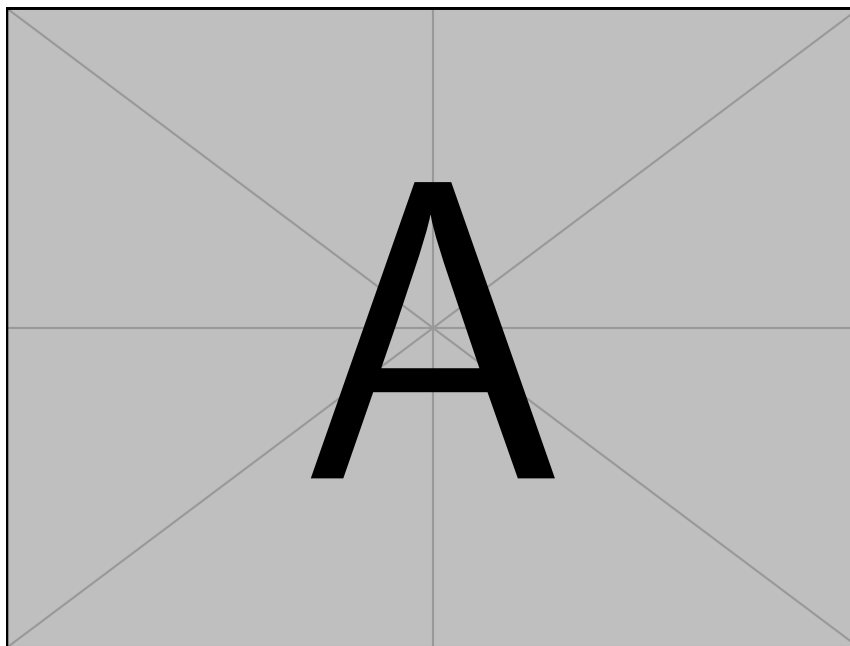


Figure 3: User interface

3 Queries

3.1 Static queries

Can be [arrival], [departure], [the nearest airport]

3.2 Dynamic queries

3.3 Checklists

Checklists queries have not been implemented depending on the model of the airplane selected. These queries are only for test purposes.

Available queries

| Intent | Description | Examples |
|---|--|---|
| Static queries (that will not change during the flight) | | |
| Departure / Arrival airport | Returns the name and the ICAO of the departure / arrival airport | "What is the arrival airport ?" |
| Runways at an airport | Returns the list of runways at the an airport | "What are the runways at [Toulouse Blagnac] ?" |
| Frequency at an airport | Returns the frequency value of a frequency channel at an airport | "[TWR] frequency at [Toulouse Blagnac]" |
| Dynamic queries (that may change during the flight) | | |
| Current flight parameters | Returns a current flight parameter (speed, altitude, Vz, heading...) | "What is my [altitude] ?" |
| Nearest airport | Returns the nearest airport from the current position | "What is the nearest airport ?" |
| Nearest trafic | Returns the nearest trafic from the current position | "Where is the nearest trafic ?" |
| Nearest runways | Returns the list of runways at the nearest airport | "What are the nearest runways ?" |
| Weather queries | | |
| Weather at airport | Returns a global status of the weather or a specific parameter at an airport | "What is the weather at [Toulouse Blagnac] ?" "What is the [visibility] at [Toulouse Blagnac] ?" |
| Weather at location | Returns a global status of the weather or a specific parameter at a location | "Give me the weather at [Toulouse] ?" "[Temperature] at [Paris]" |
| Checklists | | |
| Approach checklist | Returns the approach checklist | "Give me the approach checklist" |
| Landing checklist | Returns the landing checklist | "Landing checklist" |