



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

Air Accident and Incident Investigation Board
Nám. slobody 6, P.O. BOX100, 810 05 Bratislava 15

Reg. No.: SKA2011002

FINAL REPORT

on investigation of air accident
of aircraft type **MPX – 741 - Zenair**
registration **OM-AXM**

Date: 22. 05. 2011

Place: Bidovce

A. INTRODUCTION

The investigation of air accident [AA], serious incident [SI], 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.

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 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 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.

Owner:	Aviatický klub / Aviation Club Švedlár
Operator:	SNA gen. M. R. Štefánika – Letecká škola Košice (Aviation School Košice)
Type of aircraft:	MXP -741
Registration:	OM-AXM



Place of take-off:	Bidovce
Place of landing:	Bidovce
Flight phase:	landing
Place of accident:	airport Bidovce, N: 48°44'46.0'', E: 021°26'50.3''
Date and time of accident:	22.05.2011, 14:10 hrs

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

B. INFORMATIVE SUMMARY

On 22 May 2011, the crew with aircraft with registration. OM-AXM was making training flights on the circuit with landing on runway 17. During the fifth flight the aircraft landed hard on the grass surface of the runway (RWY).

The crew was not injured.

The aircraft was substantial damaged.

The following person was appointed as investigator of the air accident:

Ing. Grell Ladislav

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

On 22 May 2011 the pilot with aircraft registration OM-AXM was making fitness flights from the Airport Bidovce. Before the flight he offered his friend to participate in these flights as a passenger and the latter agreed.

After the flight in the area they made several landings and take-offs and then the pilot decided for full landing.

He lined up for finals to runway 170 and made the final approach according to the prescribed procedures and regimes. In a flare-out altitude of 5-6 m the pilot stated uncomfortable dazzling which diverted his attention from monitoring the speed required for landing. Immediately afterwards the aircraft pancaked and the pilot's intervention was ineffectual. The aircraft hit the ground with the landing gear and was substantial damaged. The crew left the aircraft uninjured without help of other people.

The air accident was reported by phone to a representative of the operator who was not present at the Airport Bidovce, which caused its delayed reporting to the Air Accident and Incident Investigation Board.

Daytime: day

1.2 Injuries to persons

Injury	Crew	Passengers	Other persons
Fatal	-	-	-
Serious	-	-	-
Minor	-	-	-
None	2	-	-

1.3 Damage to aircraft

The aircraft was substantially damaged in the air accident.



1.4 Other damages

The Air Accident and Incident Investigation Board was not informed about circumstances with potential claims for compensation of other damages toward a third party.

1.5 Personnel information

Pilot in command:

Citizen of the the Slovak Republic, aged of 66, holder of aviation personnel licence PPL(A) No. SK 02030224, issued by the Civil Aviation Authority of SR on 20 July 1999.

Qualifications: SEP(L) with marked validity until 31.07.2012.

Medical certificate of 2nd class with validity until 04.05.2012.

Flying experience:

Total flying hours: 780 h 00 min

Passenger: citizen of the Slovak Republic, aged of 28, without injury.

1.6 Aircraft information

a) **Airframe:**

Type: MXP - 741
Registration: OM-AXM
Serial No: AG-03-95-50-026
Year of manufacture: 1995
Manufacturer: I.C.P. PIOVA MASSAIA, Italy.

Total flying hours from the year of manufacture: 327 h 55 min and 943 flights

Special certificate of airworthiness No: 33/2000, issued by CAA SR on 2 June 2003, with marked validity until 6 October 2011.

b) **Engine:**

Type: ROTAX 912 ULS
Serial No: 5 652 292
Year of manufacture: 2008
Manufacturer: BRP ROTAX GmbH, A - 4623 Gunskirchen, Austria
Date of incorporation into aircraft: 10.06.2009
Total operating hours of engine: 37 h 55 min

c) **Propeller:**

Type: SR 2000
Serial No: E 442
Manufacturer: WOOCOMP s.r.o. Odolená voda, Czech Republic
Date of incorporation into aircraft: 10.06.2009
Total operating hours of propeller: 120 h 55 min

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

Empty weight of aircraft	304.00 kg	
Weight of crew		170.00 kg
Weight of fuel	cca 40 l x 0.72 kg/l	28.80 kg

Total weight of aircraft at the time of accident: 502.80 kg

Maximum permitted takeoff and landing weight of aircraft according to the Flight Manual is 521.5 kg.

1.7 Meteorological situation

The meteorological situation at the Airport Bidovce at the time of accident was suitable for this type of flight.

1.8 Aids to navigation

Not applicable.

1.9 Communications

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

1.10 Aerodrome information

The airport was suitable for takeoff and landing of this type of aircraft.

1.11 Flight recorders and other recording systems

Not applicable.

1.12 Wreckage and impact information

The place of accident is situated on the grass RWY 170 of the Airport Bidovce, in front of its reinforced section.

The final position of the aircraft after the accident was documented and photodocumentation was drawn up.

1.13 Medical and pathological information

Not applicable.

1.14 Fire

No fire broke out.

1.15 Survival aspects

The search and rescue were not required. After the accident the crew left the aircraft on its own.

1.16 Tests and research

Not applicable.

1.17 Organizational and management information

The aviation activity was carried out in accordance with flight regulations 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 making the landing manoeuvre, the pilot was influenced by uncomfortable impact of sunshine in the cockpit, due to which he incorrectly distributed his attention between the monitored board instruments and the surrounding external environment and did not pay adequate attention to one of the most important instruments – air speed indicator. This lack of attention resulted in the decrease of speed below the minimum speed required for flight in landing configuration, followed by a low-speed fall, due to which the aircraft hit hard to the unpaved runway section, the landing gear was massively damaged and the underbody was sliding on the grass surface until the aircraft stopped.

3. CONCLUSIONS / Cause of air accident

3.1 Findings

- the pilot had valid qualifications for the flight.
- the aircraft had 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 seriously damaged in the accident.
- nobody was injured in this accident.

3.2 Causes of accident:

- incorrect distribution of pilot's attention during the landing manoeuvre, causing the unobserved decrease of flight speed below the minimum (approach stall) speed, followed by the fall of aircraft from a low altitude.

4. SAFETY RECOMMENDATIONS

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

Aircraft type **MXP - 741**

Registration **OM - AXM**

Date of air accident: **22.05.2011**

We recommend the implementation of the following measures by the Civil Aviation Authority of SR:

- the operator SNA will analyze the air accident with the flight personnel, putting stress on the elimination of potential influence of the sun and the method of distribution of attention during landing manoeuvre.

Bratislava, 03.08.2011