



INTERSTATE AVIATION COMMITTEE
AIR ACCIDENT INVESTIGATION COMMISSION

FINAL REPORT
ON RESULTS OF INVESTIGATION OF ACCIDENT

Type of accident	Fatal accident
Type of aircraft	ATR72-201 aeroplane
Registration	VP-BYZ, Bermudas
Owner	BLF Limited
Operator	UTAir Aviation, JSC
Place of accident	1500 m from RWY 21 threshold; cross-track deviation about 400 m, Roschino aerodrome, Tyumen. Coordinates: N 57°09.440' E 065°16.000'
Date and time of accident	02.04.2012, 01:35 UTC (07:35 local time), day time

In accordance with ICAO standards and recommended practices, it is not the purpose of this report to apportion blame or liability.

The sole objective of the investigation and the Final Report is the prevention of accidents.

Criminal aspects of the accident are investigated within the framework of a separate criminal case.

Synopsis

On 02.04.2012, at 01:35 UTC¹ (07:35 local time), at day time, under VMC after the takeoff from the Roschino (Tyumen) airport RWY 21, the ATR72-201 VP-BYZ aircraft, operated by JSC “UTAir Aviation” (further referred to as “UTAir”) crashed while performing the scheduled passenger flight UTA120 from Tyumen to Surgut.

According to the load sheet the A/C TOW and center of gravity were 18730 kg and 30.72 % MAC correspondingly and that was within the aircraft operation limits. Onboard there were 4 crew members (PIC, F/O and two flight attendants) and 39 passengers, all RF citizens.

After the landing gear and the flaps retraction the aircraft started descending with a significant left bank and then collided with terrain. The ground collision first led to the structural damage of left wing followed by the fuel spillage and fire, and further to the complete destruction of aircraft with the right wing, cockpit and rear section with empennage separation.

Out of the 43 persons onboard, 4 crew members and 29 passengers were killed. Others received serious injuries.

The information of the accident was received by the Interstate Aviation Committee (IAC) on 02.04.2012 at 01:57, and the initial notification was received at 05:55.

The Investigation Team was assigned by Order No.4/569-P of 02.04.2012 by the IAC Vice-Chairman – Chairman of AAIC.

In accordance with Annex 13 to the ICAO Chicago Convention (further Annex 13) Notifications were sent to BEA France (as a State of Design and Manufacturer), TSB Canada (as a State of Engine Design and Manufacturer), and to AAIB UK (as a State of Registry) as the A/C was registered in the Bermuda Islands. In accordance with Annex 13 items 4.5 and 4.6 these States assigned their Accredited Representatives and Advisors for the investigation.

Experts from the Federal Transport Agency (FATA) also took part in the investigation.

The investigation was started on 02.04.2012.

The investigation was completed on 12.07.2013.

A preliminary criminal investigation is being conducted by the Urals Investigation Directorate of the Investigative Committee of RF.

¹ Here and further unless otherwise is stated UTC time is given.

5.9. To ATR

5.9.1 To consider the reasonability of introduction into the appropriate documentation (FCOM, FCTM, Cold Weather Operations etc.) the description of detrimental effects of ground icing accretion on different aircraft parts as well as its influence on the A/C performance and handling.

5.10. To the certification authorities of States of Design

5.10.1 To review the current procedural approach to checking aircraft surfaces on contaminants accretion before the flight and to monitoring aircraft state after de/anti-icing treatment and to consider the introduction of a requirements to mandatory equip at least those A/C types whose aerodynamic performance is very sensitive to ground icing with an on-board system for automatic detection of ground icing conditions and notifying flight crews.

5.11. To EASA and other simulator certification authorities

5.11.1 To consider the possibility to add into the simulator data-package the capability to simulate an unexpected or sudden aircraft stall at any stage of flight³⁸.

5.12. To ICAO

5.11.2 To consider the reasonability of amending Annex 6 to the Convention on International Civil Aviation related to mandatory installation of an AOA indicator in the cockpit.

5.13. To the Head of Personnel Training Center, NPP (Tyumen)

5.12.1 Correct the shortcomings contained in the present report.

³⁸ See also NTSB A-10-022 recommendation given as a result of DHC-8-400 N200WQ accident investigation which happened on February 12, 2009.



**INTERSTATE AVIATION COMMITTEE
AIR ACCIDENT INVESTIGATION COMMISSION**

FINAL REPORT

Type of occurrence	Accident
Type of aircraft	Airplane, Boeing 737-500 (53A)
Registration	VQ-BBN (Bermuda)
Registered Charterer (according to the registration certificate)	AWAS (BERMUDA) LIMITED, Clarendon House, 2 Church Street, Hamilton HM 11, Bermuda
Operator	Tatarstan Airlines, JSC, Russia
Aviation Administration	Tatar ITO, FATA
Place of occurrence	Russian Federation, Kazan International Airdrome, coordinates: N 55° 36,5291' E 49°16,6111'
Date and Time	November 17, 2013, 15:24 UTC, 19:24 local time, night time

In accordance with ICAO Standards and Recommended Practices this Final Report has been published with the sole objective of aircraft accident prevention.

It is not the aim of this investigation to apportion blame or liability.

The criminal aspects of this accident are described within a separate criminal investigation.

Synopsis

On November 17, 2013 at 15:24 UTC (hereinafter, if not specified otherwise, UTC time is used; local time being 4 hours ahead of UTC time), at night time, a Boeing 737-500 (53A) aircraft (hereinafter referred to as Boeing 737-500) registered VQ-BBN operated by Tatarstan Airlines JSC (hereinafter referred to as Tatarstan Airlines, or the Airline) crashed while conducting a go-around after the terminated approach to RWY29 of Kazan International Aerodrome. The airplane had been conducting a domestic scheduled passenger flight TAK 363 from Moscow (Domodedovo, UDD) to Kazan (UWKD).

The Air Accident Investigation Commission of the Interstate Aviation Committee was notified on the accident at 15:46, November 17, 2013.

The investigation team was appointed by the Order of IAC First Vice-Chairman № 41/655-P of November 17, 2013 as well as the Order of the Acting Chairman of the IAC № 41/655a-p of April 01, 2014.

In compliance with Annex 13 to Convention on International Civil Aviation, notifications on the accident were sent to the NTSB, USA as the State of Aircraft Design and Manufacturer; to BEA, France as the State of Engine Design and Manufacturer; to AAIB, UK as the State of Registry (the aircraft being registered in Bermuda, the overseas territory of the UK).

The investigation was participated by representatives of the NTSB, FAA, Boeing, Parker Aerospace, AAIB UK, Bermuda DCA, BEA France; experts from Rosaviatsiya, Rostransnadzor, Rosgidromet, FSUE "State ATM Corporation", Kazan International Airport JSC, State Center for Flight Safety, Scientific Production Enterprise "Rodina"; test pilots from Gromov Flight Research Institute, Tupolev JSC, as well as flight operations managers, instructors and line pilots of Tatarstan Airlines, Aeroflot, Transaero, UTair and other airlines.

In order to render assistance to the persons involved in the accident as well as families of the deceased, as well as cooperation in the rectification of the accident consequences, a Governmental Commission was formed by Resolution № 2135-r of the Chairman of the Russian Government as of November 18, 2013 chaired by the Russian Minister of Transport.

Investigation initiated on November 17, 2013.

Investigation completed on December 23, 2015.

Preliminary judicial inquiry was conducted by the Main Inquiry Office of the Inquiry Board of the Russian Federation.

amount and methodological guidance for the training process, as well as to taking measures to prevent personnel with inappropriate qualification level from passing final qualification tests.

It is recommended that the Boeing Company:

- 5.2.33. Consider the necessity of introducing changes or/and clarifications to the QRH section containing nose up upset recovery procedures to exclude misinterpretation of the provisions contained therein by pilots.

It is recommended that ICAO:

- 5.2.34. Define the minimum English language proficiency requirements to understand aircraft manufacturer's documents or other English-language materials used for flight crew training and flight operations.

It is recommended that Civil Aviation Authorities of States of Agreement, FSUE "State ATM Corporation", Aircraft Design companies, Airlines and Aviation Training Organizations

- 5.2.35. Within their respective competence, analyze the applicability of recommendations (Section 1.18.6) to prevent accidents and incidents during go-around, developed by the BEA based on the safety study related to Aeroplane state awareness during go-round (ASAGA). Depending on the results of the analysis, take applicable safety measures.