

*The original of the Final Report was issued in the Slovak language.
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AVIATION AND MARITIME INVESTIGATION AUTHORITY
Námestie slobody 6, P.O.BOX 100
810 05 Bratislava

FINAL REPORT

on the safety investigation of a serious incident
of aircraft type **PS-28 Cruiser**
with registration mark **OM-ARX**

Reg. No: **SKS2017002**

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The investigation of occurrence 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 Aircraft Accident and Incident Investigation to the Convention on International Civil Aviation.

The exclusive aim of investigation is to establish causes of accident, 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 occurrence in question have an informative character and can only be used as recommendation for the implementation of measures to prevent occurrence of other accidents and incidents with similar causes.

A. INTRODUCTION

Operator/Owner:	AeroRelax s.r.o.
Type of operation:	sports and recreational flying / individual training navigation flight
Type of aircraft:	PS-28 Cruiser
Registration mark:	OM-ARX
Take-off site:	Boleráz airport / LZTR
Flight phase:	landing
Incident location:	LZTR
Incident date and time:	24 June 2017, 10:35

Note: All time data in this report is reported in UTC time.

B. INFORMATIVE SUMMARY

On 24 June 2017 at 10:35. the aircraft bounced several times after a three-point landing; this resulted in the breakage of the nose gear and the propeller.

Ing. Juraj GYENES has been appointed to investigate the causes of the serious incident.

The Report has been issued by:

The Aviation and Maritime Investigation Authority
of the Ministry of Transport and Construction of the Slovak Republic

C. MAIN PART OF THE REPORT

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

1. FACTUAL INFORMATION

1.1 History of the flight

On the above-mentioned date the student pilot performed two flights before the critical flight: the first one with an instructor and the second one was an individual navigation flight. The pilot did not experience any difficulties during the flights. At 08:55 the pilot took off from LZTR to perform the third (individual navigation) flight. The flight was flawless until the approach phase. After approaching at a higher speed, the pilot made a three-point landing. When the nose gear touched the ground the aircraft bounced several times; as a result, the nose landing gear leg broke off and the propeller was damaged. Nobody was injured during the occurrence.

Time period: Day
Flight rules: VFR

1.2 Injuries to persons

Injury	Crew	Passengers	Other persons
Fatal	-	-	-
Serious	-	-	-
Minor	-	-	-
No injuries	1	-	-

1.3 Damage to the aircraft

The front gear and the propeller were damaged during the occurrence, the exhaust pipe and the heating pipe were distorted, the engine mount was cracked, and the cabin floor and the fabric of the lower part of the fuselage were twisted.

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1.4 Other damage

No circumstances have been reported to the Aviation and Maritime Investigation Authority which might lead to any other claims for compensation of damage against a third party.

1.5 Personnel information

Student pilot:

Citizen of the Slovak Republic, aged 36, holder of a student pilot air crew license issued by the flight school.

Medical certificate class 2 with marked validity until 23 May 2021.
LAPL with marked validity until 23 May 2021.

Flight experience:

Total flight hours: 48 hrs. 43 min.

Total flight hours in this type of aircraft:	21 hrs. 57 min.
Number of flight hours over the last 90 days:	12 hrs. 46 min.
Number of flight hours over the last 30 days:	3 hrs. 18 min.

1.6 Aircraft information

Type: PS-28 Cruiser
Registration mark: OM-ARX
Serial number: P1102040
Manufacturer: Czech Sport Aircraft a.s. Kunovice, ČR

Aircraft Registration Certificate No. 1106/01, issued by the Transport Authority of the Slovak Republic on 22 June 2012.

Restricted Certificate of Airworthiness No. 1106/1, issued by the Transport Authority of the Slovak Republic on 22 June 2012.

Airworthiness Verification Certificate No. 1106/1-092/17 issued by an authorized organization, Slovak National Aeroclub of General M.R.Štefánik, on 6 June 2017 with marked validity until 9 June 2018.

Mandatory Insurance: Association of Underwriters - Lloyd's, No. OM 2017 902 18, valid until 2 May 2018.

1.7 Meteorological information

Clear skies, cloud cover 3-4/8, visibility more than 10 km.

1.8 Aids to navigation

N/A.

1.9 Communications

N/A.

1.10 Information about the aerodrome

LZTR – non-public aerodrome, runway for take-offs and landings/VPD 14/32, size 1200 x 60 m grass, ELEV 200 m.

1.11 Flight recorders and other recording devices

The aircraft was not equipped with any equipment for recording flight parameters.

1.12 Wreckage and impact information

After bouncing, the aircraft remained stationary on VPD 14.

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1.13 Medical and pathological information

Nobody was injured during the incident.

1.14 Fire

None.

1.15 Survival aspects

It was not necessary to perform any investigation and rescue by SAR equipment.

1.16 Tests and research

N/A.

1.17 Organizational and management information

The flight activities were performed in accordance with aviation regulations valid in the territory of the Slovak Republic.

1.18 Additional information

The pilot underwent a breath alcohol test with a negative result.

1.19 Useful or effective investigation techniques

Common investigation methods were applied.

2. ANALYSIS

Pilot activity

The pilot controlled the aircraft in such a manner that he brought it to the approach phase at a higher speed and, although the pilot was aware of it and tried to decrease the speed by fully extending the flaps, he underestimated the situation due to his lack of experience; he was not aware of the potential consequences and tried to push the aircraft to three points. After the nose gear touched the VPD surface, it bounced to the height of several metres. A number of other bounces followed which resulted in breakage of the nose gear. With the undercarriage broken, the nose of the aircraft touched the VPD surface, leading to the breakage of the spinning propeller. The aircraft then slid on the grass area.

3. CONCLUSIONS / Cause of the serious incident

3.1 Findings

Pilot

- According to the submitted documentation, the pilot had valid qualifications for performing flights with the particular aircraft category;
- The pilot had little flying experience;
- At the time of the occurrence the pilot was not under the influence of alcohol, drugs or common medicaments that could have reduced his attention during the flight.

Aircraft

The aircraft had valid documentation and did not demonstrate any malfunction before the occurrence.

3.2 Causes of the serious incident

Incorrect landing calculations, higher approach/landing speed and a failure to master the piloting technique in a bailed landing - bounce.

4. SAFETY RECOMMENDATIONS

The Final Report on safety investigation of the serious incident does not contain any recommendations.

In Bratislava, 05/02/2018