



CZ-13-397

Copy No 7

FINAL REPORT

Investigation of causes of an incident at Airport Karlovy Vary - fall of a person from the aircraft A320, registration VQ-BRE, on 6 August 2013

Prague December 2013

This investigation has been carried out in accordance with the Regulation EU No 996/2010, Act No 49/1997 Coll., on civil aviation and Annex 13 to the ICAO Convention on International Civil Aviation. The sole objective of the investigation of an accident or incident under these Regulations shall be the prevention of accidents and incidents. It shall not be the purpose of such an investigation to apportion blame or liability.

The Final Report, findings and conclusions therein concerning air accidents and incidents, and possibly systemic shortcomings endangering operational safety, are only of an informative nature and cannot be used otherwise than as a recommendation for the implementation of measures in order to prevent further air accidents and incidents with similar causes. The creator of the Final Report explicitly states that the Final Report cannot be used to determine blame or responsibility in connection with determining the causes of an air accident or incident and cannot be used for enforcing claims in the event of an insurance claim.

Used abbreviation:

AAII - Air Accidents Investigation Institute

AHM - IATA Airport Handling Manual

AMSL - Above Mean Sea Level

APN M - Apron Middle

APU - Auxiliary Power Unit

ARFF - Aircraft Rescue and Firefighting

ARS - Air Rescue Service

ATC - Air traffic Control

CAA - Civil Aviation Authority

CCTV - Closed Circuit Television

cm - Centimeter (unit of length)

CR - Czech Republic

FN - Unilversity Hospital

GOM - Ground Operations Manual

GSA - General Sales Agent

HNG - Passengers handling

IATA - International Air Transport Association

IFR - Instrument Flight Rules

ISAGO - IATA Safety Audit Ground Operations

LKKV - Airport Karlovy Vary

M/SQM - SQM manager

m - Meter (unit of length)

NOTAM - Notice To Airmen

RHNG - Ramp Handling

RCA - Ramp Control Agent

SCA - Senior Cabin Attendant

SE - South east

SQM - Safety and Quality Management

THP - Technical Employee-

UTC - Co-ordinated Universal Time

VFR - Visual Flight Rules

TWR - Airport Control Tower

A) Introduction

Operator: Ural Airlines j.s.c. Aircraft Manufacturer and Type: Airbus A320 **VQ-BRE**

Registration:

Location of Incident: Airport Karlovy Vary Date: 6 August 2013

07:07 (all times are UTC) Time:

B) Synopsis

On 6 August 2013 the AAII was notified of an incident at LKKV. Custom care and operation employer-Station Manager of East-West AERO s.r.o. (hereinafter the Station Manager), who works for an Ural Airlines j.s.c., was carrying out her duties on board of Airbus A320 at the time when the aircraft was parked at the stand of the airport just before the departure. The passengers were boarded and the luggage was loaded. After concluding her duties, the Station Manager was leaving the board of the aircraft through the front door. She did not notice, however, that a ground handling operator had removed the mobile passenger stairs. The Station Manager, in effect, fell down to the concrete apron from the height of 3.5 m. She suffered serious injuries due to the falling. After initial first aid treatment she was subsequently transported to the university hospital in Pilsen - Lochotín by air.

Complementary information aiding in determining the cause of the incident was provided by the operator of the Airport Karlovy Vary (M/SQM) and was sent to the AAII.

The cause of the incident was investigated by an AAII commission. The investigation team comprised:

Investigator-in-charge: Ing. Zdeněk FORMÁNEK Ing. Josef PROCHÁZKA Commission members:

Michal VÁŇA, Czech Airlines j.s.c.

The Final Report was issued by:

AIR ACCIDENTS INVESTIGATION INSTITUTE Beranových 130 199 01 PRAHA 99

on 16th December 2013

C) This Final Report Consists of the Following Main Parts:

- 1. Factual information
- 2. Analysis
- 3. Conclusions
- 4. Safety Recommendations
- 5. Appendices

1. Factual information

1.1 The Event History

1.1.1 Circumstances preceding the incident

Airbus A320 aircraft with the registration VQ-BRE was after landing at LKKV guided to the concrete APN M, stand No. 2. Until the incident, flight No. U6 740 (Karlovy Vary-Yekaterinburg) handling was carried out in a standard manner. The Station Manager collected NOTAMs and the weather forecast report at the ARO. On 6 August 2013, after the handling of flight No. U6 740 was completed, she handed the list of passengers, the list of luggage and the flight No. U6 740 loadsheet to the aircraft commander at the gate. After the prior agreement with the handling operators and the crew, the passengers began boarding the aircraft before 07:00.

1.1.2 The Event History

The history of the event was described on the basis of the statements of the air crew members, the Station Manager and the RCA.

The Station Manager climbed the passenger stairs, following the last passenger, to the front door of the aircraft. She remained standing on the top platform of the passenger stairs before the aircraft door until the last passengers entered the aircraft. She then boarded the aircraft and remained standing very near the door. SCA picked the handset passenger address (PA) and welcomed the passengers through the PA system. The steward boarded the aircraft coming from underneath thereof where he was responsible for the number of loaded pieces of luggage (cargo). He passed by the Station Manager and proceeded to the right into the front galley.

The Station Manager noticed that the noise APU coming from the left side was growing louder. Furthermore, there was warm air flowing into the cabin from the outside. The noise was hindering the announcement in progress. The SCA was finding it difficult to concentrate on the announcement. For the above mentioned reasons (and with regard to the comfort of 6 passengers travelling in the business class), the Station Manager considered it more convenient to close the front door and leave it only ajar. She pushed the movable railing on the passenger stairs top platform, released the open front door and closed it to be only ajar. The door was left ajar for the whole time. The Station Manager was standing very near the door, with her left side turned towards the exit door, and her back leaning against the right hand wall of the aisle.

The SCA finished her announcement to the passengers and hung up the PA handset. A stewardess came forward from the back of the cabin and reported the number of passengers on board to the SCA. The Station Manager and SCA mutually agreed by a nod that the numbers of passengers concur. The steward responsible for the number of pieces of luggage (cargo) conveyed the information about the cargo to the SCA. The SCA recorded the information obtained and left for the flight deck. The steward said good bye to the Station Manager and left for the back part of the passenger cabin. The stewardess operating at position 1R was preparing the drinks for the business class passengers.

The ramp control agent stated that on 6 August 2013 he guided the aircraft to stand No. 2. After the complete stop he applied the wheel chocks, brought the ground power unit to the aircraft and opened the cargo doors for the cargo loading personel. He then went to bring the refuelling truck and refilled the aircraft's tanks with fuel. Upon finishing the

process of refuelling, he signed the document confirming the refuelling for the Commander and removed the refuelling truck from the aircraft. Whilst waiting for the passengers boarding, he was refuelling the tanks of another smaller private aircraft. After the passengers boarded the aircraft through the front door and the luggage was loaded into the hold, he closed the cargo doors that are located in the lower part of the aircraft. In order to perform a visual check he walked around the aircraft and came to the towed passenger stairs at the front door. He received the message from the RHNG employee about everything being ready and released, and that he could tow the passenger stairs away from the aircraft. When asked whether the RHNG employee checked whether the aircraft's door was open, closed or open ajar, he stated that he did not know as he was not watching it. The RCA has further stated that he usually receives an instruction from the steward who stands by the aircraft's door that he is cleared for removing the passenger stairs. This instruction is carried out by giving the thumbs up sign. In this case the front door was left ajar, it was not fully closed. He therefore went up the stairs in order to enquire the steward whether he can detach and remove the stairs. He approached the door of the aircraft and there, directly at the door, he saw the steward standing, to whom he said: "Can I leave steps?" or something like that, he could not remember exactly. Either way, it is confirmed that he asked in English, whether he could detach and remove the stairs. The steward nodded with his head in a downward direction, but did not say anything. The RCA interpreted his gesture as a permission to remove the stairs. Because the stairs are operated at the bottom, he went downstairs and before removing them, he looked up to see whether the door was closed. He saw the door ajar in such a manner that it was only slightly protuberant from its frame. After that, at 07:06 he detached and removed the stairs from the aircraft to the distance of about 10 m outside the stand No. 2 zone.

Shortly afterwards the SCA came out of the flight deck and handed two copies of the U6 740 loadsheet signed by the aircraft Commander and the SECURITY form which she had ready beforehand over to the Station Manager. The Station Manager, after receiving all the documents, thanked the SCA and bid her good bye. At 07:07:43 the Station Manager pushed the ajar front door energetically and stepped out backwards from the Airbus A320 door. The towed passenger stairs had already been towed away and the Station Manager fell down from the height of 3.5 m to the APN M, stand No. 2.

A RHNG LKV employee, having noticed the incident taking place, called the RCA and notified ARFF and the HNG in order to call the rescue service. The ARFF team and later on the KV rescue service stabilised the injured Station Manager and afterwards transported her to the University Hospital in Pilsen by air.

The incident was reported to the Police of the Czech Republic. The Police inspected the location of the incident and drafted an official report with the RHNG LKV staff. No prohibited substances were detected in the RHNG staff by toxicological examination. They collected the footage recorded by the CCTVs at LKKV, which recorded the said incident, and the ATC of the CR was required to provide the recording of communication between the flightcrew of the Ural Airlines JSC Airbus A320, registration VQ-BRE aircraft and the LKKV TWR.

1.2 Injuries to Persons

Injury	Crew	Passengers	Others (inhabitants, etc.)
Fatal	0	0	0
Serious	0	0	1
Light/No injury	0/0	0/0	0/0

1.3 Damage to Aircraft

NIL

1.4 Other Damage

NIL

1.5 Personnel Information

1.5.1 Station Manager

Age/Gender: 41 years/female
Employment: East-West Aeros s.r.o.
Official position, qualification: Station Manager-Operator

The Station Manager acquired her experience for her position during operation at different airlines. Approximately from 2006 she worked for the Hungarian national airlines MALÉV. In April 2012 she signed an employment contract with East-West AERO s.r.o., which represents the Russian Ural Airlines JSC in the Czech Republic. The home base of the airline is at the aerodrome Koltsovo - Yekaterinburg in the Russian Federation.

The Station Manager stated that during the whole time while she was present on board of the aircraft, in the proximity of the door, nobody approached the front door. She had not seen any member of the crew issuing a consent to the passenger stairs removal and neither she had issued such a consent herself to anyone.

She further stated that there had not been provided any specialised training by the LKV s.r.o. operator for the East-West s.r.o. employees. She was carrying out the activities within the scope of her duties based on the self-learned observation and consultation with her colleagues.

She had not been specially trained for the aircraft front door manipulation. She had not undergone any special training nor examination at any airline that would authorise her to carry out any such sort of operations.

1.5.2 Ramp Control Agent

Age/Gender: 46 years/male Employment: RHNG LKV s.r.o.

Official position, qualification: Ground Handling Operator

LKV s.r.o. employee working in the ground operation section where he has been employed for the last three and half years as a ground handling operator.

LKV s.r.o. management documentation does not state the level of language command of the RCA in order to ensure the readiness to perform the relevant operations.

The RCA's operation on APN M during the incident was not supervised or monitored by anyone.

1.5.3 RHNG LKV s.r.o. Staff Member.

Age/Gender: 27 years/male Employment: RHNG LKV s.r.o.

Official position, qualification: Ground Handling Operator

LKV s.r.o. employee working in the ground operation section where he has been employed for the last two years as a ground handling operator. He was only preparing the stairs and did not communicate with the crew.

1.5.4 Senior Cabin Attendant

Age/Gender: 55 years/female Ural Airlines j.s.c.

Official position, qualification: Cabin Crew

The primary area of SCA's responsibilities was the co-ordination of the crew operation on board of the aircraft. Her attention was divided between the attendance to the passengers, PA announcement and communication with the steward and the Station Manager. Having concluded the announcement, she noticed that the SM was standing sideways to the front door which the SM had brought to ajar position and was holding it with her left hand by the door grip-handle. She did not respond to the incurred situation in any way. She brought the signed flight documentation from the flight deck. She had received the command to close the aircraft and to remove the stairs from the aircraft Commander. This command was not, however, relayed to the RCA. She did not notice the stairs being towed away from the aircraft.

According to the statement of the SCA, the state of affairs was the same at all flights from LKKV. The cabin crews generally had nothing argue against the familiar procedure.

1.6 Aircraft Information

1.6.1 General Specifications of the Aircraft

Airbus A320 is a jet passenger aircraft of classic design - low-wing monoplane powered by two turbofan engines under the wings, standard tail-surfaces, and a tricycle landing gear. Two access doors can be used for the boarding of passengers

Type: A320-214 Registration: VQ-BRE

Operator: Ural Airlines j.s.c.

Manufacturer: Airbus Year of manufacture: 2006 Serial number: 2998

1.7 Meteorological Information

1.7.1 Extract from the METAR Report at LKKV

0608 0700 METAR LKKV 060700Z 13004KT CAVOK 23/17 Q1018 RMK REG QNH 1014= 0608 0730 METAR LKKV 060700Z 12003KT CAVOK 25/17 Q1018 RMK REG QNH 1014=

1.8 Radio Navigational and Visual Aids

NIL

1.9 Communications

The aircraft flight crew was in communication with the LKKV TWR

1.10 Aerodrome Information

LKKV is a public international airport located 4.5 km SE from Karlovy Vary. The permitted types of operation: VFR/IFR.

1.11 Flight Recorders and Other Means of Recording

In order to identify the causes of the incident, the footage recorded by the CCTV's at LKKV, which recorded the said incident, was collected and the Commission was provided with the recording of communication between the aircraft flight crew and the LKKV TWR. The records provided for analysis were legible and complete.

1.12 Event Location Information

On APN M there are four nose-in stands marked where the self-propelled aircraft are guided with their noses towards the existing development (terminal facility, TWR, hangar). Following ground procedures the aircraft are pushed by a towing vehicle from the stand to a taxiway strip on APN M. The marks, including stand marking on APN and roads were made in compliance with Rule L-14 and the guideline "Traffic Control on the Airport Karlovy Vary Aprons". Area of stand No. 2 had a concrete surface.

Event location:

goographical coordinates:	N 50°12′7,32′′	
geographical coordinates:	E 012°54′40,76′′	
elevation:	606 m	

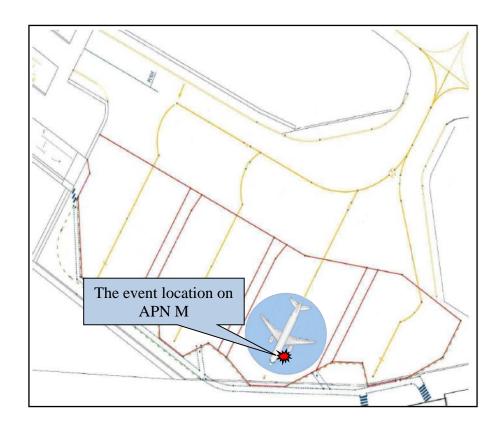


Fig. 1 Marking of the event location on APN M LKKV, stand No. 2



Fig. 2 The ajar front door from the cabin and from the vantage point of a person on the passenger stairs top platform

1.13 Medical and Pathological Information

Upon the fall, the Station Manager suffered pelvis fractures, damage of the cervical vertebrae, multiple rib fractures, insensitivity and movement ability impairment of the left leg and open vertex injury.

The Station Manager was not operating under the influence of prohibited substances, medications or drugs. No trace of ethanol (alcohol) was proven in her blood stream by the toxicological examination.

At the time of issue of this Final Report the treatment of the Station Manager was still in progress.

1.14 Fire

NIL

1.15 Survival Aspects

No search and rescue procedures were organised. After the first aid administration the ARS came to the site and the Station Manager was transported airborne to the University Hospital in Pilsen.

1.16 Tests and Research

NIL

1.17 Information about operational organization

1.17.1 Operator of LKV s.r.o.

The operator renders services in the field of aircraft ground procedures to airlines and other aircraft operators in the extent and standard usual at the international airports and in accordance with the Operating and Maintenance Manual of a given aircraft type. The employees of LKV s.r.o., a handling company, had experience with provision of services both to regular transport carriers and to general aviation clients, including the services for VIP clients. They concluded a valid contract with Ural Airlines JSC.

LKV s.r.o., RHNG department, has submitted records capturing the dates and content of practical training of operating personnel for operation of ground service equipment. Training was organised on the regular basis and its content corresponded with the BP-02-01/1 document titled Outline of Practical Training for Operators of Handling Means.

Internal standard LKV-VN-I-09-11 titled Traffic Control on the Airport Karlovy Vary Aprons describes the LKKV aprons, guidelines and procedures for controlling traffic on these aprons and identifies the competences, duties and responsibilities as well as requirements for qualification and training of the relevant operating personnel.

Ground procedures of civil business aircraft are generally based on the rules published in IATA AHM, which besides other things stipulates that the personnel shall have documentation available in a language comprehensible to them. Considering the fact that LKV s.r.o. personnel do not have the knowledge of the Russian language, the documentation (or at least its appropriate parts) have to be made accessible to them in a language comprehensible to them.

- The Operator did not stipulate the required level of knowledge of the designated language for the handling personnel
- The Operator did not provide the performance supervising system plan within the organisation and was not supervising the activities of the RCA's on APN.
- The Operator did not perform internal process auditing in the area of ramp handling services. The Commission has neither been presented with an internal process audit of LKKV aerodrome report from Ural Airlines JSC.

1.17.2 Ural Airlines JSC Representative.

East-West AERO s.r.o. is the General Sales Agent (GSA) and representative of Ural Airlines JSC in the Czech Republic. This limited liability company was established and is existing under the law of the Czech Republic. Within the scope of its business, the company does business in tourism. It caters mainly in tasks of airline operations at the check-in of passengers, supervising the aircraft ground services, relationships with the customers and sales of transport documents.

The company concluded a valid contract with Ural Airlines JSC in March 2011.

- The company did not provide for its personnel any specialised training with the LKV s.r.o. operator aimed at rendering of handling and ground services to the airlines.
- It was not effectively co-operating with Ural Airlines JSC in the area of training and lecturing of its personnel, including the area of specialised health and safety regulations.

1.17.3 Ural Airlines JSC

In April 2013 the company concluded a valid standard contract regarding the supply of the ground services with LKV s.r.o. (handling of the aircraft on the apron, passengers and their luggage, cargo and mail) for arrivals to and departures from LKKV. On 15 March 2013 the company submitted the 5th revised edition of the Ural Airlines JSC GOM in the Russian language. Russian is one of the official languages used in ICAO.

Aircraft Ground Operations Manual of Ural Airlines JSC – Section 4 reads as follows:

"The driver can drive away the air stairs only on permission of the aircraft commander. In order to prevent any damage to the aircraft, the air stairs shall be moved under a continuous control of the person responsible for the ground handling until being remote at a safe distance from the aircraft."

It is clearly stated in the Aircraft Ground Operations Manual that the command to remove stairs and close the door is issued by the aircraft commander.

1.18 Additional Information

1.18.1 Towed Passenger Stairs CDS 1842

The regulations for operations carried out on APN M were, according to the M/SQM statement, stipulated by the internal LKV documentation (Transport and Operation Code of the International Airport Karlovy Vary - LKV-VN-I-10). The operation of the towed passenger stairs on APN itself was subject to appropriate regulations and standards stated in The Manual for Motor Vehicles and Other Machinery Operation, registration No. PZ-D5-3-00/67.

The towed passenger stairs CDS 1842 are designed to serve for boarding and disembarking of passengers from the aircraft with doors located between 1.8 m and 4.2 m above the ground. The lift of the stairs is provided with hydraulic cylinder equipped with an independent hydraulic circuit with a pump powered by either electromotor or a handpump.

The stairs are mounted on a towed chassis made of closed steel profiles. The top platform sides are skirted with a sliding railing furnished with a rubber bumper at the front.

For an easy manipulation with the stairs these are equipped with an electro-hydraulically powered two-speed carriage.

The towed passenger stairs may be operated by instructed and trained personnel only. At least two staff members should operate the stairs at all times.

The general rule is that the command to detach and remove the stairs may be issued by the aircraft crew only whereas with a clearly formulated, comprehensible requirement to the handling personnel in charge of the ground operations.

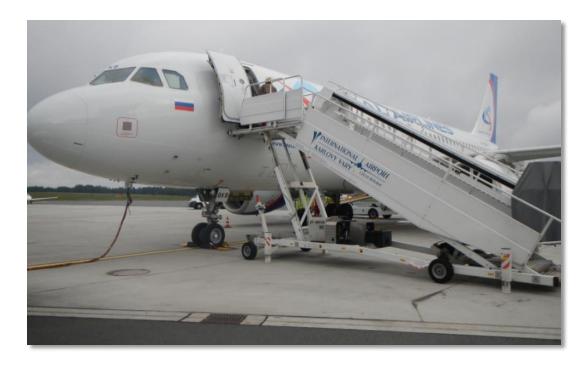


Fig. 3 Towed passenger stairs CDS 1842

1.18.2 Video Recording

From the footage recorded by the CCTV's located on the structure in the vicinity of the incident location it was feasible to clearly identify individual steps in the RCA's performance at the time just before the Station Manager's fall from the board of the aircraft, including the time necessary for the removal of the towed passenger stairs from the apron. Also, the Station Manager's activity when closing the aircraft front door ajar and her falling down on APN M was demonstrably recorded

1.18.3 Language Version of the Managed Documentation

The international standard does not stipulate whether the documentation in the respective language version shall be submitted by the air carrier or whether translation shall be provided for by the handling service provider itself. Generally speaking, the air carrier issues its instructions (manuals) in its national or English language. Translation of documentation (usually from the English version) is ensured by the handling service provider for the personnel with insufficient command of the given language (usually workmen and some salaried employees). Other than English documentation is not usually translated.

Nevertheless, it is in the interest of the airlines that the operating personnel know and adhere to the procedures specified by the managed documentation

1.19 Useful or Effective Investigation Techniques

L 13 Rule was observed during the investigation of this incident.

2. Analysis

2.1 Ramp control agent procedures

From the footage recorded by the CCTVs and after evaluation of the RCA's performance on the passenger stairs top platform throughout the incident time period, it is very probable that the RCA remained there for a very short time (approx. up to 2 seconds). Within such a short time he did not have enough time nor space to address the steward, whom he had seen in the gap between an ajar front door and the aircraft fuselage, in request whether he could detach the passenger stairs.

Non-verbal communication is used in airline operation. It is, however, necessary to bear the possibility of misunderstanding or misinterpretation in mind.

There is no entry for non-verbal instruction to detach/remove the passenger stairs in the ICAO hand signals list. It, therefore, could not have been used.

In it managed documentation, LKV s.r.o. did not determine the required level of language needed by the RCA.

2.2 RHNG LKV s.r.o. Staff Member.

On the RHNG staff member's part the procedure was performed in a routine manner without any instructions or consultation beforehand. Once all the passengers are on board, one of the staff members releases the passenger stairs so that the RCA is able to detach and remove them. The RHNG staff member was preparing the stairs only, was not in any communication with the crew was not following the movements and activity of the ground personnel in the area immediately surrounding him either.

He did not follow the standard procedures for detaching and removing the passenger stairs from the aircraft (the time sequence of the individual steps).

2.3 Station Manager

From the health and safety perspective during the time when the passengers are on board of the aircraft, the APU and the air conditioning are running, and whilst there exists a possibility of an emergency occurrence that would require the possible consequent aircraft evacuation, any operation with the door as the means of an emergency and rescue means by a person who had not been properly instructed and trained (the command of the emergency procedures, evacuation, the slide release, crowd management) is potentially dangerous for all the persons on board.

The Station Manager's use of the front door without any prior consultation with the crew was unauthorised. She respected neither the standard procedures of the airline nor the competences of the aircraft crew. It can be safely assumed that the Station Manager did not operate the door for the first time. All evidence indicates that this form of procedure had been tolerated repeatedly by the Ural Airlines JSC crews.

The Station Manager stepped out backwards with her head turned towards the aisle without making sure whether the stairs were in a position adjacent to the aircraft.

As a Station Manager, she had not been trained and examined of the command of the managed documentation and service operation procedures with the LKV s.r.o. operator. According to her statement she does not recall any such training, whether initial or recurrent courses. Prior to her current employment she worked with another airline in an administration department.

2.4 Senior Cabin Attendant

SCA was responsible to the aircraft Commander for the standard as well as emergency procedure operations execAttendentution and co-ordination as stipulated in the operating manual of the airline. Her attention was divided between the attendance to the passengers, PA announcements and communication with the steward and the Station Manager. SCA was not aware of the activities taking place in the area of the access door. She did not respond to the Station Manager's wilful pushing of the front door. She received the command to remove the stairs from the aircraft Commander. Nobody, however, relayed this command to the RCA. She did not notice the stairs being towed away from the aircraft. She tolerated the lack of observance to the internal airline procedure standards.

The Ural Airlines JSC crews had not been objecting to the routine of the procedures, there had not been any written objections to the performance of duties of the personnel who had not followed the GOM instructions

2.5 Operators

2.5.1 Operator of LKV s.r.o.

LKV s.r.o., RHNG department has presented the dates and contents of the practical training sessions in operating the handling machinery for the operation personnel. Training was organised on the regular basis and its content corresponded with the BP-02-01/1 document titled Outline of Practical Training for Operators of Handling Equipment.

The operator has not submitted any documentation specifying the RCA operation, the rules for communication with the aircraft crew and the methodological procedures for safe detachment and removal of the towed passenger stairs.

The aircraft manipulation was performed by the handling personnel in accordance with the Airport Handling Manual for the relevant type of aircraft. The contents of an approved handling personnel training programme have, however, not been presented.

The Operator was not, in the time of the incident, in possession of a complete managed documentation which was at that time circulated for internal comments and approval.

2.5.2 Ural Airlines JSC.

The airline has stipulated in the GOM that the command to detach and remove the stairs and to close the doors is issued by the aircraft commander. It has not, however, stipulated in what manner and through whom the said command would be issued, from the point of view of communication as well as from the point of view of practical application. The instruction issued is too vague and general.

It has not presented the crew's objections to activities of the ground personnel providing handling services at LKKV occurring upon the breach of GOM instructions and systematically did not instruct the flight personnel to effectively report any such discrepancy

2.6 Meteorological Conditions

The weather at the event location at the given time was no aspect relevant to the emergence and development of the incident.

3. Conclusions

Having reviewed and analyzed all available information and documents, the Commission has concluded on the followings:

3.1.1 Ramp Control Agent

- Did not adhere to the instructions applicable to detaching the towed passenger stairs from the aircraft.
- Did not have a sufficient availability of language in order to be able to communicate with the air crew.
- Was carrying out his duties on a routine basis.

3.1.2 Station Manager

- She held a valid medical certificate and the health failure as the grounds for the subject incident was ruled out.
- Was not authorised to operate the front aircraft door and was not specially trained for the authorised use thereof.
- Before stepping out of the aircraft, she did not make sure whether the stairs were in a position adjacent to the door she was intending to use.
- Was not properly trained for the performance of her position and was operating
 on basis of the knowledge she had acquired by herself and from observing the
 example of her colleagues.

3.1.3 Operator of LKV s.r.o.

- LKKV infrastructure was no aspect relevant to the emergence and development of the incident.
- The operator did not determine the manner of supervision of RCA's operation on the APN.
- The training programme of the ground personnel was, at the time of the incident, still in the process of development; the synopses for the lectures had been created, the contents of the lectures, however, were not presented.
- The operator did not have the RHNG personnel language skills level requirements stated in its managed documentation.
- The operator did not perform process auditing in the area of ramp handling services.
- The operator has failed to present evidence of state supervision over the provider of handling services to third parties at LKKV.

3.1.4 Ural Airlines JSC

- The airline tolerated the lack of observance to the internal airline procedures. The above mentioned procedures were not clearly and specifically formulated in the managed documentation of the airline, they did not correspond with the real situation and operation requirements.
- The airline did not have an established system of event reporting from the service providers at LKKV.
- The airline did not carry out any internal process auditing at LKKV despite the fact that it was a regular connection to the airline's regular destination.

3.1.5 East-West AERO s.r.o.

- Did not provide any specialised training with LKV s.r.o., RHNG department for its personnel.
- Was not sufficiently effectively co-operating with Ural Airlines JSC in the area of training and lecturing its personnel, specialised health and safety regulations training included.

3.2 Causes

The incident was caused by:

- Infringement of the RCA operation procedure for detachment and removal of the towed passenger stairs from the aircraft.
- Unauthorised use of the front door on the side of the Station Manager and her inattention when leaving the aircraft as she did not make sure whether the passenger stairs were in a position adjacent to the aircraft.

Contributory faktors:

- The lack of observance of internal regulations of all operators and airlines concerned. Substitution of all regulations valid at that time with personal (alternative) procedures, inadequacies in the managed documentation and overfamiliar internal environment in all the individual companies concerned,
- Inadequate performance on the part of the process internal auditory bodies as well as the lack of the state supervision over LKV s.r.o.

4. Safety Recommendations

CAA should supervise the LKKV operator and possible findings should be addressed.

CAA should supervise the providers of handling services at LKVV and possible findings should be addressed.

The providers of handling services which are authorised to provide handling services - Handling of Aircraft in the Operating Area, Handling of Passengers, Luggage, Cargo and Mail - shall be informed about this incident.

Other public aerodromes with international and national traffic in the Czech Republic shall be informed about this incident by AAII through authorised persons.

5. Appendices

NIL