



Safety report for 2016

Aviation remains very safe



The objective of all safety efforts is to ensure that no accidents happen in commercial aviation and to reduce accidents and incidents in non-commercial aviation to a minimum. In this context, it is vital for FOCA, the supervisory body, to focus its resources on areas where the risks (likelihood of occurrence X degree of damage) are greatest.

The European Aviation Safety Programme and Switzerland's State Safety Programme emphasize the importance of covering all elements of the [Safety Management Systems](#) to ensure effectiveness and efficiency. While the accidents and incidents described in the report necessarily lie in the past, the remit of the Office includes a forward-looking analysis aimed at producing information and knowledge.

This makes it possible to identify options in terms of safety barriers and safety nets to prevent accidents with an ALARP (as low as reasonably practicable) approach. Accident and incident data typically make up only a part of the overall picture; nonetheless, they are the point of departure for all supervisory work aimed at targeted, risk-performance-based supervision.

Sound conclusions drawn from incidents, along with exchanges with other government bodies and with industry, help us to achieve these objectives. One of FOCA's core competencies resides in the consolidation and in-depth analysis of safety-related issues across the different domains (flight operations, infrastructure, and technology) so as to direct supervisory and other measures at safety hot spots, in the interests of ordinary Swiss citizens and passengers, both domestic and international.

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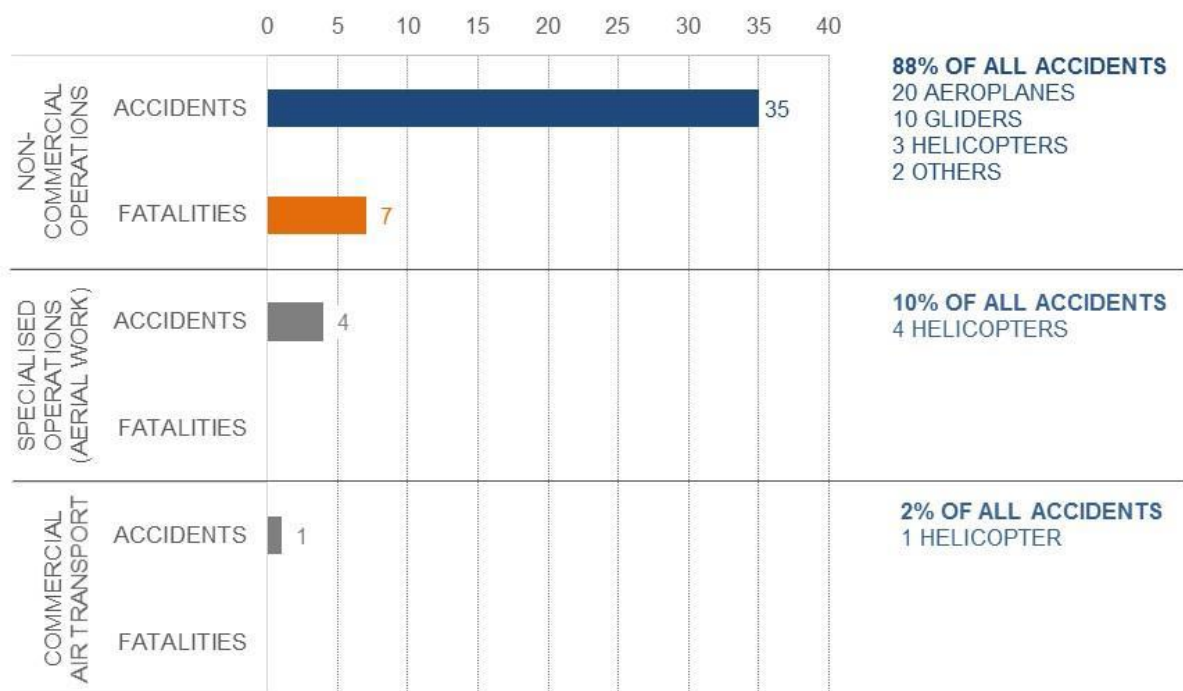
Global accident statistics down further

Commercial aviation safety remains very safe.

According to the [statistics of the International Air Transport Association, IATA](#), the all-accident rate went from 1.79 accidents per million flights in 2015 to 1.61 last year. As far as Europe is concerned, 2016 was the safest year in the history of European commercial aviation. For commercial flights above 5.7 tonnes take-off weight, only 8 accidents were registered in Europe.

The most deadly accident in civil aviation worldwide in 2016 was the one that took place on 28 November, when an Avro RJ85 originating in Bolivia ran out of fuel and crashed near Medellin, killing all 71 persons on board. The crash of an Egyptian Airbus 320 over the Mediterranean Sea in May, with 66 fatalities, has yet to be elucidated. That crash was preceded by a fire of hitherto undetermined origin in the forward part of the aircraft.

2016: 40 accidents taking place in Switzerland or involving Swiss aircraft



Swiss civil aviation was no exception, as the accident statistics for 2016 show. Not a single accident took place involving a commercial fixed-wing aircraft. The number of accidents registered in Switzerland (including those involving non-Swiss aircraft) or involving Swiss aircraft in other countries dropped from 60 in 2015 to 40 last year. The number of fatalities went down to 7 (from 14 in 2015), 4 of those involving glider accidents.

The accident rate for all aircraft other than helicopters dropped from 70 to 39 per million flights. On the other hand, for helicopters the accident rate increased from 3 per 100 000 movements in 2015 to 5 in 2016. The year remained free of fatalities, however.

With the exception of three helicopters, the aircraft were invariably small aircraft with a maximum take-off mass under 2 250 kg. The causes of accidents, where known, fall mainly in the following categories.

Loss of control due to loss of engine power and unfavourable weather were at the origin of some of the accidents. Another factor was uncontrolled runway excursions during take-off or landing. There were also two in-flight collisions and two ground collisions, each involving two aircraft.

Airspace infringements remain high



The complexity of Swiss airspace and the density of air movement at certain points contribute to numerous airspace infringements and increase the danger of near-misses. Airspace infringements, which had increased considerably from 2014 to 2015, decreased slightly in 2016, particularly for Swiss aircraft. Nonetheless, the figure remains high, with a total of 353 reported infringements. The majority of the cases was reported in Class C and D airspace (with 106 and 219 infringements respectively). Since the introduction of Regulation (EU) No. 376/2014, pilots have also begun reporting infringements (something that was restricted to Skyguide in the past). Among the measures taken by FOCA in response is a series of five short educational films produced in cooperation with other stakeholders, with a view to heightening awareness of the dangers.

More reports of incident involving drones

Drone sales, primarily for recreational use, have increased dramatically in recent years. It is estimated that the number of drones sold in Switzerland has exceeded 100 000. However, precise statistics about the actual use of drones in Switzerland are not available. The number

of reported drone incidents, most of them involving drone sightings by aircraft crew, rose sharply last year. This should, however, be put in the context of the new reporting requirements created by the aforementioned Regulation (EU) No. 376/2014. In 2016 a total of 48 RPAS Occurrence Reports (OP) were filed. Of those, 28 were filed by pilots or aerodromes in Switzerland, and 5 were filed by Swiss crews outside the country. A further 6 reports involved drone tests, while the remainder were not connected to manned aviation. No collision with a drone was reported in 2016.