



National Transportation Investigation Bureau (NTIB)

SERIOUS INCIDENT PRELIMINARY REPORT

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Accident site:	Riga FIR (EVRR)	Number of the case/investigation:	1/2024
Date and time:	03.01.2024, 02:55 UTC	AC registration number:	UR-SQP
AC type:	Boeing-737-800	Killed:	None
		Injuries:	None
Flight type:	Charter flight enroute Tallinn (Estonia) – Hurghada (Egypt)		

Introduction

This report provides information obtained by the NTIB at the initial stage of the serious incident investigation. The purpose of the report is to inform the industry and the public about the progress of the investigation. The preliminary report does not contain an analysis and the conclusions about the causes of the occurrence, which will be described in detail in the Final report.

In accordance with the Third Part of Article 119 of the Air Code of Ukraine, being based on the results of the investigation, the NTIB does not apportion blame or liability of legal entities and individuals. The sole purpose of this investigation is to prevent future aviation accidents and incidents.

According to Part Five of Article 119 of the Air Code of Ukraine, this report cannot be used by administrative, official, prosecutorial, judicial bodies, insurers to apportion blame or liability.

NTIB opened an investigation into serious incident duly to Annex 13 to ICAO Convention and Rules and procedures for technical investigation of accidents and incidents with civil aircraft approved by resolution of Cabinet of Ministers of Ukraine dated 20.05.2022 № 610.

Note: This report is a translation of the Ukrainian original investigation report. The text in Ukrainian shall prevail in the interpretation of the report.

The circumstances of the serious incident (Synopsis)

On Wednesday, the 3rd of January 2024, the crew of LLC “SkyUp Airlines” consisting of PIC, first officer, 4 flight attendants and airline representative, according to flight plan, performed a charter flight FEG8901 enroute Tallinn (Estonia) – Hurghada (Egypt) by plane B-737-800 UR-SQP. There were 193 persons – 186 passengers and 7 crew members onboard.

During climb and crossing the FL335, a warning for automatic pressure control system failure was triggered. The crew performed an emergency checklist and switched to manual control of the pressure control system. After reaching FL 360, the pressure control system was recovered in manual mode, however it was not functioning stable. The crew requested Riga FIR dispatcher for the permission to descend to FL 320. To coordinate the descend permission, Riga FIR dispatcher transferred the crew to the frequency of the Vilnius FIR sector. At the same time, the warning for exceeding altitude of 10,000 feet was triggered. The crew performed an emergency checklist, filed a distress signal, and reported on emergency descent to FL140. Due to the loss of pressure, the oxygen masks were automatically activated in cabin. During descend, the crew managed to recover control of the pressure system in manual mode and reduce the altitude in the cockpit to less than 10,000 feet. PIC decided to divert to the alternate aerodrome Warsaw (Poland). After burning off fuel at the holding area, in order to reduce maximum landing mass, the crew made a safe landing at the Warsaw airfield. As a result of the serious incident, no one was injured.

Occurrence happened at 02:55 UTC*.

Note (): hereinafter the time is described in UTC.*

Injuries, aircraft damages, other damages

Killed:	none	AC damages:	none
Crew injuries:	none	AC fire:	none
Passengers injuries:	none	Information on the aircraft explosion:	none
Injuries on the ground:	none	Other damages:	none

Crew data, Information of the AC and of the Owner/Operator

AC manufacturer:	The Boeing Company	Registration number:	UR-SQP
		MSN:	33029
Model/Series:	Boeing-737-800	AC category:	airplane
Amateur design:	no	Type of works/flight operations:	commercial/passengers flight
Operator:	LLC “SkyUp Airlines”	Operator certificate:	CE № UA 055, issued by SAAU 17.03.2021
Call sign (ICAO, IATA):	SQP, PQ		

Crew data

Position:	PIC	Sex:	male
Pilot's license:	ATPL(A) UA.FCL.XXXXXX issued on 21.01.2020, type rating B-737 300-900 and instrument rating IR (A) valid until 30.04.2024	Education:	Kharkiv Higher Military Aviation School of Pilots, 1990 year
Age:	54 y.o.	Total flight hours:	7361 h.
Flight hours on such AC type:	1442 h.	Medical certificate I-st class:	valid until 07.09.2024
Position:	first officer	Sex:	male
Pilot's license:	CPL (A) UA.FCL.XXXXXX issued on 17.09.2020, type rating B-737 300-900 and instrument rating IR (A) valid until 31.03.2024	Education:	National Metallurgical Academy of Ukraine, 2021 year
		Training:	"Condor" Flight Training School, 2019 year
Age:	37 y.o.	Total flight hours:	1615 h.
Flight hours on such AC type:	1474 h.	Medical certificate I-st class:	valid until 15.12.2024

Meteorological information and the flight plan

Time of the day:	night		
Departure point:	Tallinn airport (EETN)	Planned landing point:	Hurghada airport (HEGN)
Actual landing point:	Warsaw airport (EPWA)		

Routine aviation meteorological weather information (METAR) at Tallinn aerodrome, issued at 23:50 UTC 02.01.2024: surface wind direction 120°, wind speed 9 knots, good weather conditions, temperature -18°C, dew point -21°C, QNH 1019 hPa.

At 03:09:26 the crew, via the ATIS channel, received the following meteorological information for the Warsaw aerodrome: *Warsaw Information ATIS "G" for 02:30 UTC, expect approach of ILS RWY 11, RWY status code 5/5/5, RWY wet, transition level 90, wind direction 140°, speed 8 knots, landing zone visibility 8 km, light rain, overcast at 600 feet, temperature +3°, dew point +3°, pressure normalized to the Baltic Sea mean level QNH 996 hPa, sometimes visibility 4000 meters, heavy rain and haze, warning of bird activity.*

According to the operational flight plan, at the cruising flight level the temperature forecast to be -60°C.

Navigational aids, communication means, flight recorders

The aircraft is equipped with on-board flight and voice data recorders manufactured by Honeywell:

- Flight data recorder - FDR p/n 980-4700-042 provides recording of flight data to a solid-state storage for at least 25 hours. There are 42 flight parameters that are recorded in accordance with the requirements of AMC2 CAT.IDE.A.190 of Air OPS Easy Access Rules. Recording is performed at a speed of 256 digital 12-bit words per second;

- Cockpit voice recorder - CVR p/n 980-6022-001 provides recording of voice information to a solid-state storage for a duration of 2 hours via 4 recording channels.

After the occurrence both recorders were in good operational conditions so, after the readouts all necessary information, flight and voice data, was received. Further decoding of the information showed that the quality of both recorded information, was good. Information about this flight is available in full.

In order to decode the FDR information, a copy of the flight data was provided by the operator. Boeing data frame interface control AND requirements document D226A101-2 was used during flight parameters conversion into engineering values. For decoding and processing of flight data the specialized software "MOHCTP-X" was used.

Aerodrome information

Warsaw Chopin Airport is located 10 kilometers from the Warsaw city center. There are two RWY operated at the airport. The one is asphalt-concrete RWY11/29 with dimensions 2800x50M, PCN 77 R/A/W/T and the other RWY15/33 with dimensions 3690x60M and asphalt covering, PCN 82 F/C/X/T.

Reference point coordinates: 52°09'57"N; 020°58'02"E.

Elevation – 110 m.

Further investigation

At the current stage of the investigation NTIB in cooperation with State Commission on Aircraft Accidents Investigation of Poland continues collection and analysis of evidence as well as circumstances of the serious incident.

Safety investigation of serious incident is planned to be completed in the 2nd quarter of the current year.

Further works will include the following:

- study of the data from on-board recorders, information from ground-based recorders, synchronization of parametric and voice information;
- analysis of explanatory notes and interview protocols of the crew and technical personnel;
- analysis of the failure causes and incorrect automatic pressure control system operation in the aircraft;
- assessment of the qualifications of the PIC, crew members, their experience and medical condition, rest conditions and standards prior the flight;
- aircraft refueling and loading analysis;
- study and analysis of documents on airworthiness and aircraft maintenance;
- analysis of aeronautical information documents regarding the flight;
- analysis of measures for preliminary, pre-flight and pre-landing crew training;

- analysis of the cabin crew actions during the occurrence.

If the investigation reveals critical safety issues, the NTIB shall immediately notify the responsible authorities and parties, in order to take appropriate and timely safety measures.

Safety recommendations

To: LLC “SkyUp Airlines”:

Issue a bulletin to flight crews to enhance understanding of the consequences of cabin depressurization, the circumstances of hypoxia, its impact on flight crew performance, and the needs for emergency oxygen use.

The abbreviations which can be used in the text

AC – Aircraft;

ATIS – Automatic terminal information service

CVR – Cockpit Voice Recorder;

FDR – Flight Data Recorder;

FL – Flight Level;

ICAO – International Civil Aviation Organization;

ILS – Instrument landing system

LLC – Limited Liability Company;

METAR – Meteorological Aerodrome Report;

MSN – Manufacturer's Serial Number;

PCN – Pavement Classification Number;

PIC – pilot in command;

RWY – Runway;

SAAU – State Aviation Administration of Ukraine;

TAF – Terminal Area Forecast;

UTC – Universal Time Coordinated.