



Accident to the Skyranger
identified **988FC**
on 18 February 2023
at Païta (New Caledonia)

Time	Around 09:30 ¹
Operator	Private
Type of flight	Local
Persons on board	Pilot
Consequences and damage	Pilot fatally injured, fixed-wing microlight destroyed

This is a courtesy translation by the BEA of the Final Report on the Safety Investigation. As accurate as the translation may be, the original text in French is the work of reference.

**Engine failure, off-airfield forced landing, collision
with a bank, fire**

1 HISTORY OF THE FLIGHT

Note: the following information is principally based on statements, and the examination of the site and wreckage.

The pilot carried out a local flight from Nakutakoin microlight strip with one of his friends on board another microlight. They flew in class G airspace, without radio contact with a controller and without a transponder. After a flight time of around twenty minutes, the pilot informed his friend over the radio that he was encountering engine problems and was going to return to Nakutakoin. Shortly after, he reported that the engine had failed.

He tried to carry out a forced landing in a flat area, situated on a waste landfill site. This area had a downward slope and there was a tailwind in the direction of the flight path. The microlight flew over the site and its wheels touched down a few metres before a bank that was several metres high at the edge of the area. The microlight collided with the bank.

Witnesses present at the accident site tried to rescue the pilot but a fire broke out preventing them from intervening.

2 ADDITIONAL INFORMATION

2.1 Pilot information

The 52-year-old pilot held a microlight pilot certificate obtained in June 2022. He had totalled 113 flight hours on fixed-wing microlights including 20 hours on the Skyranger.

¹ The times in this report are given in local time. Eleven hours should be subtracted to obtain the Coordinated Universal Time (UTC) on the day of the event.

2.2 Site information

The accident occurred in a flat area of compact schist, measuring approximately 90 m in the direction of the microlight's flight path. It had a downward slope which varied between 5° and 10°. A pile of stones about 1.70 m high was situated before the flat part.

According to the witnesses on the site, the microlight's landing path was on a north-west heading.

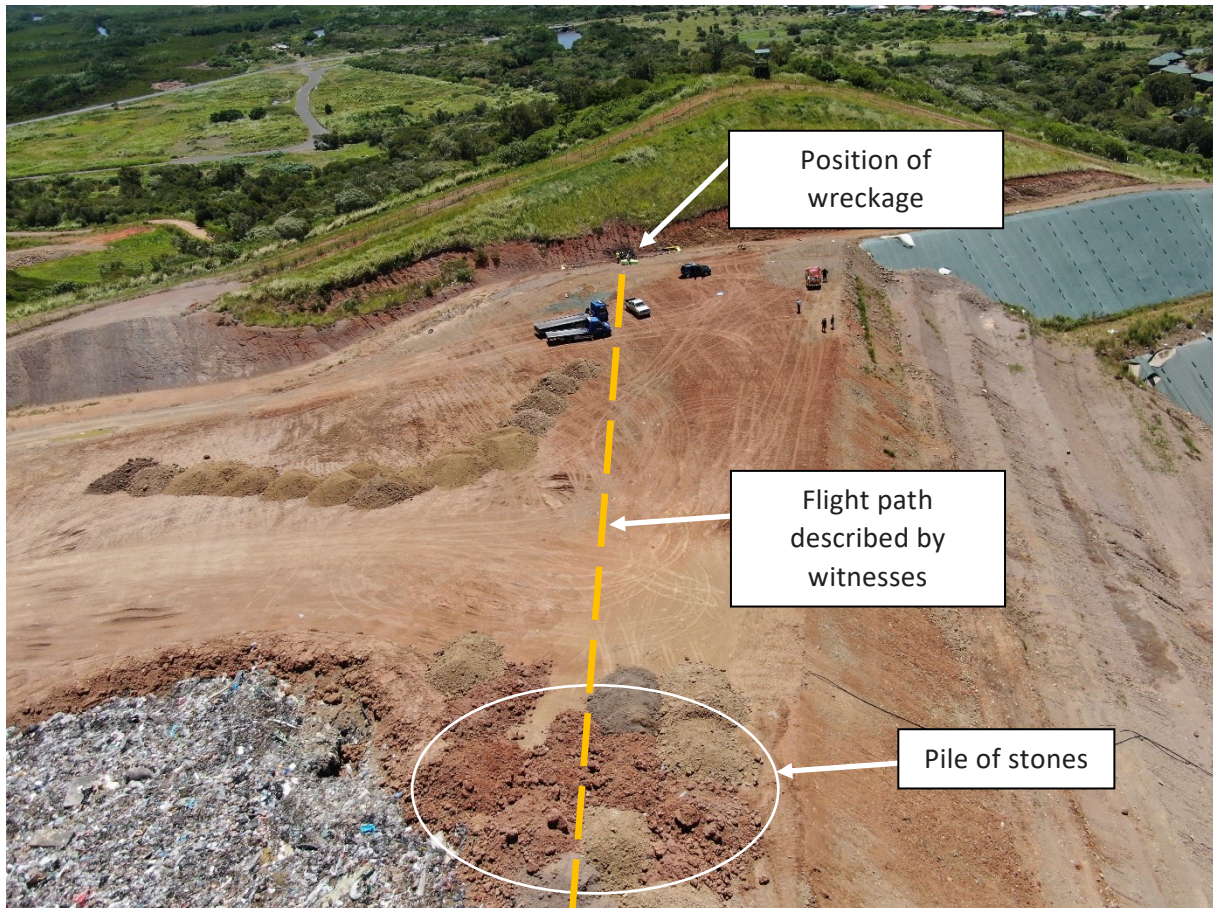


Figure 1: landing area and final flight path described by witnesses (source: GTA)

2.3 Microlight and wreckage information

The Skyranger 988FC was equipped with a ROTAX 912UL (P) engine and a PESZKE 1700/1950 carbon three-blade propeller. A declaration that the microlight was flightworthy had been filed by the pilot in July 2022 after it had been returned to flight configuration (see paragraph 2.5.3).

The examinations carried out on the wreckage did not identify any anomaly prior to the accident. The various electrical switches were all found in the OFF position but it was not possible to determine if this switch configuration preceded the engine failure, or if they were set to OFF by the pilot after the engine failure or at a later time, during the rescue operations.

The statements from the first responders indicated that there was fuel onboard which was confirmed by the strength of the fire which then broke out.

2.4 Meteorological information

At the time of the accident, the meteorological conditions were the following:

- east-south-east to south-east wind of an estimated 10 to 15 kt;
- CAVOK;
- QNH 1012 hPa;
- 28 °C.

2.5 Statements

2.5.1 Witnesses at the site of the accident

Several witnesses were present at the site of the accident. One of them explained that he had first seen the two microlights fly past in a north-westerly direction. He then saw them coming back on themselves. He saw one of the microlights suddenly modify its flight path towards the north west in a steep descent. After the microlight collided with the bank, he tried to assist the pilot by unfastening his seatbelt but was unable to do so. He then saw sparks before the microlight caught fire and the fire brigade intervened.

Several witnesses added that just before the accident, the microlight was flying at a very low height and that they did not hear any engine noise.

2.5.2 Second microlight pilot's statement

The pilot of the second microlight explained that before the flight, the pilot of 988FC had told him that he had 30 litres of fuel. They first carried out two runway circuits before heading north west at a height of 700 ft.

He specified that he was ahead of 988FC and could not see it. After the pilot of 988FC reported engine misfires and then a failure, the pilot of the second microlight made a U-turn and had sight of 988FC again as it arrived over the landfill site.

He added that a short time before the accident, the pilot of 988FC had spoken to him about a repair carried out on a fuel tank or fuel union which had been leaking. He knew that the pilot had planned to replace his fuel tanks.

2.5.3 Mechanic's statement

This witness is both a car/microlight mechanic and microlight instructor. He had worked on the 988FC several times. The microlight had not flown for around three years before being returned to flight configuration in September 2022. The mechanic had carried out several operations on the microlight but some had been put on hold by the pilot for cost reasons. In particular, the mechanic mentioned that the mechanical fuel pump needed to be replaced and that an electric pump had been added as a standby. He specified that the pilot had carried out work the morning of the accident flight to repair a crack in one of the fuel tanks; they were old tanks and needed to be replaced.

2.5.4 Instructor's statement

The pilot had flown in instruction with different instructors at Nakutakoin, including the instructor who had "approved" him for solo flight on the Skyranger. This instructor explained that before the

pilot purchased the microlight, it had experienced failures and an electric fuel pump had been added to the mechanical pump.

During an instruction flight that he carried out with the pilot, they experienced a fuel starvation failure and he had recommended to the pilot to continuously use the electric pump until the mechanical pump had been replaced. The day of the accident, the mechanical pump had not been replaced.

He specified that he learnt that just before the accident flight, the pilot had carried out repairs on the fuel tank hoses and/or the fuel tanks with resin fibre.

3 CONCLUSIONS

The conclusions are solely based on the information which came to the knowledge of the BEA during the investigation.

Scenario

During a cross-country flight accompanied by a second microlight, the pilot encountered engine problems. He decided to make a U-turn and return to Nakutakoin microlight strip. Shortly afterwards, the engine shut down requiring the pilot to carry out a forced landing. The pilot identified a flat area and tried to land there while avoiding a pile of stones situated just before it. He probably did not identify the downward slope or the tailwind component. The microlight wheels only touched down at the end of the flat area and the pilot was not able to avoid the bank situated at its extremity.

The reasons for the total reduction in power were not determined. However, it is not possible to exclude a malfunction of the mechanical fuel pump or the pilot's work on the fuel system having caused a fuel supply fault during the flight.

The BEA investigations are conducted with the sole objective of improving aviation safety and are not intended to apportion blame or liabilities.