

ACCIDENT

involving the motorised glider registered F-CGZM

Event:	Collision with high ground.
Probable cause:	Late decision to abandon a phase of flight in an air mass which made it impossible to take advantage of updrafts.

Consequences and damage:	Pilot killed, aircraft destroyed.
Type of aircraft:	Rolladen Schneider LS 8 A glider.
Date and time:	Tuesday 12 March 2002 at 16 h 32.
Owner:	Club.
Place:	Puy-Saint-Eusèbe (05), Imbertons massif, at « Clos Giraud », altitude: 1,156 metres.
Type of flight:	Circuit.
Persons on board:	Pilot.
Licenses and experience:	Pilot, aged 62, VV issued by Germany in 1985, 2,244 flying hours of which 34 on type.
Meteorological conditions:	Estimated at site: see attached file.

Circumstances

The GPS found on board made it possible to reconstitute the track followed by the glider and to trace its changes in speed and altitude.

The pilot took off from Château-Arnoux Saint-Auban (04) aerodrome at 13 h 28. His altitude was 3,250 metres when he reached the Blanc Glacier (Ecrins massif) at 15 h 40. He then climbed to 4,300 metres, the maximum altitude of his flight, about ten minutes later. Returning towards St Auban, while the glider was flying in an air mass that made it lose altitude constantly, the pilot decided to make a 360° turn to the left in order to find updrafts. At the end of the manoeuvre, not having succeeded in doing so, he began a turn to the right. Losing speed and height, the glider crashed into high ground.

Readout of the GPS data showed that at 16 h 30 min 52 sec, at an altitude of 1,082 m indicated by the GPS, the pilot could have taken a direct track towards the Crots ULM field, located at an altitude of 780 metres, 2,600 km away, by coming out of the 360° turn he had started.

A pilot instructor from Saint-Auban who was flying in the sector explained that he had heard several radio communications in German which indicated that the pilot of F-CGZM was in difficulty and that he intended to fly towards the ULM field at Crots.

The pilot had regularly flown gliders in the region for five years. This flight was the second performed by the pilot in the course of the year. He had flown with an instructor the day before.

He had obtained an update on meteorological conditions before take-off.

Meteorological conditions estimated at the accident site:

wind 240°/270°, 8 m/s gusts 12 m/s,
visibility 50 km,
cloud (ground reference) 3/8 Ac at 3,000 m, 4/8 Ci 7,000 m,
temperature 12 °C.

In the Durance valley, the low level wind was channeled over the dam between the Morgon and Mount Guillaume and thus took a west south-west direction, was « gusty » and turbulent. In these conditions, the south-facing slopes of « Clos Giraud les Imbertons » were unfavourable to updrafts. The surface humidity was particularly low, mainly due to a Föhn effect.

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General situation: At altitude: South-West airstream between the Italian wedge and the deep minimum off of Spain.

On the ground: Disturbance stretching from eastern Spain to western France at 07 UTC, progressively moving over the southern Alps during the afternoon.

QNH: 1020 hPa.

FL 75: 2,340 m (standard 2,286 m)

FL 115: 3,560 m (standard 3,505 m)

FL 195: 6,000 m (standard 5,944 m)

Sunset: 18 h 37 official time.

Winds forecast in the afternoon: Surface: South-South-East to South-South-West 10 at 15 kt, becoming weak variable at the end of the day.

1,500 m: South to South-South-East 5/10 at 25 kt from East to West, falling by about 5 kt.

3,000 m: South 20 kt except 30 kt over the Vaucluse. Weakening 5,110 kt turning to South-West.

5,000 m: South-West 30 kt increasing by about 5 kt.

Air mass: Nîmes radiosonde observation at 00 UTC:

Unstable from 1,300 to 1,800 m then stable above 1,800 m. Quite dry 1,300 at 4,000 m then becoming quite humid above 4,000 m.

Temperatures at Saint-Auban:

Observed yesterday: 20 degrees.

Forecast today: 18 degrees.

Iso 0 °C: at 2,600 m.

Iso -10 °C: at 4,000 m.

Cloud this afternoon: 5 to 7 Ci/Cs, becoming thicker from Ac/As in the second part of the afternoon.

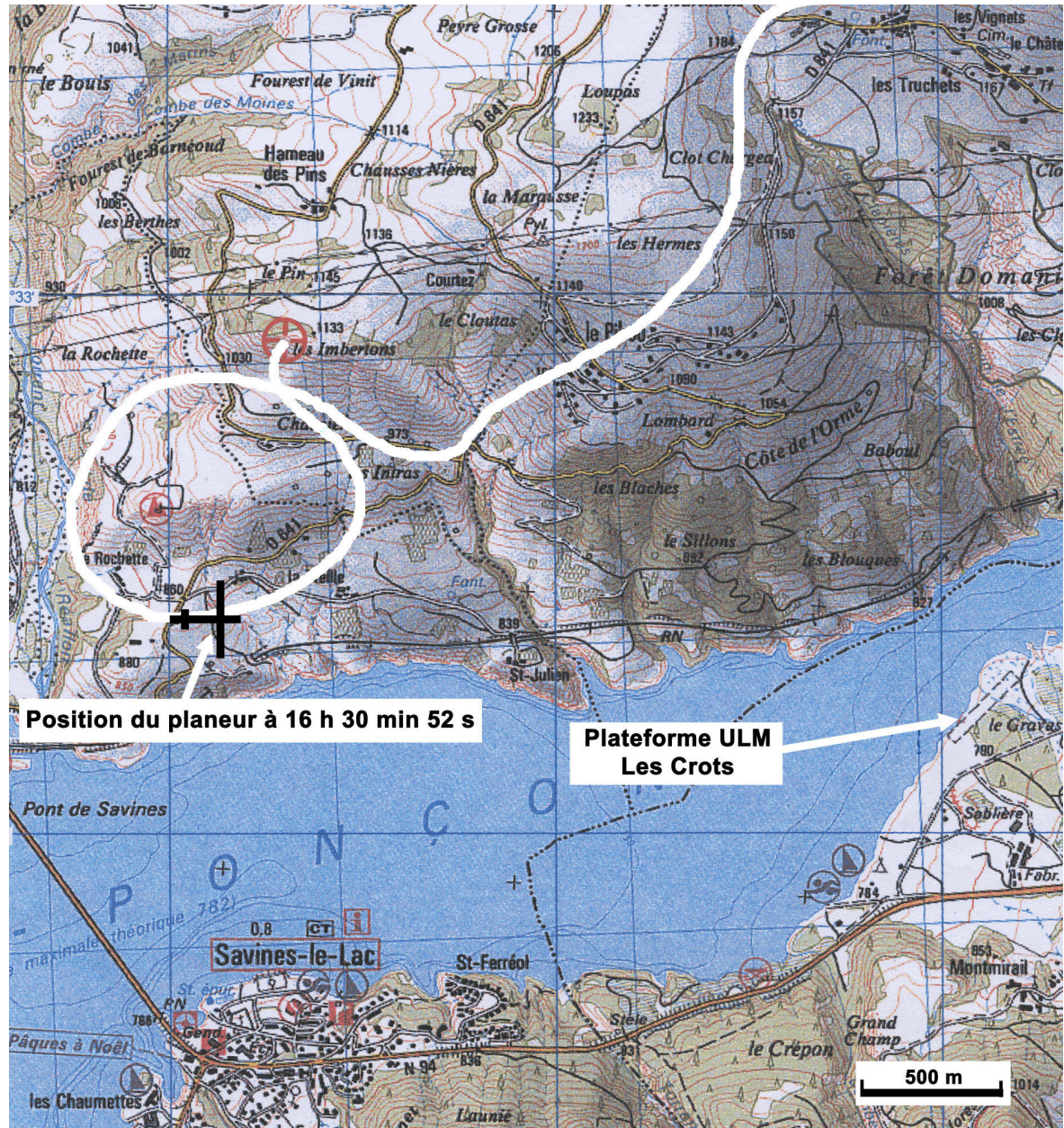
1/8 Cu over high ground at the beginning of the afternoon.

Thermal updrafts: Usable at the beginning of the afternoon.

Dynamic updrafts: West of Durance: South slopes and waves from South-South-West to South-West.

Special conditions: none.

F-CGZM on 12 March 2002



Glider track reconstituted from GPS data