



MINISTRY OF TRANSPORT, CONSTRUCTION AND REGIONAL DEVELOPMENT OF THE SLOVAK REPUBLIC

Accident and Incident Investigation Board
Nám. slobody 6, P.O. BOX 100, 810 05 Bratislava 15

Reg. No.:SKA2011007

FINAL REPORT

on investigation of air accident
of glider type **L-13 SE VIVAT**
registration No. **OM – 9109**

Date: 10.07.2011

Place: Airport Prešov / LZPW

A. INTRODUCTION

The investigation of air accident, serious incident, has been conducted pursuant to Art. 18 of the Act No 143/1998 on Civil Aviation (Civil Aviation Act) and on Amendment of Certain Acts and in accordance with the Regulation (EU) No. 996/2010 of the European Parliament and of the Council on investigation and prevention of civil aviation accidents and incidents, governing the investigation of civil aviation accidents and incidents.

The final report is issued in accordance with the Regulation L 13 that is the application of the provisions of ANNEX 13 Air Accident and Incident Investigation to the Convention on International Civil Aviation.

The exclusive aim of investigation is to establish causes of accident, serious incident, and to prevent their occurrence, but not to refer to any fault or liability of persons.

This final report, its individual parts or other documents related to the investigation of the air accident in question have an informative character and can only be used as recommendation for the implementation of measures to prevent occurrence of other air accidents and serious incidents with similar causes.

Operator / Owner:	SNA gen. M. R. Štefánika / Aeroklub Prešov
Type of operation:	general aviation
Type of glider:	L-13 SE VIVAT
Registration:	OM – 9109



Take-off site:	LZPW
Flight phase:	landing
Place of accident:	RWY 05 LZPW
Date and time of accident:	10.07.2011, 07:10 hrs

Note: All time data in this report are stated in the UTC time.

B. INFORMATIVE SUMMARY

On 10 July 2011 at 07:10 hrs the pilot with glider L-13 SE, registration number OM-9109, made a flight traffic circuit of the airport LZPW to verify the propeller turns. During the landing manoeuvre on the grass runway („RWY“) 05 of airport LZPW the undercarriage retracted and the powered glider was damaged.

The flight was conducted in accordance with the operator's licences.

The pilot was not injured in the accident.

The accident was reported in writing to the Air Accident and Incident Investigation Board and to the Flight Operations Directorate of SNA.

Person appointed for investigation of causes of the accident:

PaedDr. Ján Mikuš

The report is issued by:

Air Accident and Incident Investigation Board
of the Ministry of Transport, Construction and Regional Development
of the Slovak Republic

C. MAIN PART OF REPORT

1. FACTUAL INFORMATION
2. ANALYSES
3. CONCLUSIONS
4. SAFETY RECOMMENDATIONS

1. FACTUAL INFORMATION

1.1 History of the flight

After the take-off from RWY 05 the pilot made a circling flight in the standard manner. In the downwind position it dropped the gear and continued the landing manoeuvre. After the completion of the 4th circling turn he extended the dive flaps and adjusted the calculation by slipping. After the contact with the ground the gear retracted and the propeller touched the ground. In the final phase the pilot directed the aircraft off the runway 05.

Daytime: day

Flight rules: VFR

1.2 Injuries to persons

Injury	Crew	Passengers	Other persons
Fatal	-	-	-
Serious	-	-	-
Minor	-	-	-
None	1	-	

1.3 Damage to glider

The lower engine hood was damaged and became deformed and the propeller was destroyed during landing.

Damages to the glider allow the repair to be done using standard procedures and by replacement of damaged parts.



1.4 Other damages

No other damages were documented.

The Air Accident and Incident Investigation Board was not informed about circumstances with potential application of claims for compensation of damage towards a third party.

1.5 Personnel information

Pilot:

Citizen of Slovak Republic, aged of 62,

holder of the pilot licence CPL(A) No. SK 03980390, issued by the Civil Aviation Authority of SR on 29 October 1998, with marked validity until 14.09.2015.

Qualifications:

FI (A) with marked validity until 30.09.2013

SEP(L) with marked validity until 31.08.2012

TMG with marked validity until 31.08.2012

Flying experience:

Total flight hours: 1104 h

of which with TMG: 150 h

in 2011 flight hours with L-13 SE: 35 h

Theoretical examination from regulations and guidelines on 27.02.2011.

Practical examination from pilotage on 29.03.2011 with evaluation - passed.

1.6 Aircraft information

Airframe:

Type: L-13 SE VIVAT

Registration No: OM-9109

Serial No: 890318

Year of manufacture: 1989

Manufacturer: Aerotechnik CZ Kunovice, CR.

Certificate of airworthiness No. 3524, issued by the Civil Aviation Authority of SR on 03.07.2008.

Certificate of verification of airworthiness No. 382/3524/04/N98 with marked validity until 01.09.2012.

Take-off weight and c.g. position were within the permitted range at the time of accident.

1.7 Meteorological situation

CAVOK, variable wind, maximum speed 5 m/s, visual range above 10 km

The meteorological situation at the time of accident was suitable for conducting flights of this type.

1.8 Aids to navigation

Standard equipment of L-13 SE type for VFR flights.

1.9 Communications

The glider was equipped by radio communication system enabling two-way radio communication at every moment of flight with all air and aircraft stations. At the time of accident the radio station was tuned to a frequency of 122.15 (MTWR Prešov).

1.10 Aerodrome information

Not applicable.

1.11 Flight recorders and other recording systems

Not applicable.

1.12 Wreckage and impact information

The point of contact of the glider with RWY surface was 150 m away from the threshold of RWY 05.

1.13 Medical and pathological information

The pilot was alcohol-tested with a negative result.

1.14 Fire

No fire broke out.

1.15 Survival aspects

The search and rescue using the SAR means were not required.

1.16 Tests and research

No tests or expert examinations of the glider parts were required.

1.17 Organizational and management information

The flight operation was conducted in accordance with flight rules valid in the territory of the Slovak Republic.

The operator of the glider is an organization that holds the required licences.

1.18 Additional information

Not applicable.

1.19 Useful or effective investigation techniques

Standard investigation methods were used.

2. ANALYSIS

2.1 Activity of pilot

The pilot conducted a check flight to verify the pitch and maximum revolutions of propeller. After the 2nd circling turn above RWY 05 the pilot checked the pitch and propeller revolutions but did not detect any faults. In the downwind position he made the prescribed operations with landing gear extension, but did not check its locking and went on circling. After the completion of the 3rd circling turn the pilot registered wind from the rear and a climbing air current, which he eliminated by extending the dive flaps. After the completion of the 4th circling turn he eliminated the wind from the right side and from the rear by slipping the glider at idle thrust, but again without checking the locking of the landing gear. Having recovered the aircraft from the slip, the pilot landed at a higher speed and the glider sat down on unlocked landing gear. The landing gear retracted and the propeller was damaged in this landing. During the ground roll the pilot with the glider ran off RWY 05.

3. CONCLUSIONS / Cause of air accident

3.1 Findings

- the flight was conducted in accordance with planned activity of the aircraft operator,
- the pilot was authorized to conduct the flight and fulfilled all required professional and qualification requirements,
- the glider was fit for the respective flight; all prescribed works were done on the glider,
- at the place of accident and during inspection of the glider no faults or defects of the aircraft systems were detected that could have been the cause of the air accident. All damages to the glider were caused by landing with unlocked landing gear which retracted after the contact with RWY.
- the meteorological conditions were suitable for this type of flight,
- the airport was operable and suitable for this type of glider.

3.1 Causes of air accident:

- landing of powered glider on unlocked landing gear
- nonobservance of procedures and inconsistent implementation of prescribed operations by the pilot who extended the landing gear without checking its locking.

4. SAFETY RECOMMENDATIONS

On the basis of investigation of causes of the air accident of:

Glider type: **L-13 SE**

Registration No. **OM-9109**

Date of accident: **10.07.2011**

We recommend the implementation of the following measures by the operator of the Slovak National Aero Club of gen. M. R. Stefanik :

To implement an analysis of the air accident with flying personnel.

Bratislava, 30.08.2011