



State Commission on Aircraft Accidents Investigation
ACCIDENT 2015/1735
RESOLUTION
of 8 August 2022

Type and model of aircraft:	Powered hang glider: ENDURO-XP Engine: ROTAX 582/54 PS
Registration marks:	D-MBCA
Date of occurrence:	19 August 2015
Place of occurrence:	EPWK (Kruszyn Aerodrome)

After reviewing the investigation material, pursuant to **Article 138 of The Act of 3rd July 2002 – Aviation Law (as amended)** and **§ 18 of the Regulation of Minister of Transport of 18th January 2007 on air accidents and incidents**, the State Commission on Aircraft Accidents Investigation determined that:

1. The course of the occurrence was as follows:

From 15 to 23 August 2015, the 13th FAI European Microlight Championship was held at EPWK aerodrome. During the competition a hang glider accident occurred.

The hang glider was operated by a German pilot. During climb, at an altitude of about 40 m, the engine stopped. The pilot made a right turn, during which a stall occurred at a height of about 10 m. The aircraft started autorotation to the right and collided with the ground (Fig. 1, 2).

Fig. 1 The hang glider after the collision [source: PKBWL]



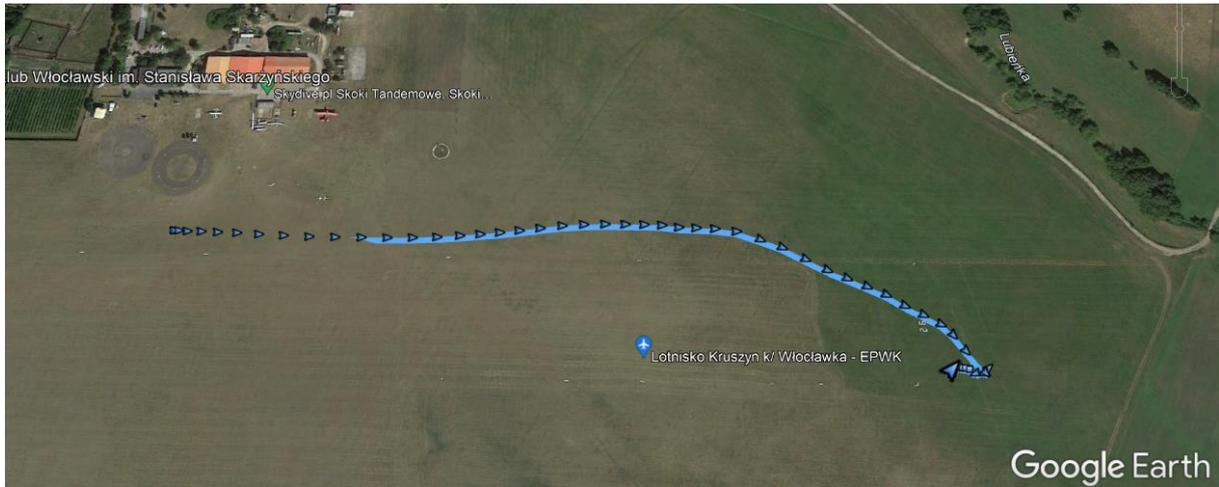


Fig. 2. Flight path GPS recording [source: pilot's GPS]

As a result of the accident, the pilot and navigator were seriously injured.

The course of the occurrence was reconstructed based on analysis of the GPS recording and recording from the camera installed on the right side of the wing of the powered hang glider.

After completing the preparations for the flight, the crew took their places in the powered hang glider cart. The pilot tried to start the engine twice with the starter. As the engine did not start, the pilot got out of the cart and started the engine manually (by turning the propeller), but after turning off the choke, the engine stopped. The pilot tried to start it again using the starter. Since the battery has been discharged, the attempt failed. The pilot got out of the cockpit and started the engine manually.

After starting the engine, the hang glider taxied to take-off area (fig. 3 - A, B). The pilot did not warm up the engine and did not perform test run prior to take-off.

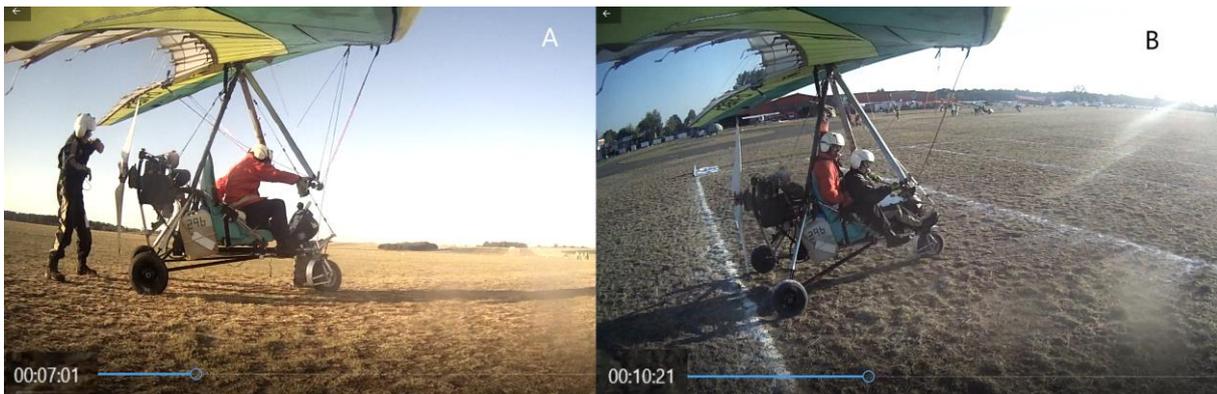


Fig. 3. A – The pilot starts up the hang-glider engine B – Hang-glider take-off run [source: camera recording]

15 seconds after initiation of the take-off run, when the glider was at a height of about 40 m (during climb), the engine began to lose power and stopped. The pilot slightly pulled the control bar, increasing speed, and after 15 seconds he started the right turn (Fig. 4 - A, B).

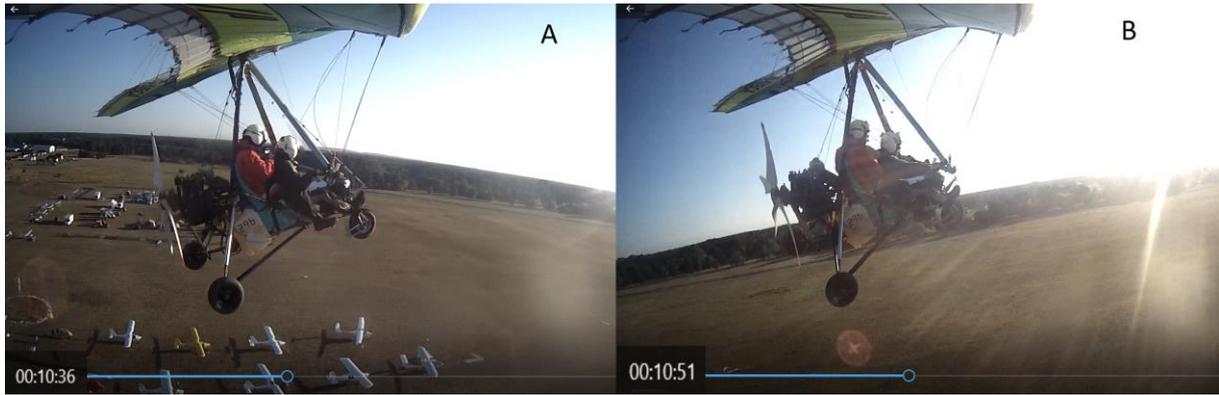


Fig. 4. A Hang glider during climb. B Initiation of right turn
[source: camera recording]

After making the turn (of about 25°), the hang glider flew straight for a while, and then the pilot started another turn to the right. In that turn he pushed the control bar, causing the wing to stall. At a height of about 10 m, the hang glider began autorotation to the right, and after a while it collided with the ground (Fig. 5 - A, B).



Fig. 5. A – Hang glider during the second right turn. B – A while before collision
[source: camera recording]

2. Cause of the occurrence:

Hang glider wing stall in a turn during landing after engine failure.

3. Contributing factors:

Take-off performed without warm-up of the engine, which could not be started until the fifth attempt.

4. The Commission accepted the following preventive measures :

Not issued.

5. In addition, the Commission has proposed the following safety recommendations:

Not issued.

Investigator in charge

SCAAI Chairman

Signatures on original only