

Collision with high ground in cruise in unfavourable meteorological conditions

Aircraft	Piper PA-39 "Twin Comanche" registered G-AYZE
Date and time	Friday 17 June 2011 at around 11 h 15 ⁽¹⁾
Operator	Private
Place	Peille (France)
Consequences and damage	Pilot and passenger killed, aeroplane destroyed

⁽¹⁾Except where otherwise stated, the times shown in this report are expressed in Universal Time Coordinated (UTC). Two hours should be added to obtain the legal time applicable in metropolitan France on the day of the accident.

CIRCUMSTANCES

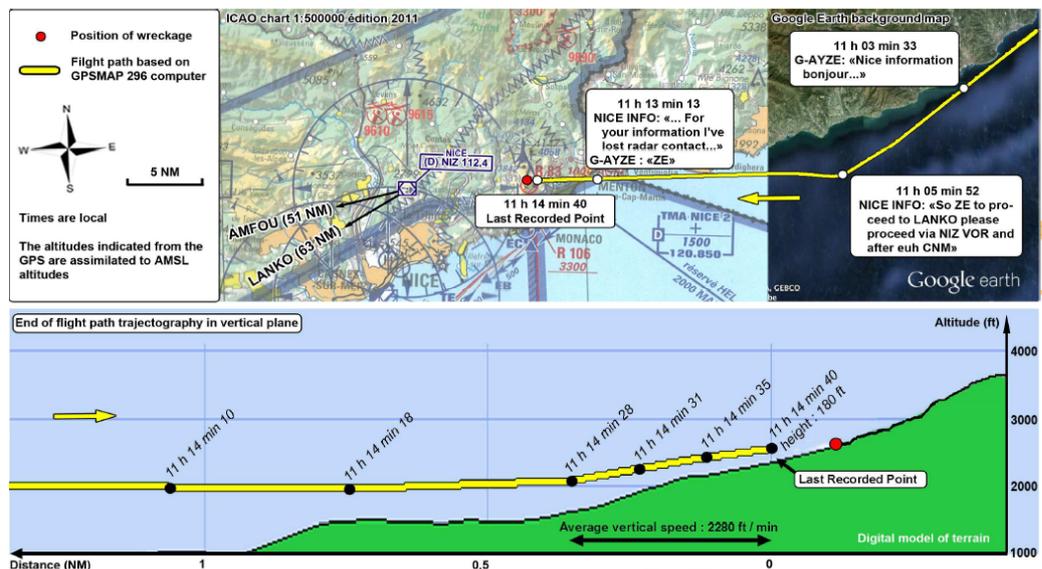
At around 10 h 10, the pilot took off from Lucques aerodrome (Italy) bound for Troyes aerodrome (France). He filed a mixed VFR/IFR flight plan in which he planned to switch to IFR at LANKO waypoint (see trajectory below). About 50 minutes later, he contacted the flight information service (FIS) controller at Nice (France). The pilot informed him that he was flying at 2,000 ft and asked him if it was possible to modify his flight plan in order to switch to IFR at the AMFOU waypoint instead of LANKO. The controller responded that it was not possible to comply with this request. The pilot then continued his flight under VFR to LANKO. The controller asked him to proceed towards this waypoint via the Nice (NIZ) VOR then via that of Cannes (CNM). Around 8 minutes later, the controller told the pilot that he had lost radar contact⁽²⁾. The pilot read back. The aeroplane struck the southern slopes of Mount Agel about 2 minutes later. Getting no response from the pilot, the controller launched the distress procedure. The emergency services found the wreckage 4 hours later⁽³⁾.

⁽²⁾The controller explained that VFR flight plots frequently disappear from their screens in this area because of the high ground nearby.

⁽³⁾The aeroplane was not equipped with an emergency locator beacon.

Flight Path

Readout of a GPS found on board made it possible to reconstitute the following flight path:



Meteorological Conditions

The analysis of the meteorological situation showed the likely presence of clouds on Mount Agel. This situation was confirmed by the emergency services, which had not been able to overfly the accident zone because of the clouds.

METAR and TAF for Nice Côte d'Azur airport:

- LFMN 170900Z 16006KT 9999 FEW016 BKN250 23/20 Q1016 NOSIG=
- LFMN 170930Z 14006KT 9999 FEW016 SCT120 BKN250 23/20 Q1016 NOSIG=

Examination of the site and the wreckage

The altitude of the highest point in the area, mentioned on the aeronautical charts with a 1:500 000 scale that were in force at the time, was 4,134 ft. The wreckage was located at an altitude of about 2,700 ft. Observations at the accident site showed that the aeroplane struck the ground in a climb and at high speed. Examination of the wreckage did not bring to light any malfunctions likely to have contributed to the accident.

Additional information

The pilot had had onboard "glass cockpit" equipment since 2007. Two GPS had ground proximity warning system functions. Readout of the one installed on the wheel showed that it should have indicated to the pilot the presence of an obstacle about 55 seconds before the first subsequent nose-up input. The default setting on this GPS had been modified: the alert altitude and the prediction time had been halved. It was not possible to determine if the alerts functioned correctly during this flight or whether the pilot perceived them. The climb performance achieved by the aeroplane during the last seconds of the flight was close to the maximum defined by the manufacturer. The pilot had a CPL (A) IR licence issued by the United Kingdom Civil Aviation Authority in November 2000. He had 1,805 flying hours experience, of which about 18 hours in the previous 3 months and 16 hours in the previous month, all on type.

In class D airspace, visual meteorological conditions are defined as follows:

- Vertical distance from cloud layer: 300 m;
- Horizontal distance from cloud layer: 1,500 m;
- Visibility must be at least of 5 km below FL100 or 8 km above FL100.

CONCLUSION

The accident was due to the pilot's decision to continue the flight under VFR in instrument meteorological conditions and at an altitude that was lower than the high ground in the region.

LESSON LEARNED

Controllers do not know meteorological conditions local to the aircraft. When flying under VFR, pilots must maintain visual flight conditions regardless of any clearance given by controllers.

APPENDIX

The United Kingdom, as State of Registry of the aeroplane, appointed an Accredited Representative who was associated with the investigation. In accordance with Article 17.3 of European Regulation (EU) 996/2010 of the European Parliament and Council of 20 October 2010, the draft Final Report was sent to this representative. Some of the comments made following this consultation were taken into account in the Final Report. However, the comment reproduced hereafter was not taken into account in the Final Report since the BEA does not agree with this analysis.

“The transmission by the Nice controller: ‘SO ZE TO PROCEED TO LANKO PLEASE PROCEED VIA NIZ VOR AND AFTER EUH CNM’ was not in standard RTF phraseology. The pilot may have interpreted it as an instruction or clearance. He may also have interpreted the entry of the aircraft into controlled airspace along this route as the beginning of flight in airways and therefore under IFR. The transmission did not include a level or altitude instruction, there was no reminder to maintain VMC or continue VFR, and no reference to the high ground on the track towards NIZ.

The pilot did not request the route to the north of the Nice CTR, but flew the aircraft along this route because of the transmission from Nice Information. Therefore, if the transmission to fly via NIZ had not been issued the aircraft would not have been flying towards high ground near Mont Agel. Consequently, the transmission to proceed via NIZ VOR should be considered a causal factor in the accident.”