

aerofly FS 2: Rodeo's Tutorial

My second ILS approach

v1: 2017-02-08

You did follow the tutorial My first ILS approach.
We will use quite the same flight for the next step.
This time let's try a full automatic ILS approach.

Preflight Preparations: We are going to San Francisco Intl and want to approach Runway 19L.

Open the site <http://airnav.com/airports/> and search for San Francisco or SFO or KSFO.

KSFO is the ICAO code of the airport (*ICAO = International Civil Aviation Organization*), also listed in aerofly.

The KSFO page tells you everything about the airport.

Please scroll down to **IAPs - Instrument Approach Procedures** and open the PDF file **ILS OR LOC RWY 19L**.

The layout of this file is standardized and explained in various locations of the web.

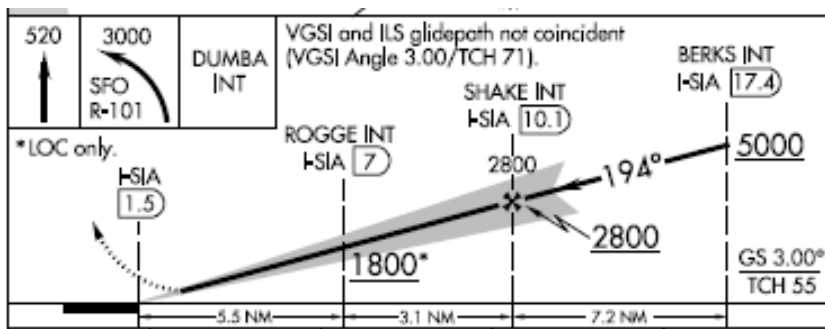
In the beginning we will concentrate on the most important information for us.

SAN FRANCISCO, CALIFORNIA

LOC/DME I-SIA	APP CRS	Rwy Idg	19L	19R
108.9	194°		8650	7650
Chan 26		TDZE	11	11
		Apt Elev	13	13

The frequency of the localizer *LOC/DME* is 108.9 MHz,
the approach course *APP CRS* is 194 degrees.

The available runway length *Rwy Idg* is 8650 ft,
the touch down zone elevation *TDZE* is 11 ft.



This is the glide path to the runway.
To intercept the glide path, our flight level in a distance of 17.4 nm is at or below 5000 ft.

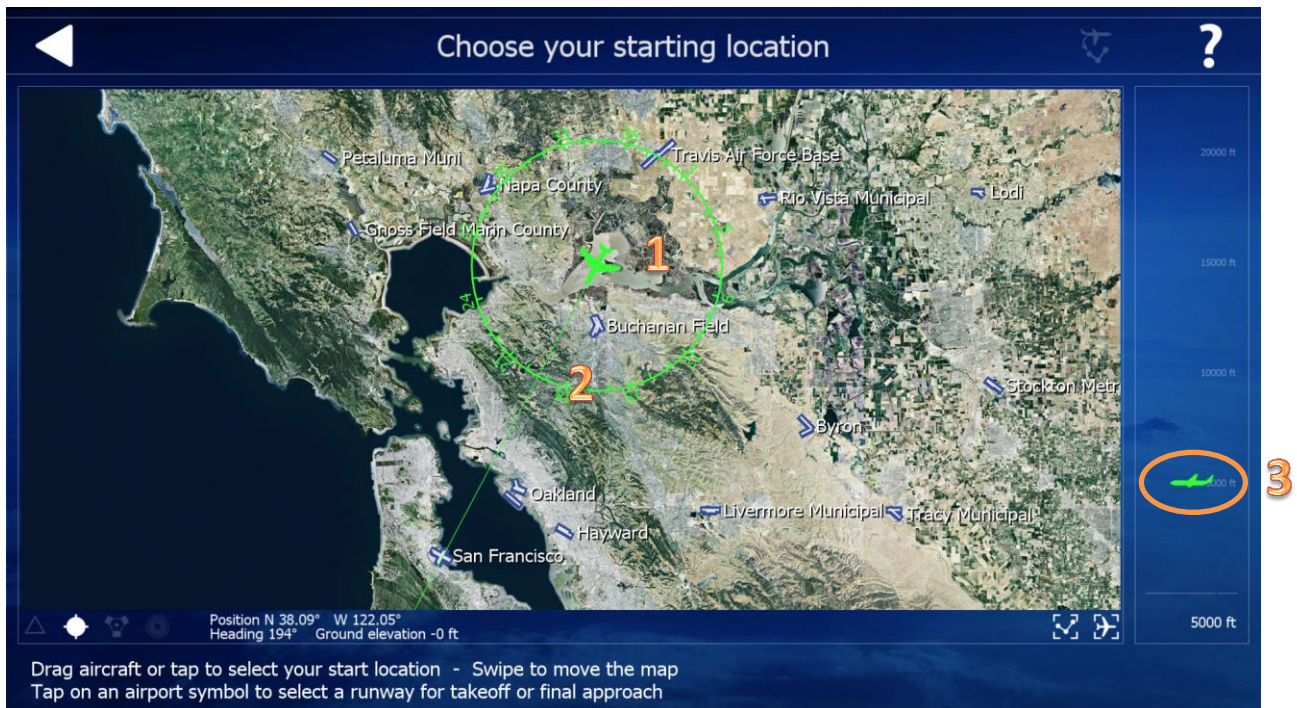
The final approach fix FAF is in a distance of 10.1 nm at 2800 ft. Our aircraft should be in line now and follow the glide path.

Next start aerofly FS 2, select Aircraft and scroll to the Baron 58.

This tutorial is based on the Baron 58, the instruments may differ in other aircrafts.

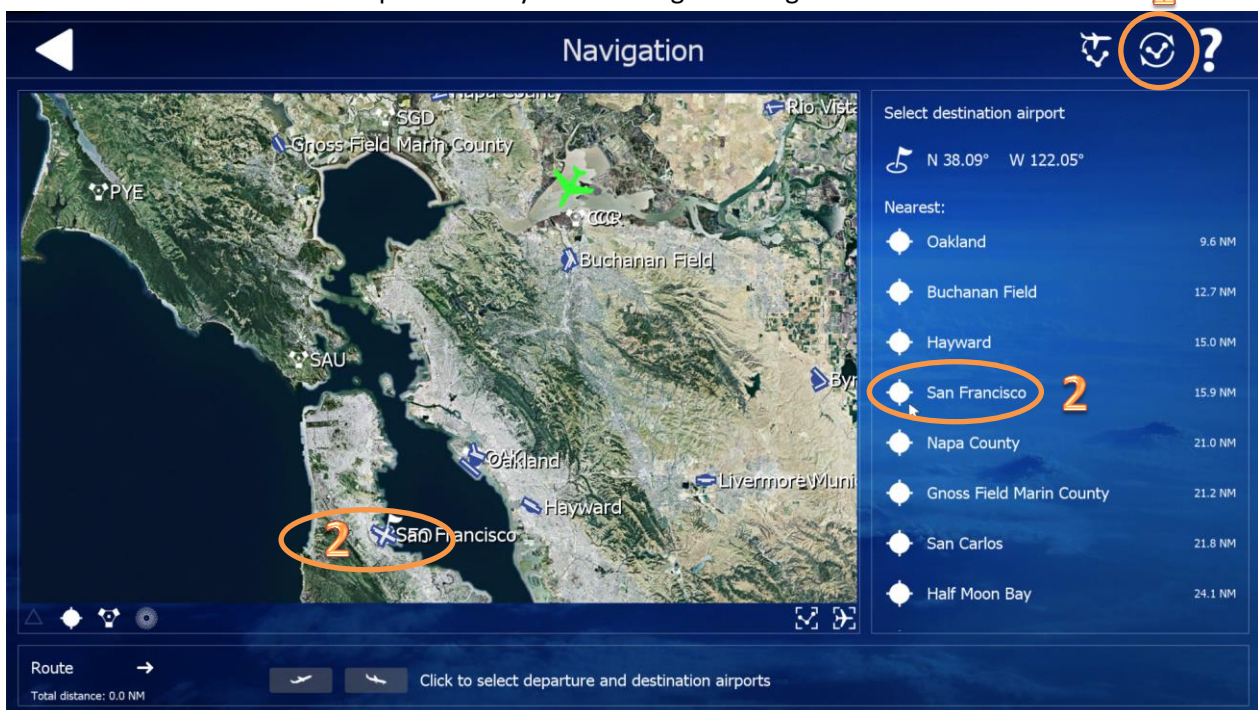
Exit aircraft selection and go to Location menu.

- 1 Place your aircraft above the Grizzly Bay NE of San Francisco.
- 2 Rotate the circle with the mouse to a heading of 194 degrees. The heading is shown below the map. Drag your aircraft symbol to be lined up with the San Francisco runways.
- 3 Select a flight level of 5000 ft.



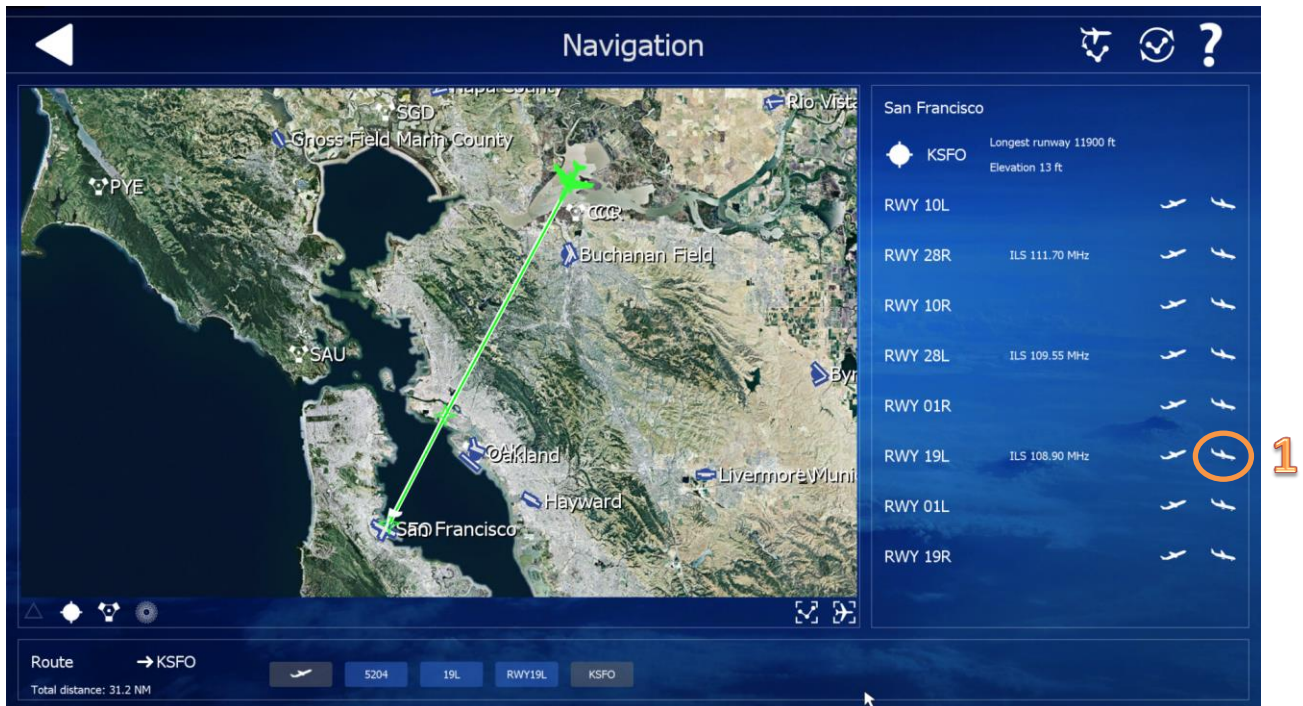
Leave the Location menu and enter the navigation menu.

- 1 Delete previous route settings
- 2 Click San Francisco on the map OR directly in the listing at the right side of the screen.



1 Select the arrival symbol of RWY 19L and see your flight route on the map.

Note additional information like the ICAO code, the ILS frequency and the total distance of 31.2 nm.



Leave the Navigation menu and **start the simulation**.

It's not bad to fly in the early morning. Adjust the time by pressing T or Shift-T.

The screenshots are done during daylight for better visibility.



Adjust average power, level your aircraft and press the key A to activate the Autopilot (alternatively press AP at the control panel).

Now we have the time to enter our flight data.

1 Turn the frequency knob of NAV 1 to 108.90.

Use the mouse wheel for this, point to outer ring for large change, inner knob for decimal changes.

2 Press the active/standby button. The active frequency 108.90 swaps to the left.

3 Turn the heading knob of the HSI instrument to 194 degrees.

4 Turn the knob to the same direction.



1 The ILS is now active. Note the distance, the average speed and minutes to our destination just below the HSI.

2 Turn the OBS knob to 194 (*OBS = omni bearing selector*).

3 Turn the knob of the CDI to 194 (*CDI = course deviation indicator*).

The knob is hidden behind the gear. Point with mouse to the marked position to get the mouse wheel symbol.



Fly with autopilot to our destination, course approximately 194, flight level 4000-5000ft.



Autopilot is active.

Now press the button APR at the control panel.



The text APR may be displayed in the second line.

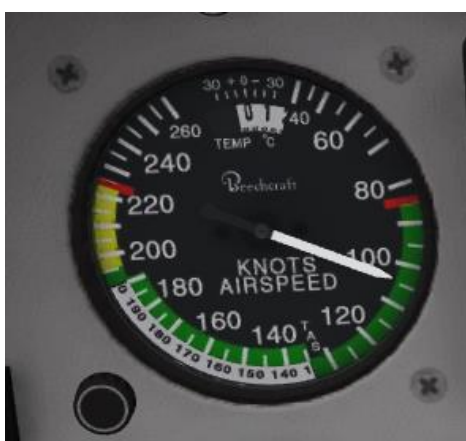
As soon as it gets the signal it jumps into the first line (at a distance of approximately 26nm).

Alert may blink for a while. As soon as it gets the vertical glide path the alert disappears.

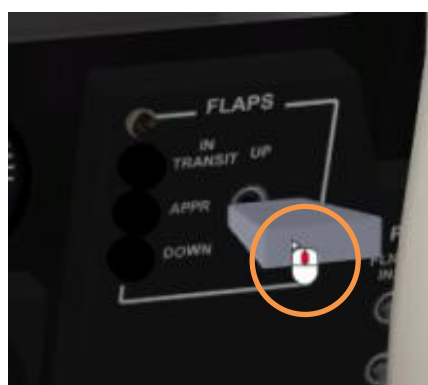
This is much closer at a distance of approximately 17nm.

Now the navigation system will perform a complete automatic approach.

You have to control airspeed, flaps and landing gear.



Watch the Airspeed indicator and manage the speed during approach.



Set flaps during approach.

You can use the mouse wheel

(keys F and Shift-F are the standard setting for flaps).

Deploy the gear, hidden at the right side of the steering wheel
(key G is the standard setting for the gear).



As soon as the aircraft touches down the autopilot switches off.
You have to take back control.

**Attention: I'm not a pilot and this tutorial is not an official flight procedure.
It may contain errors and is only intended for demonstration of aerofly FS 2 functionality.
Happy landings!**