



KÖZLEKEDÉSBIZTONSÁGI
SZERVEZET

TRANSPORTATION SAFETY
BUREAU

FINAL REPORT

EVENT No. 096/2006

Kaposújlak Airfield

7th April 2006. 14:00 UTC

ZENIT 290 typ. parachute

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
Type of the parachute	ZENIT 290
Serial No	Z-97001
Owner	Debreceni Légisport Egyesület of Hungarian Aeronautical Association (HAA)
Operator	Debreceni Légisport Egyesület of Hungarian Aeronautical Association (HAA)
Date and time of event (UTC)	7 th April 2006. 14:00
Location	Kaposújlak Airfield
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 instructor on site at 14:10 UTC on 7th April 2006.

The duty personnel reported the case to the Director General at 14:15 UTC. He also informed the Civil Aviation Authority at 14:20 UTC. The Director General appointed an Investigating Committee (referred to as IC hereinafter).

Head of IC	Ferenc JANOVICS, investigator, analyst
Member of IC:	Attila FARKAS, investigator-technician
Consultant:	Was not required
Foreign expert:	Was not required
Ad Hoc Expert:	Szilárd SÁRKÖZY, meteorologist

1. Factual information

Preparation

Based on the instructor's account, on the day of the accident the student took a written test followed by a number of drills using ground equipment. Afterwards, the instructor and the student went to the airfield. There the instructor described the turning points and the relevant altitudes of the planned flight path and they practiced the landing together. After the practice, the instructor had the student rigged up and checked his gear, put on his own parachute and they boarded the airplane to complete the student's first jump.

1.1. History of the flight

When the airplane reached the planned altitude, the instructor released a wind drift indicator and by its descent he determined the optimal location of the jump. When the airplane was in the right position, the student exited properly on the instructor's signal. Soon the instructor followed. He told the IC that the student acted reassured, his movements were composed. The canopy deployed normally. Seconds later the instructor saw the student's canopy in perpetual right rotation. He called the student on the helmet-mounted radio but did not get a reply. He then manoeuvred closer and saw that the student was gripping fitfully onto the right control string. He tried to convince the student to release the string but with no success. The spin lasted until the student 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 incident.

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	Valid until 30 th January 2011.
Qualifications	Student
Certifications	None
Number of hours flown/takeoffs (as in the flight log)	
Total	None
Int he last 12 months	None
In the last 30 days	None

1.6. Aircraft information

	Date of manufacture	Airworthiness valid until
Main parachute	15 th June 1996.	31 st December, 2006.
Reserve parachute	19 th March 1998.	19 th March 2008.
Harness	March 1998	March 2008

1.7. Meteorological information

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

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 student had a helmet-mounted radio but he did not react to the instructor's calls.

1.10. Aerodrome information

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

1.11. Flight recorders

The vehicle did not have an on-board flight 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 Kaposi Mór Hospital in the city of Kaposvár where he was diagnosed with pubic bone fracture.

1.14. Fire

There was no fire.

1.15. Survival aspects

The investigated flight situation was not life-threatening for the parachute jumper.

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 organization that conducted parachuting training courses at the airfield had the necessary certifications, equipment and qualified personnel for conducting such training.

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

- 2.1. One of the test questions was referring to manoeuvres with a deployed canopy. The original copy of the test sheet clearly indicated that the student omitted the turning points' altitudes from the flight path and that the instructor put them in as correction remarks with a different colour.
- 2.2. The student had an altitude meter with him. He could not, however, reply to the IC's questions concerning the altitude of deployment, first and subsequent turning points, and that of the final turning point before the landing.
- 2.3. The student had a helmet-mounted radio that was switched on by the instructor before the jump. When the student got into spinning the instructor tried to contact him on the radio then manoeuvred his canopy close to the student's and gave him voice commands.
- 2.4. The IC examined the parachute canopy and strings looking for defects that might have caused the uncontrollable right rotation but found none.
- 2.5. The student's questioning revealed that he did not remember any details of his jump. He was not able to determine his position at the time of parachute deployment, therefore he could not tell the IC how and where he intended to complete the landing.

3. Conclusions

It is obvious that the student panicked at the time of parachute deployment. He was paralyzed when he realized that he was hanging on thin strings 900 meters above the ground. He evaluated the situation as extremely dangerous and he could not make controlled actions anymore.

4. Safety recommendations

BA2006-096_1: The IC recommends the parachute committee of HAA to consider a change in the training that would require a tandem jump before the first solo jump. This way the instructor could directly observe and evaluate the student's reactions and movements during the jump.

Budapest, 6th September 2006.

Ferenc JANOVICS
Head of IC

Attila FARKAS
Member of IC