



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

Aviation and Maritime Investigation Authority
Nám. slobody 6, P.O.BOX 100, 810 05 Bratislava 15

Reg. No.: SKA2012002

FINAL REPORT

on investigation of air accident
of aircraft **WT-9 Dynamic Club T**
registration No. **OM-PDA**

Date: 17.04.2012

Place: Prievidza Airport / LZPE

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.

Type of aircraft:	WT-9 Dynamic Club T
Registration number:	OM – PDA
Operator:	SNA gen. M. R. Štefánika
Owner:	AERO CLUB Prievidza



Take-off site:	LZPE
Planned landing site:	LZPE

Flight phase: taxiing to the take-off site
Place of accident: 40 m SSE of THR RWY 04R
N 48°45'44,12'', E 018°34'59,29''
Date and time of accident: 17.04.2012, 12 h 20 min

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

B. INFORMATIVE SUMMARY

On 17.04.2012 at 12:20, when the aircraft taxied to the runway 04 („RWY04“) during the tow flights for the 3rd flight mission of the 5th year of the international gliding competition in Prievidza („FCC Gliding 2012“), the nose landing-gear wheel of the towed aircraft got stuck in a hole that was not visible and that was probably dug out by wild animals 40 m SSE of the threshold of RWY04 („THR RWY04“) of the airport LZPE.

The air accident was reported by the competition organizer to the Police of Prievidza and to the Aviation and Maritime Investigation Authority of the Ministry of Transport, Construction and Regional Development of SR.

Specialized commission appointed for investigation of the air accident:

Ing. Ján CHUDÝ – chairman of the Investigation Commission;
Lic. Jaroslava MIČEKOVÁ – member of the Investigation Commission.

Report issued by:

Aviation and Maritime Investigation Authority
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

In the days of 15.04.-27.04.2012, FCC Gliding 2012 took place at the airport LZPE. The competition was organized in accordance with the FAI Sporting Code – General part and Part 3, Amendment „A“ to the Sporting Code Part 3, and the Local Rules of FCC Gliding 2012.

On 17.04.2014 tow flights of competing aircraft for the 3rd mission were made from RWY 04 of the airport LZPE. The towed aircraft WT-9 Dynamic Club T, registration No. OM-PDA, was taxiing with increased idling engine speed to the take-off site on RWY04. The nose landing gear wheel got stuck in a 15 cm deep hole that was invisible and probably dug out by wild animals 40 m SSE of THR RWY04.

In view of the large depth of the hole, the nose wheel broke off the attachment in the fork. The aircraft tilted over to its nose, the rotating propeller come into contact with the ground and the engine was stopped by force. When the engine stopped the pilot turned off the magnetos and the main switch, close the fuel tap and left the aircraft unharmed on his own.

Flight rules: VFR

1.2 Injuries to persons

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

1.3 Damage to aircraft

After the collision of the rotating propeller with the ground all the three propeller blades broke off in one third of the length of the propeller blade shank, the engine was stopped by force, and the fork of attachment of the front landing-gear leg wheel and the aerodynamic covers of the nose landing gear got broken.



1.4 Other damages

The Aviation and Maritime Investigation Authority was not informed about circumstances with potential application of other claims for compensation of damages towards a third party.

1.5 Personnel information

Pilot in command:

Citizen of the Slovak Republic, aged of 71 years

Holder of pilot licence PPL(A) No. SK 01010309, issued by the Civil Aviation Authority of SR, with marked validity until 13.04.2017.

Qualifications: SEP(L), with marked validity until 30.04.2014

Medical certificate of 2nd class with marked validity until 29.04.2012.

Flying experience:

Total number of flight hours: 1 806 h 11 min and 10 347 flights

On the day of air accident: 1 h 06 min and 10 flights

1.6 Aircraft information

a) Airframe:

Type: WT – 9 Dynamic Club T
Registration No.: OM – PDA
Serial No: DY – 077 / 2005
Year of manufacture: 2005
Manufacturer: AEROSPOOL, spol. s r.o. Prievidza

Total number of flight hours since manufacture: 1 736 h 51 min and 8 620 flights

Certificate of airworthiness No. 0877 issued by CAA SR on 17.10. 2007 with unlimited validity on the condition of verification of airworthiness by authorized legal person with periodicity not longer than 12 months.

The last verification was implemented on 15.9.2011 and validity of CoA was prolonged until 16.09.2012.

b) Engine:

Type: ROTAX 912 S2
Serial No: 492 3994
Year of manufacture: 2010
Manufacturer: BRP ROTAX GmbH, A - 4623 Gunskirchen, Austria

Date of incorporation into aircraft: 20.08.2010

Total number of operating hours: 307 h 51 min

c) Propeller:

Type: SR 2000D
Serial No: 3550
Manufacturer: WOOCOMP s.r.o. Odolená voda, Czech Republic

Date of incorporation into aircraft: 18.04.2011.

Total number of operating hours: 310 h 13 min.

d) Calculation of aircraft weight at the time of air accident

Empty weight of aircraft	308,9 kg
Weight of crew	85,0 kg
<u>Weight of fuel: cca 35 l x 0.72 kg/l</u>	<u>25,2 kg</u>
Total weight of aircraft at the time of accident	419,1 kg

Maximum permissible take-off and landing weight of aircraft according to the Flight Manual is 472.5 kg.

1.7 Meteorological situation

The meteorological situation at the airport LZPE at the time of air accident was suitable for this type of flight and had no influence on the air accident.

1.8 Aids to navigation

Not applicable.

1.9 Communications

The aircraft was equipped by radio communication system enabling two-way radio communication at every moment of flight with all air stations.

1.10 Aerodrome information

The airport LZPE is a public domestic aerodrome with irregular international traffic. The grass RWY 04/22 is used for aircraft operation and it was fit for the flight in question at the time of air accident.

1.11 Flight recorders and other recorders

Not applicable.

1.12 Wreckage and impact information

The place of accident is situated on the safety strip („SS“) of airport LZPE.

The final position of the aircraft after the air accident was documented, including preparation of photodocumentation.

The place of accident is delimited by coordinates: N 48°45'44,12", E 018°34'59,29"



1.13 Medical and pathological information

Not applicable.

1.14 Fire

No fire broke out.

1.15 Survival aspects

Search and rescue operations were not required.

1.16 Tests and research

Not applicable.

1.17 Organizational and management information

The flight operation was carried out in accordance with flight rules that are valid in the territory of the Slovak Republic.

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

When taxiing along the safety strip of airport LZPE with increased idling engine speed to the take-off site on RWY04, the pilot did not notice the obstacle in the form of a 15 cm deep hole, which was probably dug out by wild animals and invisible from the cockpit. The nose landing gear wheel got stuck in the hole and, due to its significant depth, the nose wheel broke off from the attachment in the front landing gear fork. Subsequently the aircraft tilted over to its nose, the rotating propeller touched the ground and the engine was stopped by force. The pilot left the aircraft unharmed.

3. CONCLUSIONS / CAUSE OF AIR ACCIDENT

3.1 Findings

- the pilot had valid qualifications for making the critical flight,
- the aircraft has a valid documentation and did not show any faults before the air accident,
- the aircraft fulfilled the conditions of airworthiness before the critical flight,
- the aircraft was slightly damaged in the air incident,
- the meteorological conditions had not influence on the air accident,
- nobody was injured in this air accident.

3.1 Cause of air accident

- the pilot taxied with the aircraft at higher speed and did not notice the obstacle on the safety strip. The front landing gear wheel got stuck in a hole and the aircraft became damaged.

4. SAFETY RECOMMENDATIONS

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

Aircraft: **WT-9 Dynamic Club T**

Registration No.: **OM-PDA**

Date of accident: **17.04.2012**

We recommend the aircraft operator to take the following measure:

- to analyze the air accident with the flight staff

We recommend the operator of airport LZPE to take the following measure:

- to check the non-reinforced areas of the airport safety strip for obstacles in the form of dug out holes before the start of the flight day.

Bratislava, 22.05.2012