



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

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



Reg. No.: SKS2013003

## FINAL REPORT

on investigation of serious incident  
of aircraft type **EuroFOX VISION**  
registration No. **OM-LIV**

Date: 02.08.2013

Place: Tesárske Mlyňany

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

Type of aircraft: EuroFOX VISION  
Registration No.: OM-LIV



Operator: AEROPRO, s.r.o. Nitra  
Owner: AEROPRO, s.r.o. Nitra  
Take-off site: Airport Nitra / LZNI  
Planned landing site: LZNI  
Flight phase: precautionary landing  
Type of operation: general aviation / sports and pleasure flight  
Place of serious incident: N 48°20'45,6'', E 18°21'17,8''  
Date and time of occurrence: 02.08.2013, 18:45

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

## **B. INFORMATIVE SUMMARY**

On 2 August 2013 during the pleasure flight the pilot felt air sick and decided to make a precautionary landing on selected surface (field in the community Tesárske Mlyňany). In the landing approach phase the propeller and front fuselage of the aircraft came into contact with an overhead line and broke it. After the contact with the line the pilot landed with damaged aircraft on the selected site.

Neither the pilot nor other person suffered injury.

The following persons were appointed for investigation of the occurrence:

Ing. Igor BENEK  
Ing. Zdeno BIELIK

The report is issued by:

The 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**

On 2 August 2013 at 17:40 the pilot with aircraft AeroFOX VISION, registration No. OM-LIV (hereinafter "FOX"), started from the airport LZNI for a pleasure flight on the route LZNI - south-east slope of the mountain Tríbeč - Veľká Lehota - Zlaté Moravce - LZNI.

In the last section of the route, near the city of Zlaté Moravce, the pilot felt air sick (unnaturally parched mouth, feeling of warmth and perspiration with signs of fainting away). The pilot feared the worsening of his health condition, so he decided to make a precautionary landing and started to search for a suitable site for the landing manoeuvre, being aware that a relatively dense network of electrical wires was situated in the area. During the landing approach phase he noticed electrical wires in front of him and reacted by instinctive opening of the throttle and pulling up of the elevator. At the same time he felt the aircraft vibrate and swing to the sides.

After the collision of the aircraft with the electrical wires and their cutting by the propeller, the engine cables were damaged, probably under the influence of electric charge, which caused the engine to stop. Subsequently the pilot landed with the aircraft on the ground without further problems and damages.

Flight rules: VFR  
Daytime: Night

## 1.2 Injuries to persons

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

## 1.3 Damage to aircraft

The aircraft was substantially damaged in the serious incident (damaged propeller blades, right front fuselage and right wing leading edge).



## 1.4 Other damage

HT overhead line of the company Západoslovenská energetika a.s. was damaged in the occurrence and a passing car owned by a national of Poland was damaged when the electrical wires collapsed on the express way R1.

## 1.5 Personnel information

### Pilot of aircraft:

A national of the Slovak Republic, aged of 50 years, holder of the private pilot licence PPL(A) No. SK 02990339, issued by the Civil Aviation Authority of the Slovak Republic on 15 May 2012.

Medical certificate of 2nd class with marked validity until 02.04.2014.

Limited radio telephonist licence No. OFI-112/05 with marked validity until 05.08.2013.

### Qualifications:

SEP(L) with marked validity until 31.05.2014

### Flight experience:

Total flight hours: 482 h 31 min  
For the last 30 days: 3 h 20 min  
For the last 90 days: 2 h 25 min  
For the last 90 days with the type: 2 h 25 min

## 1.6 Aircraft information

Type: EuroFOX VISION  
Registration No.: OM-LIV  
Serial No: 00111  
Manufacturer: AEROPRO, s.r.o. Nitra

Total operating hours since manufacture: 222 h 49 min.

Special certificate of airworthiness No. 1081/2, issued by the Civil Aviation Authority of the Slovak Republic on 16.12.2011, with marked validity until 15.12.2013.

Third party insurance: Allianz Slovenská poisťovňa, No.411 015 428.

## 1.7 Meteorological information

The flight of the aircraft was conducted at high air temperatures (approx. 35°C).

## 1.8 Aids to navigation

Not applicable.

## 1.9 Communications

The aircraft were equipped by onboard radio station enabling a two-way radio communication with all air stations at every moment of flight.

## 1.10 Aerodrome information

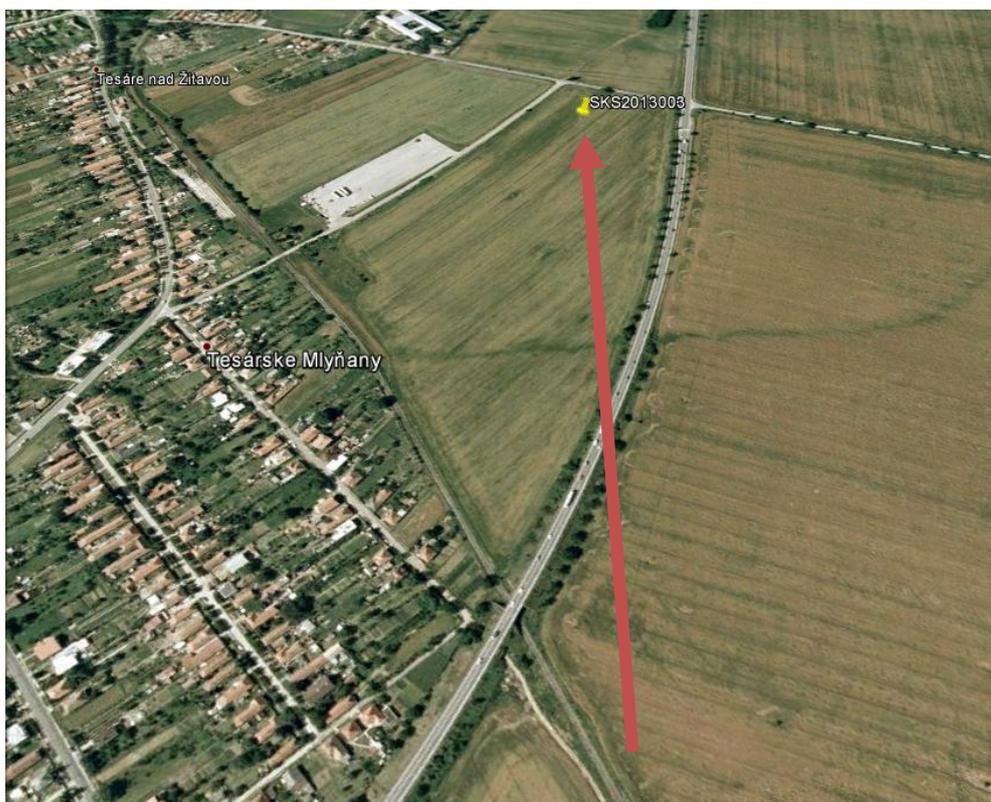
Not applicable.

## 1.11 Flight recorders

Not applicable.

## 1.12 Wreckage and impact information

The place of collision of the aircraft with electrical wires is described by geographical coordinates: N 48°20'57,56'', E 18°21'38,23''.



### **1.13 Medical and pathological information**

Not applicable.

### **1.14 Fire**

No fire broke out.

### **1.15 Survival aspects**

Not applicable.

### **1.16 Tests and research**

Tests and research were not required.

### **1.17 Organizational and management information**

Not applicable.

### **1.18 Additional information**

According to the pilot statement the reason of his sudden air sickness could be the insufficient intake of liquids at high air temperatures.

Judging by the position of the setting sun in the location, statement of the driver of damaged car and of the pilot of the aircraft, as well as the flight direction, the sun rays were directed directly against the landing aircraft at the time of occurrence (during twilight the upper layers of the atmosphere are still lit by the sun rays directly, while the Earth surface is already in the Earth's shadow).

On 2 August 2013 the sun was setting at 18:24 in the area of Zlaté Moravce.

According to the report of the Police of SR and the statement of the driver of damaged car the serious incident occurred at 18:45. The pilot indicated the time of 18:30 in his statement.

### **1.19 Useful or effective investigation techniques**

Standard investigation methods were used.

## **2. ANALYSIS**

Judging particularly by the statement of the pilot, who described the signs, the worsening of his health condition during flight occurred as a result of dehydration of organism.

It can be stated that the underrating of drinking regime by the pilot, especially in conditions when air temperatures achieved enormous values of 35° and more degrees of Celsius on several consecutive days, caused sudden negative changes in his health condition.

Fearing the worsening of his health condition, the pilot solved the air sickness by precautionary landing on selected suitable surface.

The pilot made the landing approach and landing during twilight, when the ongoing sun setting played a negative role. The sun shining directly against the aircraft approaching for landing probably caused the pilot to overlook the electrical wires.

### **3. CONCLUSIONS / CAUSE OF SERIOUS INCIDENT**

#### **3.1 Findings**

- the pilot had valid qualifications for the critical flight under the flight conditions VFR day,
- the pilot did not pay sufficient attention to the flight preparation, incorrectly chose the flight route, as regards the requirement to land before the sunset at the airport LZNI, and made the final flight phase on the place of serious incident during twilight,
- the pilot did not hold the authorization for flight after the sunset,
- the aircraft had valid documentation and did not show any faults before the occurrence,
- the aircraft fulfilled the conditions of airworthiness before the critical flight,
- the aircraft was not equipped for a flight after the sunset.

#### **3.2 Causes of serious incident:**

- sudden worsening of health condition of the pilot, which was probably caused by insufficient intake of liquids by the pilot on the day of occurrence and the preceding day,
- overlooking of electrical wires by the pilot and later collision of the aircraft with these wires.

### **4. SAFETY RECOMMENDATIONS**

The final report from investigation of the serious incident does not contain any recommendations.

Bratislava, 30.08.2013