The original of the Final Report was issued in the Slovak language. In case of inconsistency original version in Slovak language is applicable.



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

FINAL REPORT

on investigation of serious incident

Flying sport vehicle type GIN / BOLERO 5S

Identification number OM - P565

Reg. No. SKA2016003

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:	PERFECTFLY
Type of operation:	general aviation / sport and recreational flying
Туре:	flying sport vehicle GIN / BOLERO 5S (hereinafter "FSV")
Identification number:	OM – P565
Take-off site:	Donovaly – Nová hoľa
Flight phase:	manoeuvring
Place of accident:	Donovaly
Date and time of accident:	23.04.2016, at 07:50

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

B. INFORMATIVE SUMMARY

On 23.04.2016 in the morning the pilot on training flight lost control of his craft when performing a training element and came into collision with the ground after 5 minutes of flight.

The following commission was appointed for investigation of the accident:

Ing. Igor BENEK – chairman of the investigation commission Ing. Milan BOHUŠ – member of the investigation commission

The report is 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**

Pilot with FSV started the training flight at 07:45. The flight occurred normally and during this flight the pilot fulfilled instructions given to him by the instructor via a radio station. After 5 minutes of flight the instructor instructed the pilot to perform a task – closing of external parts of the parachute canopy, when the pilot pulled wrong ropes.



This caused deformation of the parachute wing (fullstal), followed by its shooting under the pilot



and his fall into the canopy and then to the ground.



The accident was reported the Aviation and Maritime Investigation Authority of the Ministry of Transport, Construction and Regional Development of SR by the authorized representative of the Light Aircraft Association of the Slovak Republic.

Daytime: day Flight rules: VFR

1.2 Injuries to persons

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

1.3 Damage to FSV

FSV was not damaged in the accident.

1.4 Other damage

No circumstances with potential claims for compensation of other damage toward a third party were notified to the Aviation and Maritime Investigation Authority.

1.5 **Personnel information**

Pilot under training:

A national of the Slovak Republic, aged of 26 years, holder of the pilot under training licence PK-A, issued by an inspector of the the Light Aircraft Association of the Slovak Republic on 20.04.2016.

Flying experience:

Total flight hours of pilot: determined according to the flight recorder of FSV that he used during training: 26 take-offs – 37 minutes

1.6 Information about FSV

Туре:	Bolero 5S
Identification number:	OM – P565
Manufacture number:	BE01-K7000191D
Manufacturer:	GIN

Certificate of airworthiness No. 15306 with marked validity until19.04.2017.

1.7 Meteorological situation

Medium to high clouds 6 - 8/8, visibility above 10 km, south-west wind up to 2 m/s.

1.8 Aids to navigation

N/A.

1.9 **Communications**

The communication between the pilot and the instructor was running through a PMR radio set with range of 10 km.

1.10 Aerodrome information

Starting point: Donovaly – Nová hoľa.

1.11 Flight recorders

Outdoor camera GoPro.

1.12 Wreckage and impact information

The pilot fell into the forest above Sport Hotel in the cadastral area of community Donovaly.



1.13 Medical and pathological information

From forensic perspective it was a violent death - multiple injuries with fatal consequences.

1.14 Fire

No fire broke out.

1.15 Survival aspects

Search and rescue using SAR devices were not required.

1.16 Tests and research

No tests or expert inspection of FSV were required to be conducted.

1.17 Organizational and management information

The flight was conducted in accordance with aeronautical and tourist regulations valid within the territory of the Slovak Republic.

1.18 Additional information

N/A.

1.19 Useful or effective investigation techniques

Standard investigation techniques were used.

2. ANALYSIS

Activity of pilot

The pilot under training with minimum flying experience practiced the closing of external parts of the canopy during the first flight from the hill Nová Hoľa in Donovaly.



By ignorance he pulled the whole set of C-cords (trailing edge) ended in the leading edge of parachute wing, instead of the outer A-cords. It caused separation of flow lines and drop of deformed parachute wing behind the pilot. When the pilot realized his mistake he suddenly let loose this set of cords, which caused inflation of the wing, followed by its shooting under the pilot and his fall into the canopy.

3. CONCLUSIONS/CAUSE OF ACCIDENT

3.1 Findings

Pilot under training

- According to the submitted documentation had valid qualification for flights with this category of FSV;
- Did not have sufficient flying experience to practice the closing of external parts of canopy;
- Had no pilot's flight logbook;
- Was not under the influence of alcohol, drugs and common medicines which could have decreased his attention during the flight.

3.2 Causes of accident

Insufficient flying experience and poor mastering of the flying technique in performance of the respective task.

4. SAFETY RECOMMENDATIONS

On the basis of investigation of the accident of

FSV type **GIN / Bolero S5** Identification number **OM–P326** Date of accident **23.04.2016**

We recommend LAA SR to implement the following measures:

- To analyze the accident with training centre managers of LAA SR;
- To publish the final report on the website of LAA SR;
- Training centre managers of LAA SR to put emphasis on keeping of training records.

Bratislava, 24.06.2016