



Accident to the Cessna - 206 (SOLOY) registered F-HSTL

on 28 September 2019
at Albi (Tarn)

⁽¹⁾ Unless otherwise stated, all times given in this report are in local time.

Time	Around 00:55 ⁽¹⁾
Operator	SAS Albi parachutisme
Type of flight	Parachute drop
Persons on board	Pilot
Consequences and damage	Pilot injured, aircraft destroyed
This is a courtesy translation by the BEA of the Final Report on the Safety Investigation published in May 2020. As accurate as the translation may be, the original text in French is the work of reference.	

Collision with ground after a parachute drop, at night, fire

1 - HISTORY OF THE FLIGHT

Note: the following information is mainly based on statements, radio communication recordings and radar data.

During a private party, the pilot and one of the operator's associates (parachutist) decided to make a night flight from and to Albi - Le Séquestre aerodrome (Tarn) during which the parachutist was to make a jump at FL100.

At 22:56, the pilot telephoned the Blagnac control tower supervisor, in charge of the Toulouse FIS, to explain his intentions. The control tower supervisor asked whether a NOTAM had been filed. He did not raise any objections, but requested that the FIS be contacted before the parachute drop.

The pilot took off at 00:30 from runway 27 at Albi aerodrome without night lighting. He climbed to an altitude of 6,400 ft before descending to 4,300 ft.

At 00:39, the pilot contacted the FIS controller and advised him of his intention to make a single parachute drop at FL55. The controller approved the drop. The pilot again announced twice that he was ready for the drop. The controller reiterated his approval both times. The pilot reported that the drop was made at 00:48:03 (at an altitude of 4,500 ft), then he left the frequency and continued his flight to Albi aerodrome.

The last position of the aircraft in flight based on the radar data was recorded at 00:50:43, to the east of the aerodrome. The wreckage was located on a hill about 300 m from the last radar blip. The pilot, who was slightly injured, managed to extricate himself from the wreckage before it caught fire.

At 01:25, the alert phases were activated after receiving an emergency locator transmitter signal in the vicinity of Albi aerodrome.

2 - ADDITIONAL INFORMATION

2.1 Pilot and parachutist information

The 50-year-old pilot holds an aeroplane commercial pilot licence and an instructor rating, a single- and multi-engine IR rating, a night rating and a CESSNA SET (land) class rating.

On the day of the accident, he had logged 2,752 flight hours, including 188 hours 15 minutes on the CESSNA 206 SOLOY.

He was an employee of the company, Albi parachutisme.

Toxicology tests conducted when the pilot was admitted to the A&E revealed that he had consumed alcohol. Witnesses indicated that this consumption took place during the party before the flight. A study of the radio frequency recordings shows that the pilot's communications were long-winded and sometimes even unclear.

The 38-year-old passenger holds a professional skydiving licence and a tandem rating. He had logged 4,570 jumps, including 591 in 2019.

2.2 Site and wreckage information

The aircraft struck the vegetation on a hillside approximately 2,200 m south-east of the threshold of runway 27, along a course heading towards the threshold of that runway. The accident site is hilly and covered with dense vegetation about two to three metres high. The examination of the vegetation found that the aircraft had a shallow pitch attitude when it collided with the trees.

The visual examination of the wreckage did not find any faults that could explain the accident.

2.3 Aerodrome information

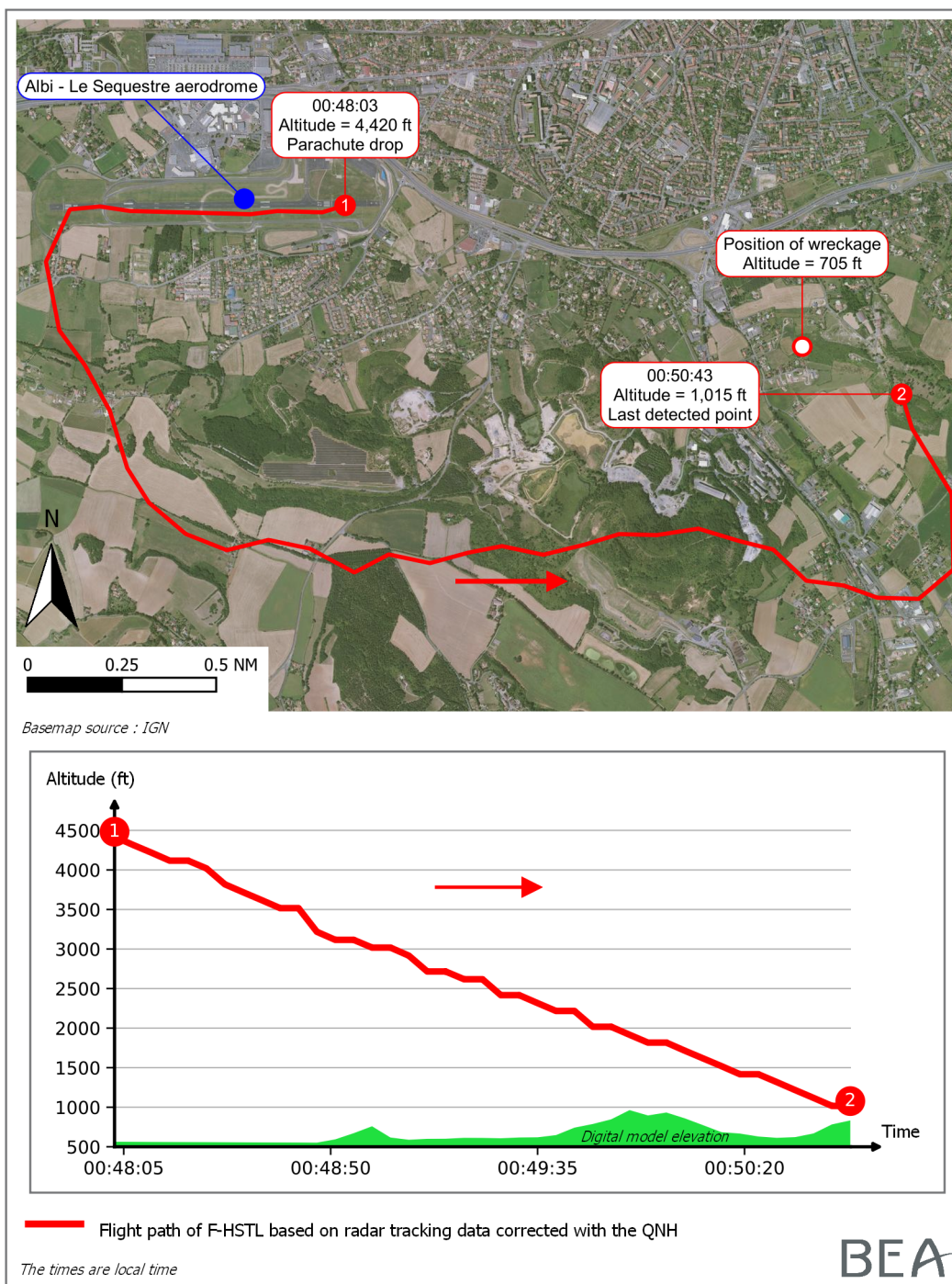
Albi - Le Séquestre aerodrome has a paved runway 09-27 measuring 1,560 m long and 30 m wide. It is approved for night flights under VFR, but the night lighting can only be activated by the AFIS agent. At the time the pilot took off, the AFIS service was not in operation.

The altitude of the threshold of runway 27 (preferred QFU) is 564 ft. The runway 27 traffic pattern is to the south.

Parachuting activity is specified on the VAC chart (Zone N357) from ground level to FL135, between sunrise and sunset plus 30 minutes. This activity is known to the Toulouse FIS or the AFIS, when the agent is present.

Night flights departing from or arriving at this aerodrome and parachute drops were therefore not permitted under the regulations.

2.4 Trajectory



The examination of the flight path found that the average rate of vertical descent was constant during the last minute of the flight and was approximately 1,100 ft/min. The glide path did not show any dip that would be consistent with a loss of engine power. The glide path was constant up to the radar detection limit near the accident site. At that point, its height was approximately 200 ft.

2.5 Meteorological information

Estimated conditions at Albi aerodrome at 00:30:

- ☐ calm wind;
- ☐ visibility 5,000 m;
- ☐ cloud cover: overcast at 5,000 ft;
- ☐ temperatures: 15 °C, dew point 12 °C;
- ☐ QNH 1,020.

A reduction in visibility was reported between 00:00 and 01:00. Outside this time frame, visibility was greater than 10 km.

The illuminance was that of an evening before a new moon, made darker by the cloud cover.

The meteorological conditions were compatible with a night flight under VFR, but did not allow the aircraft to reach the planned flight level (parachute drop at FL100). It is likely that the pilot aborted the planned climb because of the cloud layer.

2.6 Parachute company information

The special activities manual of the company, Albi parachutisme does not provide for night-time parachute drops. At no time did the CEO of the company authorise the use of the company's aircraft for this flight.

2.7 Review of the maintenance records

The examination of the maintenance records did not reveal any faults that could have called into question the airworthiness of the aircraft. At the date of the accident, the aircraft had logged 10,200 flight hours and 10,212 flight cycles.

The aircraft had undergone the following scheduled maintenance inspections:

- ☐ 100-hour inspection (airframe and engine) on 14 August 2019 at 10,133 flight hours and 10,155 flight cycles;
- ☐ 50-hour inspection on 12 September 2019 at 10,181 flight hours and 10,202 flight cycles.

It had logged 19 hours with this pilot since the last inspection, including 2 hours and 35 minutes the day before the accident, with no reported faults. The spectral analysis of the radio communications found that the frequency assigned to the engine was constant during the last exchanges between the pilot and the controller and did not indicate any fluctuation in engine rpm.

3 - CONCLUSIONS

The conclusions are solely based on the information which came to the knowledge of the BEA during the investigation. They are not intended to apportion blame or liability.

Scenario

The pilot and his passenger improvised a parachute drop flight at night under VFR from Albi even though the drop zone was not active and this type of night flight is not authorised by the company that owns the aircraft.

The pilot contacted the air navigation services to inform them of his intention to make a drop at FL100. The control tower supervisor at Blagnac, in charge of the Toulouse FIS, replied that he had no objection providing that he maintained radio contact with the flight information service. The radio contact that the pilot had with the air navigation services before and during the flight encouraged him in his decision to go ahead with his plans. He did not check whether the meteorological conditions would allow him to complete the planned flight. He took off from runway 27 without airport lighting. He began the climb to FL100 and then stopped at an altitude of about 6,500 feet, probably due to cloud cover. He descended and then announced the parachute drop, which took place at an altitude of 4,500 ft. He continued the descent at a vertical speed of approximately 1,100 ft/min and then proceeded towards the final approach to runway 27. In the absence of sufficient outside visual references, allowing him to know his precise lateral position and therefore his obstacle clearance margin, he collided with the vegetation with a slightly nose-down attitude on a path converging with the final approach to runway 27.

Contributing factors

The following factors contributed to the accident:

- ☐ Alcohol consumption and collective emulation, which may have impaired judgement and led to this flight going ahead.
- ☐ Improvising a night flight from an aerodrome where the lighting was not on.
- ☐ Lack of outside visual references at night and in hilly surroundings.
- ☐ The interpretation of the communication with the control tower supervisor in Toulouse, which encouraged the pilot to go ahead with his plans.