



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. SKS2012005

FINAL REPORT

on investigation of serious incident
of aircraft type **DA-42NG**
registration No. **OM-IVO**

Date: 30.09.2012

Place: Airport Piešťany / LZPP

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.

A. INTRODUCTION

Operator/Owner:	AIRTAXI, spol. s r.o. / PROTRIEM, spol. s r.o.
Type of operation:	training flight
Type of aircraft:	DA-42NG
Registration No:	OM-IVO



Take-off site:	Airport Bratislava / LZIB
Flight phase:	landing
Place of serious incident:	LZPP
Date and time:	30.09.2012, 08:45

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

B. INFORMATIVE SUMMARY

During landing training on the airport LZPP with aircraft with one driving unit switched off, the crew failed to timely extend the landing gear and landed on the asphalt runway ("RWY") with the belly ("belly landing"). The aircraft became damaged in the landing manoeuvre.

At the time of landing the surfaces leased and used by the company operating the "Sunday driving school", were damaged.

The aircraft was removed from RWY with help of the airport personnel.

No one was injured in the landing.

The following persons were appointed for investigation of the serious incident:

Ing. Igor BENEK
Ing. Zdeno BIELIK

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

On 30 September 2012 the crew composed of instructor and pilot-student, was making a training flight in accordance with the training manual. They concentrated on landing training with one driving unit switched off. The crew took-off with the aircraft from the airport LZIB and continued the flight to the airport LZPP, where they intended to implement the training.

At that time the airport LZPP was out of operation, so the pilots transmitted on the frequency 122.6 MHz ("blind transmission") and implemented the procedure of approach and landing at unoccupied airport. After the arrival at the airport LZPP they flew over TWY01 to check its condition and actual wind conditions. Then they made a left-hand circle over RWY01 for landing according to the approved practical training programme (mission MEP/4).

Before the third circular turn the instructor throttled down the left-hand engine and then switched off and feathered the propeller.

The pilot-student started doing operations after the engine flame-out. When completing the continuous third and fourth turns, the crew saw two vehicles on RWY, which according to their statements distracted them from doing mandatory operations before landing with one

driving unit switched off. The instructor did not check the extension of the landing gear and only realized his error when the pilot-student throttled down the engine and the gear-up alarm sounded. After registration of the alarm the instructor attempted to extend the landing gear, but he did not succeed to extend it fully and secure it the extended position.

The instructor decided to complete the landing, taking into account the left-hand engine switched off. The aircraft landed on the belly, stopped and stood still on RWY.

The crew left the aircraft without help and uninjured.

The aircraft was removed from the manoeuvring areas with help of the airport personnel.

Daytime: day

Flight rules: VFR

1.2 Injuries to persons

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

1.3 Damage to aircraft

Destroyed right-hand engine propeller, scratched bottom engine nacelles, damaged footsteps on both sides of the aircraft.





1.4 Other damages

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 - instructor:

A Citizen of the Slovak Republic, aged of 27 years,

holder of pilot licence CPL(A), SK 03090160, issued by the Civil Aviation Authority of the Slovak Republic on 14 August 2009 with marked validity until 21.05.2017.

Medical certificate:

of first class with marked validity until 20.07.2013

of second class with marked validity until 20.07.2017

General licence of radio telephonist No. VVR 95/2006.

Qualifications:

IR(A) with marked validity until 31.07.2013

MEP(L) with marked validity until 31.07.2013

FI(A) with marked validity until 30.11.2012

SEP(L) with marked validity until 31.05.2013

RA390 co-pilot with marked validity until 31.05.2013

Flight experience:

Total flight hours with all aircraft types: 1,395 h

For last 30 days: 73 h

For last 90 days: 207 h

For last 90 days with the aircraft type: 188 h

Pilot - student:

A Citizen of the Slovak Republic, aged of 25 years,

holder of pilot licence PPL(A), SK 02080211, issued by the Civil Aviation Authority of the Slovak Republic on 24 November 2008, with marked validity until 05.09.2017.

Medical certificate of first class with marked validity until 17.08.2013.

General licence of radio telephonist No. VVR-79/2008.

Qualifications:

SEP(L) with marked validity until 30.11.2012

Flight experience:

Total flight hours: 156 h 20 min

1.6 Information about aircraft

Airframe:

Type: DA-42NG

Registration No.: OM-IVO

Serial No.: 42.N020

Manufacturer: Diamond Aircraft Industries GmbH

The certificate of airworthiness No. 1042/01, issued by the Civil Aviation Authority of SR.

Third-party insurance: Allianz Slovenská poisťovňa No. 411013148.

1.7 Meteorological situation

Not applicable.

1.8 Aids to navigation

Not applicable.

1.9 Communications

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

1.10 Aerodrome information

The operating hours of the aircraft LZPP are Monday – Friday 0615-1800 (0515-1700). Out of the operating hours, the airport administration may provide services at written request, which must be submitted one working day in advance, before 1100 (1000).

1. Out of the operating hours, any flights at the airport LZPP are permitted following the previous agreement with the airport operator.
2. This provision of paragraph 1 does not apply to rescue service flights, flights directly connected with rescue of human life, search and rescue flights permitted by the competent authority of SAR and flights of aircrafts which made a forced or emergency landing.
3. Flights according to paragraphs 1 and 2 are made by the aircraft operator at its own risk.

1.11 Flight recorders and other recording systems

Not applicable.

1.12 Wreckage and impact information

The aircraft landed on RWY 01 of LZPP.

1.13 Medical and pathological information

Not applicable.

1.14 Fire

No fire broke out.

1.15 Survival aspects

The search and rescue operations using SAR means were not required.

1.16 Tests and research

Tests or expert examinations of the aircraft parts were not required.

1.17 Organizational and management information

The airport LZPP issued the authorization for the operation of training flights to the operator Opera Jet, a.s. under the following conditions:

- Opera Jet, a.s. will obtain a valid approval of the Civil Aviation Authority of SR for training flights;
- Opera Jet, a.s. will fulfil the conditions of training flights at the airport LZPP determined in the Agreement on the Operation of Training Flights. This agreement was not submitted to the investigation commission.

The Civil Aviation Authority has entered into the Aircraft Register the company PROTRIEM, spol. s.r.o. with registered office Dlhé Diely I/6A, 841 01 Bratislava, as owner of the aircraft **DA-42NG**, and the company AIRTAXI s.r.o. with registered office Dlhé Diely I/6A, 841 01 Bratislava, as operator of the aircraft.

On 20 May 2011 the aircraft owner concluded the contract on the lease and operation of the aircraft with company Opera Jet, a.s. with registered office Ivánska cesta 30/B, Bratislava 821 04, which is an aviation school (“FTO”), which operates training flights at the aircraft M.R. Štefánik on the basis of the licence granted by the Civil Aviation Authority of SR.

At the time of serious incident the RWY and taxiway at the aircraft LZPP were used for other type of operation, which blocked at the moment.

Out of the operating hours, no control or publication of information about the condition of movement areas and facilities on the part of the operator of the aircraft LZPP is guaranteed.

1.18 Additional information

Not applicable.

1.19 Useful or effective investigation techniques

Standard investigation methods were used.

2. ANALYSIS

During the preparation for the flight the pilots did not pay sufficiently attention to study of required information about the aircraft of planned landing and decided to implement training at the airport LZPP without making sure that the conditions of its use outside the operating hours were satisfactory.

At the time of landing of the aircraft the airport was leased out and its manoeuvring areas were used by a company, which was implementing the “Sunday driving school” at the airport on that day. Consequently, the pilots were puzzled when they saw vehicles driving on RWY just before the landing with one driving unit switched off. This situation caused that the pilots were distracted from doing the required operations before landing, when both of them were concentrated to the runway clearance check. The instructor ordered the pilot-student to extend the landing gear, but he did not check this operation in the strained situation and realized that the landing gear was still up just before the contact with RWY, when he heard the alarm after throttling down the engine. At that moment the aircraft flew with one engine only, so the crew was unable to repeat the circle. In spite of the instructor’s intervention, the crew did not succeed to extend the landing gear timely and secure it in the extreme position, so they made a belly landing.

The drivers of vehicles moving on RWY of the airport LZPP noticed that the pilots plan to land at the airport, timely cleared RWY and thus prevented the imminent threat to their health and safety.

Despite the information about operating hours indicated in AIP SR, the use of the airport LZPP is permitted for all flights after previous agreement with the airport operator and for rescue service flights, flights directly connected with rescue of human life, search and rescue flights permitted by the competent authority of SAR and flight of aircraft that made a forced or emergency landing.

AIP SR LZPP AD 2.20.1.3 clearly provides that all flights out of the operating hours of the airport will be made at the risk of the aircraft operator.

In this case the operator of the aircraft LZPP was not obliged to publish information about the condition of manoeuvring areas and facilities at the aircraft LZPP.

3. CONCLUSIONS / CAUSE OF SERIOUS INCIDENT

3.1 Findings

- the aircraft crew had valid qualifications for the critical flight;
- the aircraft had valid documentation and did not show any faults before the occurrence;
- the aircraft LZPP was out of the operating hours at the time of occurrence;
- the aircraft operator violated the provision of LZPP AD 2.20, Local Rules of Operation of AIP SR by not applying the operator of the airport LZPP for the permission to make flights out of the operating hours in connection with the light of aircraft type DA-42NG;
- the aircraft suffered minor damage in the serious incident;
- no one was injured in the serious incident.

3.2 Causes of serious incident:

- non-extension of the landing gear before landing with one driving unit switched off;
- the pilots did not pay sufficient attention to the pre-flight preparation, when they did not study the conditions for use of the airport LZPP out of the operating hours (AIP SR, Part of LZPP AD 2.20 LOCAL RULES OF OPERATION).

4. SAFETY RECOMMENDATIONS

On the basis of investigation of causes of serious incident of

aircraft type **DA-42NG**
registration No. **OM-IVO**
date of serious incident: **30.09.2012**

We recommend the implementation of the following measures:

By the Civil Aviation Authority of SR:

- to enter the contracts on the operation of aircraft in case of its lease to FTO or training facilities in the Aircraft Register of SR;
- to determine the obligation for the airports LZPP, LZZI and LZTT to implement their own measures for publication of information for the general public on the use of manoeuvring areas of the airport out of its operating hours for other purpose than that, for which they are intended in the operating hours.

Bratislava, 22.02.2013