

PRELIMINARY REPORT

ACCIDENT

**aircraft Jodel D.140E registration marks F-PMGV
and aircraft AS350 B3 registration marks I-EDIC,
Rutor glacier (AO),
24th January 2019**

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ANSV safety investigations are conducted in accordance with Annex 13 to the Convention on International Civil Aviation and EU Regulation No 996/2010. The sole objective of the safety investigation of an accident or incident under these Regulations is the prevention of future accidents and incidents. It is not the purpose of such an investigation to apportion blame or liability. Accordingly, it is inappropriate that ANSV reports should be used to assign fault or blame or determine liability, since neither the investigation nor the reporting process has been undertaken for that purpose.

This Preliminary Report is published to provide details of the initial facts. It contains facts which have been determined up to the time of issue and contains neither conclusions nor safety recommendations. It is published to inform the aviation industry and the public of the general circumstances of the accident and should be regarded as tentative and subject to alteration or correction if additional evidence becomes available. The investigation is continuing and a final report will be published in due course.

Aircraft Type and Registration	Helicopter AS350 B3 I-EDIC. Airplane Jodel D.140E F-PMGV.
Date & Time (UTC)¹	25th January 2019, around 13.30’.
Location	Close to Rutor Glacier (AO), 45°39’27.11”N 6°58’45.99”E.
Description of Occurrence	Mid-air collision.
Type of Flight	Training for Mountain Rating (Jodel); CAT ² (AS3650 B3).
Persons on Board	Jodel: 3 pilots. AS350 B3: 1 pilot, 5 passengers (skiers).
Injuries	POB ³ killed: 5 (helicopter), 2 (airplane). POB seriously injured: 1 passenger (helicopter), 1 pilot (aircraft).
Nature of Damage	Both aircraft destroyed.
Pilot in Command	AS350 B3: 53 years, male, Italian. Total flight experience: 7080 F/H ⁴ . Jodel: the positions on board of the recurrent training pilot (male, Belgian), pilot in training (male, French) and the instructor (male, French) at the time of the accident are unknown.
Aircraft Information	Aerospatiale AS350 B3 I-EDIC: year built 2008, S/N ⁵ 4458, MTOM ⁶ 2250 kg, engine Turbomeca Arriel 2B1.

¹ UTC: Universal Time Coordinated. Local time, at the time of accident, was UTC+1 hour.

² CAT: Commercial Air Transport.

³ POB: Person on Board.

⁴ FH: Flight Hours.

⁵ S/N: Serial Number.

⁶ MTOM: Maximum Take Off Mass.

Total flight time: around 2900 F/H.

Jodel D.140E F-PMGV: year built 2004, S/N 463, MTOM 1200 kg, engine Lycoming O-360-A3A. Total flight time: 7392 F/H.

Weather Conditions

CAVOK⁷.

Narrative

The I-EDIC helicopter and the F-PMGV airplane experienced a mid-air collision in an area close to the Rutor glacier, at an altitude of about 2700 m, around 13.30' UTC (photo 1).

Following the collision, both aircraft sustained damages that did not allow them to continue the flight and consequently crashed to the ground.

The pilot and 4 out of the 5 passengers on board of the helicopter and 2 out of the 3 pilots on board of the airplane died.

The French instructor pilot on board the Jodel and a German skier on board of the helicopter survived the crash and were hospitalized in the intensive care unit of the Aosta Regional Hospital.

The helicopter was operated by GM Helicopters, located in Entrèves (Courmayeur) and was carrying out heliski flights; the airplane, taken off at around 13.00' UTC from Megève airport (F), was flying a training mission, with two pilots and an instructor on board.

Findings

Ground distribution and evidence on wreckages and parts of both aircraft seem to indicate that:

- the mid-air collision between the two aircraft occurred with the airplane higher than the helicopter;
- the first contact occurred between the airplane lower right side and the helicopter main rotor;
- after the first contact between the two aircraft, the airplane broke up in flight, separating in at least 4 sections: the engine, the wings, the canopy and the tail; all these elements were found on the ground separated from each other (photos 2, 4, 5 and 6);
- after the first contact, the helicopter suffered serious damages to the main rotor blades, which likely prevented the helicopter from maintaining control in flight, with subsequent crash to the ground (photo 9);
- the collision between aircraft occurred with both of them having a ground track substantially headed south, consistent with the hypothesis they were flying toward the glacier landing areas (photo 1).

On the Rutor glacier, several ski tracks were found, most likely left by aircraft take-offs and landings (photos 7 and 8).

⁷ CAVOK: Ceiling and Visibility OK.

Activities on going

- Acquisition from the provider of the “Bolero” flight tracking system, installed on the I-EDIC helicopter, of data related to the recorded accident flight.
- Acquisition from the Italian ATS⁸ provider (ENAV SpA) of information regarding any radar tracks, flight plans and air/ground communications with the ATC⁹.

Further Investigation

The following activities will be carried out in coordination with the Italian Judicial Authority, according to art. 12 EU Regulation 996/2010:

- recovery of any data contained in the VEMD¹⁰ installed on the helicopter; data recovery from the DECU¹¹ only in case data from VEMD are not recoverable or present; in both cases recoveries and analysis would take place through BEA¹² assistance, being the manufacturers of both equipment French;
- data retrieval from electronic devices (smartphones, tablets, cameras, drones, etc.) owned by pilots and passengers, recovered at the accident site and secured by the Judicial Authority;
- removal from the wreckage of VHF radios installed on board of both aircraft, and analysis supported by manufacturers aimed to ascertain the last radio frequency selected;
- forensic report following autopsies carried out on helicopter and aircraft pilots.

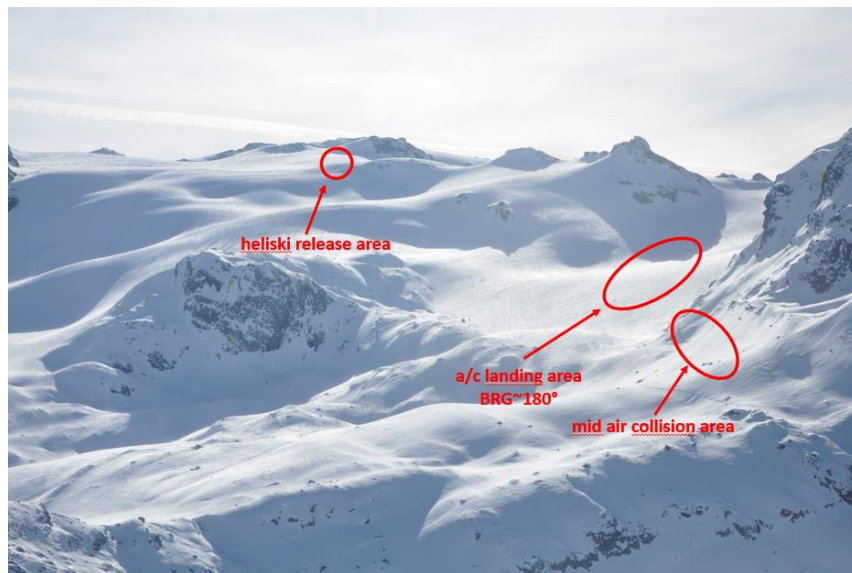


Photo 1: mid-air collision area, glacier landing area, heliski release area.

⁸ ATS: Air Traffic Services.

⁹ ATC: Air Traffic Control.

¹⁰ VEMD: Vehicle and Engine Multifunction Display.

¹¹ DECU: Digital Engine Control Unit.

¹² BEA: Bureau d'Enquêtes et d'Analyses pour la Sécurité de l'Aviation civile.



Photo 2: area of dispersed wreckages and parts.



Photo 3: helicopter main wreckage.



Photo 4: aircraft wing.



Photo 5: aircraft canopy.



Photo 6: aircraft tail.



Photo 7: glacier aircraft landing area.



Photo 8: aircraft ski take-off and landing markings.



Photo 9: helicopter main rotor blades damages.



Photo 10: aircraft wreckage reconstruction.