



KÖZLEKEDÉSBIZTONSÁGI
SZERVEZET

TRANSPORTATION SAFETY
BUREAU

FINAL REPORT

EVENT No. 023/2006

Sóskút

February 12, 2006. 15:00 UTC

OZONE ELECTRON typ. paraglider

The sole objective of the technical investigation is to reveal the cause and circumstances of aviation accidents, incidents or irregularities and to initiate the necessary technical measures and make recommendations in order to prevent similar cases in the future. It is not the purpose of this activity to apportion blame or liability.

Synopsis

Event category	Accident
Manufacturer of the paraglider	
Type of the paraglider	OZONE ELECTRON
Serial No	B-52-0013
Owner	the injured person
Operator	the injured person
Date and time of event (UTC)	12 th February 2006. 15:00
Location	Sóskút, „Kálvária” Hill
Number of injured	1
Damage to vehicle	None
State of registry	n/a (registration is not required for this type of vehicle)
Registering authority	n/a

The event was investigated by the Transportation Safety Bureau of Hungary (hereinafter referred to as TSB).

Investigation data

The event was reported to TSB' 24/7 duty service by the paramedic team that transported the injured to the hospital on 12th February 2006.

The duty personnel reported the case to the Director General of TSB at 15:15 UTC. He also informed the Civil Aviation Authority at 15:20 UTC. The Director General appointed an Investigating Committee (hereinafter referred to as IC).

Head of IC: Ferenc JANOVICS, investigator, analyst

Member of IC: Pál BURDA, investigator-technician

Consultant: Was not required

Foreign expert: Was not required

Ad Hoc Expert: Szilárd SÁRKÖZI, meteorologist

1. Factual information

Preparation

On the day of the incident the injured pilot decided the weather was suitable for flying so he travelled with his friend to Sósút to fly from the „Kálvária” Hill. They knew the site and had completed several flights starting from there.

According to weather forecast, intensifying wind was expected later that day but they trusted their knowledge of the terrain and proceeded with their preparation for a training flight.

1.1. History of the flight

The pilots probed the wind the previous day by completing a dynamic vertical lift with minimal forward speed. They did not have any instruments to measure the wind speed and direction.

On the day of the accident the pilot started his flight and quickly was at an altitude. He felt that the strong wind would soon carry him away unless he flies forward. Therefore he pushed the accelerator and the glider began to move ahead. He soon felt that his canopy wires were becoming loose on the right side. He looked up and saw about 70% of his canopy being collapsed. The glider went into an intense turn and lost altitude (cca. 10-15 m/30-45 ft) in 2 seconds. The pilot hit the ground and suffered serious injuries (with healing time more than 8 days).

1.2. Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	-	-	-
Serious	1	-	-
Minor/None	-	-	-

1.3. Damage to aircraft

The vehicle was not damaged in the accident.

1.4. Other damage

The IC received no information on any other damage during the investigation.

1.5. Personnel information

Pilot

Age and gender	25-year-old male
License	
Medical certificate	Not required
Qualifications	Paraglider B
Certifications	Can execute solo flights
Number of hours flown/takeoffs (as in the flight log):	
Total	48 hours 00 minutes
Int he last 12 months	48 hours 00 minutes
In the last 30 days	none

1.6. Aircraft information

		valid until
Airworthiness	issued on 15th June, 1999.	31th December, 2005.
Category	DHV 1-2	31th December, 2005.
Rescue system	not known	not known
Insurance		31th December, 2005.

1.7. Meteorological information

The meteorologist expert' opinion is the following:

„The site was not suitable for any kind of paraglider flying due to the strong wind prevalent in the area on the day of the accident. Turbulence over the terrain and sudden lift changes caused by the wind gusts made flying even more dangerous.”

1.8. Aids to navigation

The navigation instruments had no effect on the course of events therefore their analysis was not required.

1.9. Communication

The communication instruments had no effect on the course of events therefore their analysis was not required.

1.10. Aerodrome information

The site of the incident is not registered with the Ministry of Environment and Water. It does not have an operator or any kind of equipment supporting flight operations. Therefore the site does not have a permit for operation.

1.11. Flight recorders

The vehicle did not have an on-board flight data recording device. It is not required for this type of aerial vehicle and mission.

1.12. Wreckage and impact information

There was no wreckage.

1.13. Medical and pathological information

The injured was transported to the traumatology of the Szent János Hospital in Budapest where he was diagnosed with vertebra fracture.

1.14. Fire

There was no fire.

1.15. Survival aspects

The investigated flight situation was not life-threatening for the paraglider pilot.

1.16. Tests and research

There was no need to conduct tests and research for reaching the conclusion.

1.17. Organizational and management information

The IC found that the site was selected by the pilot therefore the organizational and management aspects were not analyzed.

1.18. Additional information

The IC did not receive any additional information.

1.19. Useful or effective investigation techniques

The investigation did not require techniques differing from the traditional approach.

2. Analysis

Based on the documents presented to the IC during the investigation neither the pilot nor his glider had the necessary certifications required for such flights by the paragliding section of the Hungarian Free Flyers' Association (HFFA).

The pilot flew 38 hours (out of the total 48) since he had passed the exam required for solo flights but his flight log had no entry after 27th December 2005. Based on his log, by the date of the accident he had not flown for about 2 months. The pilot's statement about his flight the previous day contradicted the log records. It is likely that he had not always recorded his flights in the log.

The site is not registered at the Ministry of Environment and Water; there are no aids to flight operations. The pilot had to judge empirically how the wind conditions and the occasional gusts affected the flight conditions.

Both the injured and his companion were allowed to conduct solo flights but they had not enough experience to handle the constantly changing conditions.

The injured told the IC that he was not aware of the wind intensification (due to lack of wind speed and direction indicator at the launching site) therefore the turbulence took him by surprise.

When he noticed the canopy collapse he tried to make it reopen and eventually succeeded but it was too late, and his flight direction took him into the ground.

3. Conclusions

Would the pilot have had self-control stronger than his desire to fly, he could have avoided the accident.

A wind speed and direction meter at the temporary launch site could have helped to prevent the accident.

The pilot could not give firm answers to the IC's questions that were related to the wind conditions, in-flight wind speed evaluation, dangers of turbulence as well as to how his canopy behaves in unexpected situations.

The canopy's right wing collapsed due to turbulence. As a result, the glider made a sharp right turn while losing altitude. The canopy reopened but it was in tailwind that prevented regaining of lost altitude. The pilot was unable to avoid collision with the ground and sustained serious injuries.

4. Safety recommendations

Similar cases can be avoided by observing the applicable rules and regulations therefore there is no need for issuing safety recommendations.

Budapest, 4th September 2006.

Ferenc JANOVICS
Head of IC

Pál BURDA
Member of IC