



KÖZLEKEDÉSBIZTONSÁGI  
SZERVEZET

TRANSPORTATION SAFETY  
BUREAU

# **FINAL REPORT**

**297/2006**

**ACCIDENT**

**Eged-hegy SE take-off point**

**19th August 2006, 17 hours 10 minutes UTC**

**SKY ATIS type paraglider**

The sole objective of the technical investigation is to reveal the causes 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.

## This present investigation was carried out on the basis of

- Act XCVII of 1995 on aviation,
- Annex 13 of MTW Decree 20/1997. (X. 21.) on the declaration of the annexes of the Convention on International Civil Aviation signed in Chicago on 7<sup>th</sup> December 1944,
- Act CLXXXIV of 2005 on the technical investigation of aviation, rail and marine accidents and incidents (hereinafter referred to as Kbvt.),
- MET Decree 123/2005 (XII. 29.) on the regulations of the technical investigation of aviation accidents, incidents and irregularities,
- In absence of other related regulation of the Kbvt., the Transportation Safety Bureau of Hungary carried out the investigation in accordance with Act CXL of 2004 on the general rules of administrative authority procedure and service,
- The Kbvt. and the MET Decree 123/2005 (XII. 29.) jointly serve the compliance with the following EU acts:
  - a) Council Directive 94/56/EC of 21 November 1994 establishing the fundamental principles governing the investigation of civil aviation accidents and incidents,
  - b) Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation.
- The competence of the Transportation Safety Bureau of Hungary is based on the Kbvt. until 31<sup>st</sup> December 2006 and on Government Decree 278/2006 (XII. 23.) from 1<sup>st</sup> January 2007 respectively.

## Under the aforementioned regulations

- The Transportation Safety Bureau of Hungary shall investigate aviation accidents and serious incidents.
- The Transportation Safety Bureau of Hungary under its discretion can investigate other not serious aviation incidents and irregularities which - in its judgement - would have resulted in accident in other circumstances.
- The technical investigation is independent of any administrative, infringement or criminal procedures.
- In addition to the aforementioned laws, the ICAO DOC 6920 Manual of Aircraft Accident Investigation is applicable.

## Abbreviations

MTW (KHVM)	Ministry of Transportation, Telecommunication and Water Közlekedési, Hírközlési és Vízügyi Minisztérium)
MET (GKM)	Ministry of Economy and Transportation (Gazdasági és Közlekedési Minisztérium)
ICAO	International Civil Aviation Organisation
HFFA	Hungarian Free Flyers Association
IC	Investigating Committee
TSB	Transportation Safety Bureau of Hungary
CAA	Civil Aviation Authority

## Synopsis

<b>Event category</b>	Accident
<b>Manufacturer of the paraglider</b>	unknown
<b>type</b>	SKY ATIS type paraglider
<b>serial number</b>	2004-04-11-0275
<b>registration mark</b>	EE-124
<b>owner</b>	the injured
<b>operator</b>	Hungarian Free Flyers Association
<b>Date and time of the event (UTC)</b>	19 <sup>th</sup> August 2006. 17 hours 10 minutes
<b>Location</b>	Eged-hegy SE take-off point
<b>Number of seriously injured</b>	1
<b>Damage to aircraft</b>	none
<b>State of registry</b>	N/A (registration is not required)
<b>Competent investigating authority</b>	Transportation Safety Bureau ( <b>TSB</b> )

## Short summary

### Investigation data

The personnel of the Safety Department of Free Flyers Association reported the event to the TSB duty services at 09 hours 15 minutes LT on 20<sup>th</sup> August 2006.

The on duty personnel of TSB reported the event to the General-Director of TSB at 09 hours 25 minutes and also informed the on duty personnel of Civil Aviation Authority at 09 hours 30 minutes.

The following Investigating Committee (hereinafter referred to as IC) was appointed on 23<sup>rd</sup> August 2006 to investigate the accident:

Head of IC	Ferenc Janovics aviation accident investigator
Member of IC	Attila Farkas on-site investigator technician

Using the available documentation of the investigation as well as reports and interviews, the IC prepared a draft report and sent it to the relevant parties - defined under Act CLXXXIV of 2005 - for reflections. As the relevant parties did not make any reflections within the period defined by law (60 days), this present final report contains the same data as in the draft report.

## 1. Factual information

### Preparation

According to the pilot's statement, he arrived at the take-off point approximately at 13.00, and then he took off at 13 hours 30 minutes.

### 1.1. History of the flight

After his first flight, the pilot flew back to the chosen landing site around 15.00 hours. Due to the unfortunate landing, he suffered serious injuries with more than 8 days healing time.

### 1.2. Injuries to persons

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

### 1.3. Damage to aircraft

None.

### 1.4. Other damage

The IC did not receive any information about other damage.

### 1.5. Personnel information

#### Information on the paraglider pilot

Age and gender: Aged 40, male  
 Qualification; Student pilot II  
 Licence: Can perform practice flights without altitude limitations in non-turbulent weather under instructor's supervision and can perform intermediate practice flights in the presence of instructor.

Flight hours / number of take-offs according to the pilot's flight log:

Total	130 hours 47 minutes
In the last 12 months	89 hours 11 minutes
In the last 30 days	33 hours 23 minutes

### 1.6. Aircraft information

Paraglider		Valid
Date of manufacturing	2004	31 <sup>st</sup> December 2006.
Category	DHV 1-2	31 <sup>st</sup> December 2006.
Rescue system	Independent Joker	unknown
Insurance	HFFA	31 <sup>st</sup> December 2006.

### 1.7. Meteorological information

Based on the pilot's statement about the weather, the IC judged the meteorological conditions as suitable for flying.

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**1.8. Aids to navigation**

GPS- MAP 60-C, vario (Brauniger ICU Comfort)

**1.9. Communications**

The paraglider did not have a radio and it is not prescribed for carrying out this task.

**1.10. Aerodrome information**

Not applicable.

**1.11. Flight recorders**

The paraglider did not have an on-board flight recording device and it is not required for this type of aerial vehicle and task. The pilot's GPS was switched off.

**1.12. Wreckage and impact information**

There was no wreckage.

**1.13. Medical and pathological information**

Medical and pathological information was not available at the time of the preparation of the final report.

Examination by forensic medicine expert was not necessary.

**1.14. Fire**

There was no fire.

**1.15. Survival aspects**

The accident was not life-threatening for the paraglider pilot, therefore the survival aspects were not analysed.

**1.16. Tests and research**

It was not necessary to conduct tests and research for reaching the conclusion.

**1.17. Organisational and management information**

It was not necessary to analyse the organisational and management aspects.

**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

The pilot took off the second time at approximately 13 hours 30 minutes.

The weather changed, therefore the pilot had to land earlier than it had been planned. Realising this as well as considering that his car had been parked beside the take-off point, the pilot decided to fly back and land at the take-off point.

According to the pilot, no one was preparing for take-off at that time, therefore he thought that his landing would not disturb anyone on the ground.

In the middle of the take-off point approximately 2 metres from the ground, he stood up from the sitting harness. Due to this movement, he accidentally pulled the brakes further, more than the already applied 50 %. As a consequence, the wing stalled.

It is likely that he positioned higher than he should have done, and as a result, he had to apply the brake.

As the wing slid backwards, the pilot landed with high vertical speed.

The IC thinks that it is highly probable that the pilot turned round his axis when swinging under the stalled wing.

The pilot's injury was probably caused by landing with high vertical speed as well as turning round his axis.

## 3. Conclusions

The pilot's equipment was suitable for flying and he was in possession of the recommended navigation instruments.

According to his passed examination - Student Pilot II - he was qualified for "performing practice flights without altitude limitations in non-turbulent weather under instructor's supervision and performing intermediate practice flights in the presence of instructor"

The atmospheric conditions (wind direction, wind speed) were ideal at the time and place of the take-off. The previously flown 1 hour and 30 minutes also proves this fact. The direct cause of the accident was the unfortunate landing as a result of the high vertical speed of the descent.

## 4. Safety recommendations

Had the pilot kept to the relevant rules, the accident would have been avoidable. Therefore it is not necessary to make safety recommendations.

Budapest, " " March 2007.

Ferenc Janovics  
Head of IC

Attila Farkas  
Member of IC