



AFPM
Mountain Flying Awareness Training Program

02/2022 – v1

I. Theory part

BRIEFING (1h max)

1. Aircraft performance
2. Physiology and human factors
3. Basic piloting
4. Weather and aerology
5. Relevant documentation
6. Valley routing – crossing passes and ridges
7. Organization of the flight training

II. Practical part, in form of two flight lessons (2h30 max)

1. Basic piloting :

- Trimmed flight on different paths
- Attitude-speed / attitude-incidence relationships
- 360° level at 30° bank with a mountainous horizon
- 360° level at 45° bank with a mountainous horizon
- Enter a sufficiently long and wide valley, at an altitude below the pass at the end of the valley:
 - o Point out the importance of moving to one side of the valley and not in the middle by asking for a U-turn
 - o At a sufficient distance from the pass and at a sufficient height, show the insidious transition to the second regime at full throttle until the approach of the stall (demonstrated typology: case of the false horizon or of the will to 'climb' towards the pass rather than to turn back)
 - o Pass the pass at a sufficient height, starting with a U-turn to bring the aircraft parallel to the line of the pass, before deciding, at zero inclination, to continue the U-turn or to make a turn towards the other side of the pass. Emphasize the importance of seeing the mountains behind the pass grow from the beginning of the valley: if not, climb with 360° until you can see the background behind the pass and confirm that it is growing as you approach the pass. If it is not the case, repeat the 360° ascent without delay.
 - o Once the pass has been crossed, continue the route in the valleys, asking for different ridge and pass crossings. Insist on the importance of seeing the relief grow in the background before crossing.

2. Navigation in mountainous regions

- Ask to prepare a round trip to an AD in a mountainous region that is neither an altiport nor an altisurface. Ask to prepare a different itinerary for the return trip.
- The pilot will brief on the route, TEMs and proceed with the execution of the flight.
- A full landing will be made at the destination AD, to allow a short debriefing of this first leg. At this point, the instructor will indicate deteriorated weather conditions simulating a cloudy ceiling that the pilot will have to take into account for the return flight (impossibility to find one's way by the summits, adaptation of the planned itinerary if necessary...).
- During the outbound and return flights, the instructor will pay particular attention to :
 - o The quality of piloting (maintaining altitude in front of rising and falling terrain...)
 - o Decision making (height) for pass and ridge crossings,
 - o Precision of the execution of the passes and ridges
 - o Accuracy of navigation (logbook follow-up, orientation of valleys, time between characteristic points, use of an appropriate map) and, if necessary, the return to the last identified point that would be executed by the trainee who would be aware of having possibly lost his way in a wrong valley