

# Reservoir-Tour (V2.5)

Flight created on 10.07.2022 (20.10.2023 V2.5 English)

Estimated flight time 1,5h

Difficulty level normal

Mission: Fly tourists to Swiss reservoirs.

Prerequisite: **For this flight, the seaplane "D18S CAFNM" is absolutely necessary.**

Download this plane here:

<https://www.rikoooo.com/downloads/viewdownload/343>

---

## Introduction:

Your boss wants you to make a reservoir flight with tourists. As usual, the boss is profit oriented, so combine this flight with package deliveries. The co-pilot will entertain the passengers, help you navigate and do the package drops.

The tourists would like to visit nearby reservoirs and then go for a hike at Lac de Mory.

---

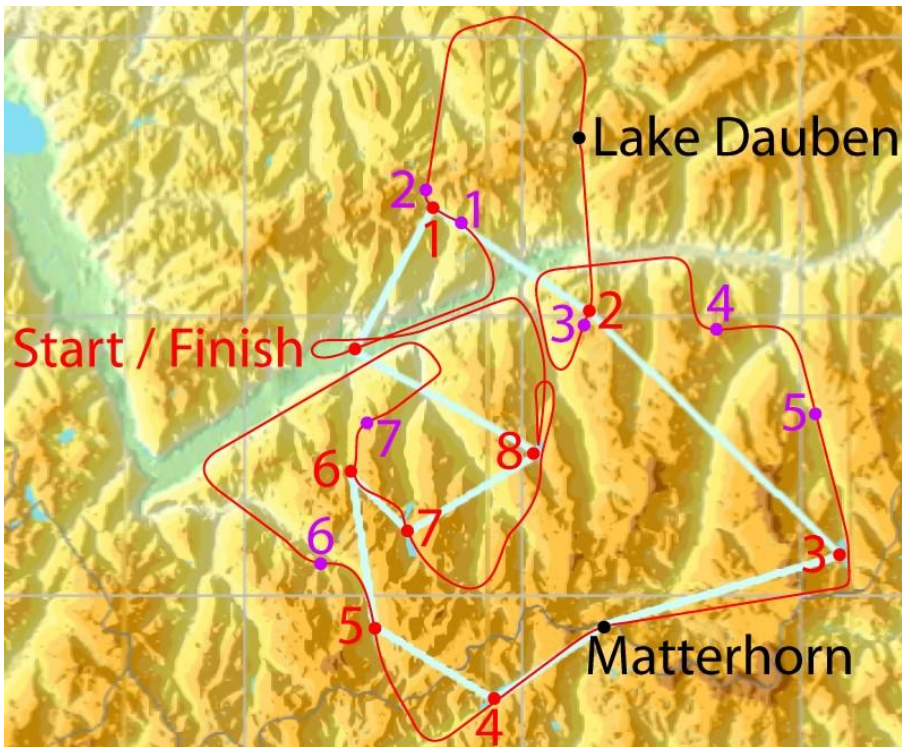
## The flight:

You are in Switzerland, at Sion airport (LSGS). Follow the instructions from the co-pilot.

The map shows the flight route.

The white line shows the GPS flight plan.

The red line shows the actual flight route.



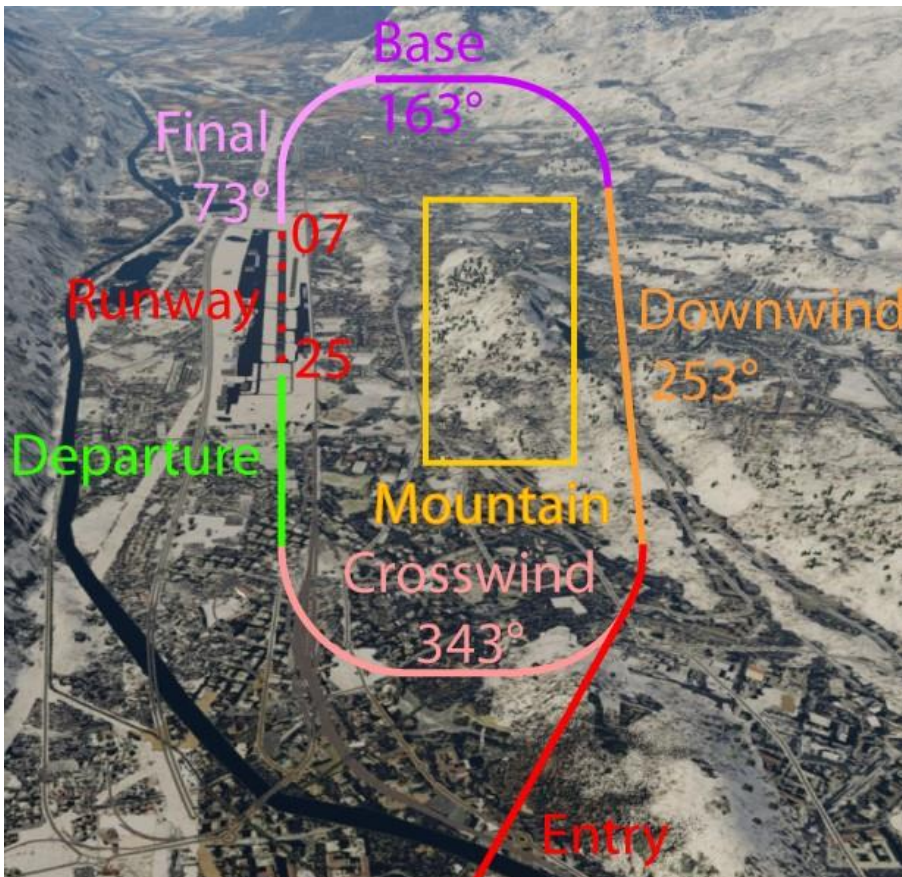
Purple dots show the drop forts.

Red dots show the reservoirs:

- 1 Lac de Tseuzier
- 2 Lake Ill
- 3 Mattmark
- 4 Lac de Places de Moulin
- 5 Lac de Mauvoisin
- 6 Cleuson Lake
- 7 Lac des Dix
- 8 Lac de Moiry

On the "Lac de Moiry" you will land and disembark the tourists.  
Now you will fly back to Sion airport.  
Enter a left aerodrome turn, land and taxi to the parking area.

Traffic pattern, help, how do you do that?



- You approach from below, in the direction of the runway.
  - The tower guides you into the traffic pattern (red).
  - So turn right, approach 1.5km away from the runway.
- How far is 1.5km to the right of the runway?  
 Fly right past the mountain (yellow), as soon as you can see the runway in the left window, you are far enough to the right.  
 Then turn into the counter-approach (Downwind), heading 253° .
- The co-pilot will give you further instructions on altitude, flaps, landing gear, speed and direction.

### **Info about the flight:**

a) The mission compass often points in a different direction than the co-pilot has you flying. This is because you have to fly around a mountain for a good approach.  
 So follow the co-pilot's instructions and everything will be fine. :-)

b) The co-pilot will often help you, but a lot of things you have to decide/assess yourself.  
 For example:

#### 1) Airspeed:

- Maintain at least 100 knots when climbing (reduce climb rate if less than 90 knots).
- Cruise at about 140 knots (so reduce thrust when reaching altitude and speed).
- Approach drop zones at 120 knots.

- Maintain 120 to 140 knots during descent.

2) Climb rate:

- Normal climb/descent rate of the D18S is 1000ft/min.

- If there are mountains ahead, you may have to climb at 1500 to 2500ft/min. If the airspeed is high enough, you can do this for a short time without any problems.

- Above 12000 feet, the D18S can no longer climb at 1000ft/min, so you must independently reduce to 700ft/min. (or less).

3) Maintain course and altitude:

- If the co-pilot says "hold 10000 feet, heading 180 and fly over the house":

Must independently correct altitude and heading to fly low over the house.

After the house, hold 10000 feet and heading 180 again until the co-pilot says otherwise.

4) Mixture adjustment:

- Depending on your altitude, you will need to independently lean/enrich the mixture to keep the engine running smoothly. During this flight you will often climb and descend, so you will have to readjust constantly.

Below you will find a list, in which you can read the correct mixture setting.

*4a) With the wrong mixture setting, you will not be able to reach the required altitude at the 1st drop point, for example. Also the approach to the Matterhorn will be problematic, because you will not get over the mountains!*

*In this case you have to make a "canyon turn" on your own: Turn around, build up speed and gain altitude.*

c) Landing on Lac de Moiry: In P3dV6 there is little water in the reservoir.

In this case, land on the rear area (red rectangle), because the jetty for unloading passengers is located there (red circle).



In the picture, it looks as if the front reservoir area is larger than the rear one. This is an optical illusion, in fact the rear area is much larger.

Landing and takeoff is doable, but you need almost the whole area, so touch down as early as possible and maneuver all the way to the back end of the lake for takeoff.

---

### Info about the D18S aircraft:

1) Mixture adjustment: On most airplanes you can tell by the "fuel flow indicator" if the mixture is adjusted correctly.

Unfortunately I did not find this indicator on the D18S. So you have to estimate from the engine noise if the mixture is leaned enough, or roughly follow this list:

- At 2500 feet 60%
- At 4000 feet 55%
- At 6000 feet 50%
- At 8000 feet 45%
- At 10000 feet 40%
- At 12000 feet 35%
- At 14000 feet 30%

2) This machine is quite old, yet a GPS has been installed.

Display GPS: Click the icon at the bottom left.



GPS displays



3) Propeller and power:

For takeoff, set both to 100%.

For climb, reduce propeller speed to 2100 RPM and power to max. 35 in Hg.

2100 RPM



35 in/Hg



4) The usual climb rate of the D18D is 1000ft/min, at 100 knots.

1000ft/min



95 knots, so speed up a bit.



---

I hope you enjoyed this flight, if so please give feedback to [p3d@andi20.ch](mailto:p3d@andi20.ch) . Also send error messages (spelling mistakes, wrong information, etc.) to [p3d@andi20.ch](mailto:p3d@andi20.ch), I appreciate any feedback.