

# **IS AEROBATICS A RISKY ACTIVITY?**

FACT SHEET #2 - version 1.0



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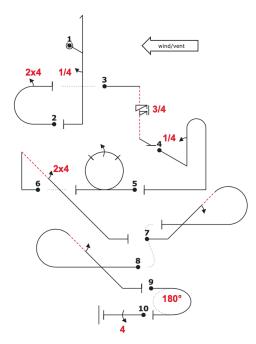
## FACT #1: THE NUMBER OF FATAL ACCIDENTS WITH AEROBATIC AIRCRAFT IS VERY LOW

The planes used for aerobatics are particularly reliable. They are designed to be much more resistant than other planes, with the massive use of carbon. Their structure allows them to perform tricks with accelerations of up to +/- 10G, which means that the pilot can feel up to 10x his body weight.

In addition, these planes are equipped with special systems that guarantee the supply of oil and fuel to the engine, regardless of the position of the plane. The visibilitý (often brightly colored) and maneuverabilitý of these machines are also increased, which reduces the risk of collision with other air users. In addition, training is done regularly under the supervision of a person on the ground to ensure the safety of the airspace. Finally, aerobatic aircraft are thoroughly checked at least every 50 hours of flight by certified mechanics.

< 2%
of fatal accidents in Swiss
aviation since 1970 are due
to aerobatics (9 cases in
50+ years)</pre>

### FACT #2: AEROBATIC PILOTS ARE NOT "HOTHEADS"



On the contrary, the pilots who practice aerobatics are looking for a perfect piloting, a mastery of their machine in complete safetý aerobaticists are not stuntmen! Thanks to dual controls, pilots learn and practice new tricks with certified instructors who can at any time regain control of the machine if the maneuvers are not executed correctly.

During the competitions, the pilots must execute strictly codified programs, composed of a series of free or imposed figures. They evolve in a cube of one kilometer side, called "box", whose limits are ideally marked on the ground. Judges on the ground evaluate the qualitý and precision of each figure and assign scores to break the tie. There is no tolerance for risk-taking: any pilot who does not respect the minimum flight heights or who does not demonstrate control of his machine is immediately disqualified. In addition, wearing a safety parachute is mandatory.

When aerobatic pilots take passengers with them, they must have a minimum of recent flying experience, explain the flight in detail to the passengers and ensure that they are comfortable in the aircraft. The pilots usually practice itinerant aerobatics and also make sure that their passengers know how to behave so that the flight remains a wonderful memory. It is all about introducing an extraordinary activitý not about proving anything to anyone.

# FACT #3: AEROBATICS IS A SPORT GOVERNED BY STRICT RULES

Before being allowed to practice aerobatics, a pilot must be instructed and must pass a practical examination.

The practice of aerobatics is subject to many rules that guarantee the safetý of the practitioners and their environment. First of all, it is forbidden to practice aerobatics in a controlled airspacé or at night. Unless specially authorized, it is forbidden to fly at a height lower than 500 m from the highest object on the ground.

It is also prohibited to practice aerobatics over cities or dense residential areas, as well as over large gatherings of people.

#### Sources and additional information:

- Swiss Transportation Safety Investigation Board (STSB): https://www.sust.admin.ch/en/stsb-homepage
- Federal Office of Civil Aviation (FOCA): https://www.bazl.admin.ch/bazl/en/home.html
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Y-Axis Crosswind X-Axis Floor of the box



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