

⁽¹⁾The gyroplane call sign was F-JULP.

⁽²⁾Except where otherwise indicated, the times in this report are local.

Accident to the Autogyro MTO Sport 8.4 Turbo identified 34AKC⁽¹⁾

on 3 August 2018
at Lansargues (Hérault)

Time	Around 11:10 ⁽²⁾
Operator	Private
Type of flight	Cross-country
Persons on board	Pilot
Consequences and damage	Pilot fatally injured, gyroplane destroyed
This is a courtesy translation by the BEA of the Final Report on the Safety Investigation published in April 2020. As accurate as the translation may be, the original text in French is the work of reference.	

Loss of control in flight, collision with ground, fire

1 - HISTORY OF THE FLIGHT

Note: The following information is principally based on the GPS data from a tablet found onboard the gyroplane and from a witness statement.

The pilot took off at around 11:00 (point ❶ of figure 1) from a private runway situated in the Saintes-Maries-de-la-Mer commune (Bouches-du-Rhône), bound for Montpellier-Candillargues airport (Hérault).

Around two minutes after the take-off, the gyroplane was at an altitude of 900 ft, it then rapidly descended to 200 ft ❷ before climbing again to 800 ft. For the next seven minutes, it flew at an altitude of between 700 ft and 970 ft towards its destination ❸.

After a flight time of ten minutes, at an altitude of 900 ft, the gyroplane started a shallow descent. The descent then became steeper ❹ and at 450 ft, on approaching a marshy area and a herd of animals, the gyroplane made a steep left climbing turn ❺.

The gyroplane collided with the ground and caught fire ❻.

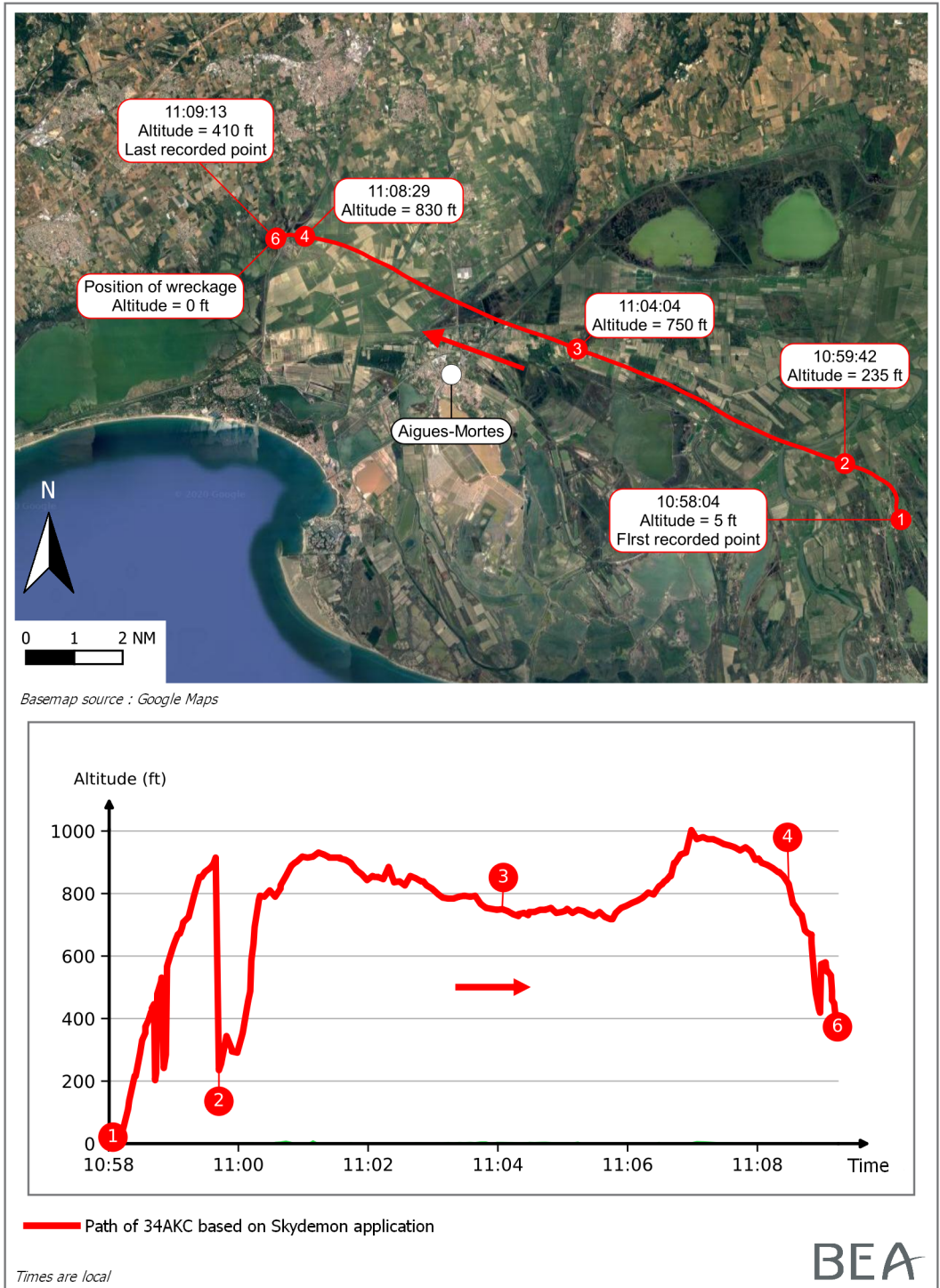


Figure 1: path based on GPS data

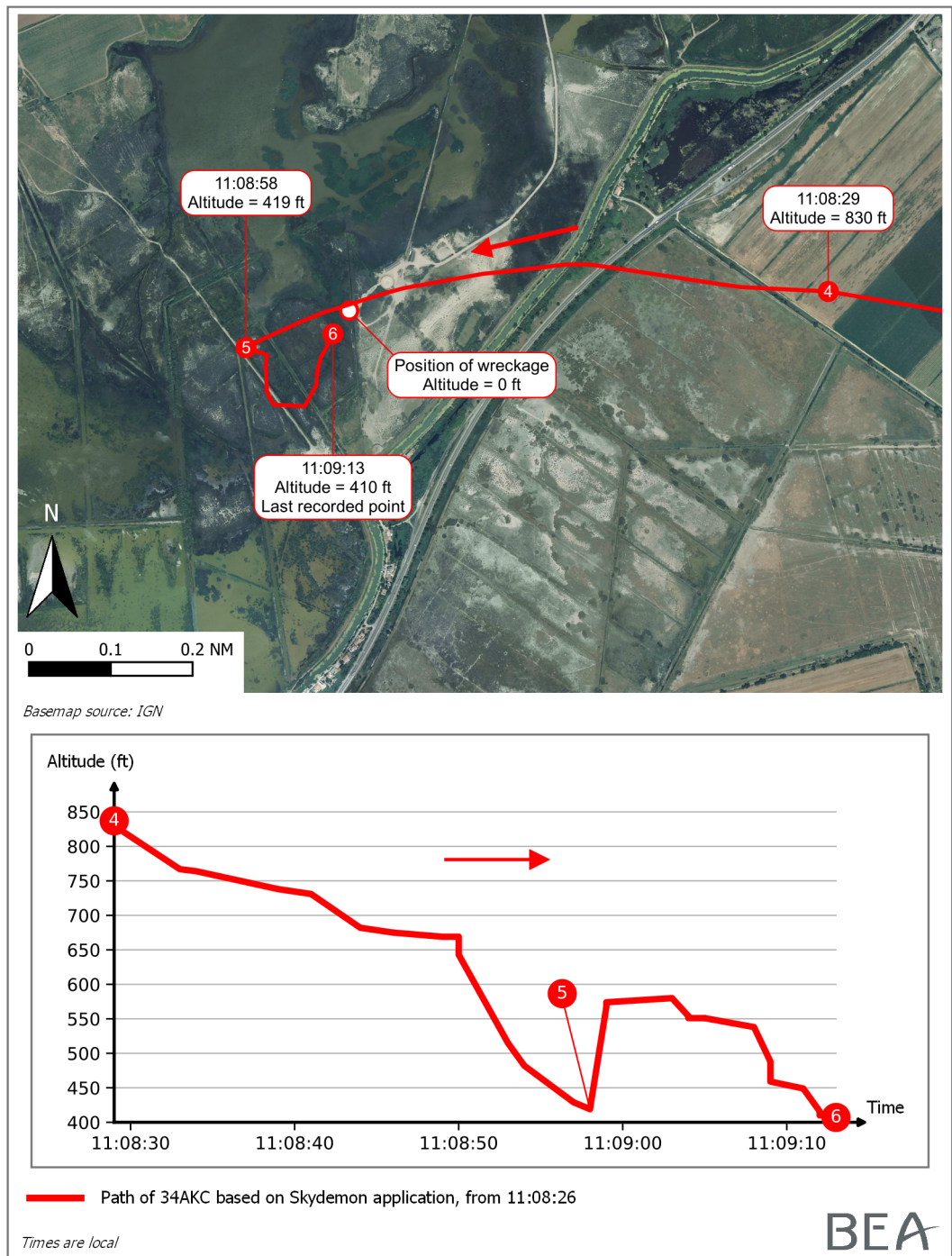


Figure 2: path of end of flight based on GPS data

2 - ADDITIONAL INFORMATION

2.1 Aircraft information

The gyroplane identified 34AKC was an Autogyro MTO Sport of a metal structure. It had two seats in a tandem configuration in an open cockpit. It was equipped with a 115 HP Rotax 914UL turbo engine.

The 34AKC was built in 2012. The maintenance documentation mentioned a 400 h inspection carried out in February 2018. Although it was not indicated in these documents, the mechanic indicated that the 500 h inspection had been carried out.

⁽³⁾ A FI, trained by the BEA, is a civil aviation agent who, from time to time, on the BEA's request and under its authority, carries out the initial investigation actions.

2.2 Site and wreckage information

The wreckage was situated in a marshy area, south-east of Lansargues commune (Hérault), at around 3.5 km from Montpellier-Candillargues airport (Hérault) and 25 km from where the gyroplane had taken off.

It was concentrated in one area and had been destroyed by a fire resulting from the collision with the ground (see figure 3).

In coordination with the BEA, a field investigator (FI⁽³⁾) examined the wreckage on the accident site.

The wreckage was then moved to a hangar close to the site before being transported to the BEA for a detailed examination. This was limited given the damage caused by the fire. The following observations were made:

- ❑ The limited examination of the engine did not find any mechanical assembly failures.
- ❑ The fuel system, including the carburetors, was partially destroyed; its continuity and its functionality could not be confirmed.
- ❑ The damage to the propeller blades indicated that the engine was operating at the time of the impact without it being possible to determine the power output.
- ❑ The detailed examination of the flight controls did not find a failure prior to those caused by the collision with the ground; the yaw control and the pitch/roll control linkage were continuous before the impact.
- ❑ The sudden failure of the right main landing gear and the nose gear along with the damage to the main rotor blades indicated that the aircraft had a high bank angle to the right on its initial contact with the ground.
- ❑ The failures identified on the aircraft were all caused by the impact.

The examinations carried out did not find a malfunction likely to have contributed to the accident. However, the damage caused by the fire did not permit an exhaustive examination of the gyroplane and its engine.



Source: BEA

Figure 3: photograph of site and wreckage

2.3 Meteorological Information

The Météo-France measuring station located near Marsillargues (Hérault), at around five kilometres from the accident site, reported at the time of the accident:

- wind from 040° at 6 kt;
- few to scattered clouds in lower stratum;
- outside air temperature 31.5 °C and dew point 17.4 °C.

2.4 Witness statement

A witness, in a field, indicated that the gyroplane had arrived from the east in descent. He specified that the gyroplane was then about ten metres from the ground travelling at a slow speed but was not able to estimate this speed. The gyroplane suddenly made a steep left turn before taking a nose-down attitude, colliding with the ground and bursting into flames. He also indicated that the engine was not making a steady noise and mentioned sputtering.

2.5 Pilot information

The pilot, aged 64, had a gyroplane pilot licence since February 2012 with passenger carrying privileges since June 2014. It was not possible to precisely establish the pilot's experience but, according to witnesses, he had logged approximately 550 flight hours on gyroplanes of which 500 hours on the 34AKC which belonged to him since 2013. The pilot had carried out all of his training in the region of the accident and knew the area well.

3 - CONCLUSION

During a cross-country flight, the pilot lost control of his gyroplane which collided with the ground. A fire broke out following the impact.

The investigation was not able to determine the reasons which led the pilot to manoeuvre at a low height and in particular, if he was confronted with a technical failure.