

Incident / Accident Investigation Report Form

Esemény üzemeltetői vizsgálati jelentés

I.a.w. the requirements of 13/2000. (V.31.) KHVM-HM-EuM Joint Decree of the Republic of Hungary (about the rules of professional investigation of aviation accidents and incidents)
A 13/2000. KHVM-HM-EuM rendelet előírásai szerint.

Report No.: 05/2005 FAH ; 219/2005 PoLéBiSz:

Jelentés száma:

A/C Operator: FARNAIR Hungary Kft.

Repülőgép üzemeltetője:

A/C Manufacturer: LET

Repülőgép gyártója:

A/C Type: L 410 UVP-E

Repülőgép típusa:

A/C Nationality: Hungarian

Repülőgép nemzetisége:

A/C Registration: HA-LAS

Repülőgép lajstromjele:

Occurrence: Incident

Esemény:

Occurrence date and location: LRTS/TSR 18:20 LT

Esemény dátuma és helye
2/SEP/2005

Incident / Accident Report Form No.: 05/2005.

Esemény / Baleset Bejelentő Nyomtatvány száma:

Composition of Investigation Team:

Repülőesemény vizsgálati bizottság összetétele:

VARGA, Levente; ROZSOS, László; KÁROLYI, Imre

Short Overview of Event and Actions Taken:

Az esemény és a fogantatosított intézkedések rövid áttekintése:

FLIGHT AHU3101 HAS DEPARTED FROM LRTS / TSR AT 17:17UTC. 3 MINUTES AFTER TAKE-OFF SUDDENLY UNUSUAL, UNKNOWN NOISE WAS HEARD FROM THE CABIN/ENGINES. NO UNUSUAL ENGINE PARAMETERS OR SIGNIFICANT CHANGE IN THE PARAMETERS WAS OBSERVED BY THE CREW. THE INCIDENT WAS NOT IDENTIFIED AND DECLARED AS AN EMERGENCY, BUT THE CREW DECIDED TO ABORT CLIMBING AND LANDED BACK TO TSR AIRPORT FOR DEFECT IDENTIFICATION. AFTER LANDING THEY HAVE SCENTED LIGHT SMELL. CHECKING THE CARGO COMPARTMENT THEY FOUND THE TEMPERATURE ON THE CEILING (INSIDE OF THE CABIN) UNDER THE WING INTERSECTION HIGHER THAN USUAL AND OTHER PART OF THE AIRCRAFT. THE HEATING SYSTEM'S HEATING COMPENSATOR (P/N: L410-8510-05) WAS FOUND DEFECTIVE AND WAS REPLACED.

Short summary of possible causes:

Az esemény okainak rövid összefoglalása:

THE PLACEMENT OF THE HEATING COMPENSATOR GIVES THE POSSIBILITIES OF THIS MALFUNCTION. IT IS A KNOWN DEFECT (BY OTHER OPERATORS AND THE FACTORY ITSELF) ARISING FROM A BAD CONSTRUCTION DESIGN OF THE SYSTEM, BUT WAS NEVER CORRECTED BY THE MANUFACTURER. (Remark: FARNAIR HUNGARY LTD has already sent reports several times for the manufacturer for resolving this problem, without any follow-up from their side.)

1. Facts / Ténybeli Információk

1.1. Description of Flight / A repülés lefolyása

FLIGHT AHU3101 HAS DEPARTED FROM LRTS / TSR AT 17:17UTC. 3 MINUTES AFTER TAKE-OFF SUDDENLY UNUSUAL, UNKNOWN NOISE WAS HEARD FROM THE CABIN/ENGINES. NO UNUSUAL ENGINE PARAMETERS OR SIGNIFICANT CHANGE IN THE PARAMETERS WAS OBSERVED BY THE CREW. THE INCIDENT WAS NOT IDENTIFIED AND DECLARED AS AN EMERGENCY, BUT THE CREW DECIDED TO

ABORT CLIMBING AND LANDED BACK TO TSR AIRPORT FOR DEFECT IDENTIFICATION.

1.2. Personal Injuries / Személyi sérülések

None.

1.3. A/C Damage / A légi jármű rongálódása

THE HEATING SYSTEM'S HEATING COMPENSATOR (P/N: L410-8510-05) WAS FOUND DEFECTIVE AND WAS REPLACED.

1.4. Other Damages / Egyéb kár

None.

1.5. Flight Crew Data / A személyzet adatai

The commander of the flight on the given date was a 48 years old L410 commander, Hungarian citizen, working permanently for FAH. He had valid ATPL licence with proper type rating. His medical certification was also valid on the given date. The F/O, Hungarian citizen, was 43 years old L410 F/O, working permanently for FAH. He had valid ATPL licence with proper type rating. His medical certification was also valid on the given date.

1.6. A/C Data / A légi jármű adatai

A/C registered as HA-LAS was in permanent FAH operation and maintenance since many years. The aircraft was in servicable condition in the morning of the incident.

1.7. Meteorological Data / Meteorológiai adatok

Meteorological conditions were suitable for the planned flight on the day of the event.

1.8. NAV Equipment / Navigációs berendezések

Were functioning properly. The incident has no connection related NAV equipment functionality.

1.9. Communication / Összeköttetés

Communication with ATC was reported normal and uneventfull during the whole flight.

1.10. Airport Data / Repülőtéri adatok

Departure and returning airport TSR/LRTS. There were no remarkable aspects of the event related to the airport itself. Not applicable for the incident.

1.11. Flight Data Recorders / Légi jármű adatrögzítők

The analyses of the FDRs were not found to be necessary during the assessment of the event, since not containing data related to heating system.

1.12. Impact and Wreckage Data / A roncsra és a becsapódásra vonatkozó adatok

None.

1.13. Medical Data / Orvosi és igazságügyi-orvosszakértői adatok

Both crew member had valid medical certificates during the event. Otherwise, there is no other remarkable medical aspect of the incident.

1.14. Fire / Tűz

None.

1.15. Survival Possibilities / A túlélés lehetősége

Not applicable

1.16. Experiments and Tests / Próbák és kísérletek

None.

1.17. Description of other Services and Organizations / A szervek jellemzése

Not applicable.

1.18. Additional Information / Kiegészítő adatok

None.

1.19. Effective Investigation Techniques / Hasznos kivizsgálási módszerek

Nothing remarkable.

2. Analysis / Elemzés

THE PLACEMENT OF THIS HEATING COMPENSATOR GIVES THE POSSIBILITIES OF THIS MALFUNCTION. IT IS A KNOWN DEFECT (BY OTHER OPERATORS AND THE FACTORY ITSELF) ARISING FROM A BAD CONSTRUCTION DESIGN OF THE SYSTEM, BUT WAS NEVER CORRECTED BY THE MANUFACTURER. (Remark: FARNAIR HUNGARY LTD has already sent reports several times for the manufacturer for resolving this problem, without any follow-up from their side.)

THE PLACEMENT OF THIS COMPENSATOR IN THE L 410 UVP-E (ONLY IN THIS VARIANT) AIRCRAFT TAKES THE POSSIBILITY OF THE OCCURANCE OF THIS DEFECT. THE TWO PIPES ARE CONNECTED BY THE COMPENSATORS ARE NOT IN LINE (CO-AXIAL). BECAUSE OF THE VIBRATIONS AND TENSION IN THE COMPENSATORS THE DISTORTION AND EVENTUALLY THE CRACK OF THE COMPENSATOR IS POSSIBLE BUT THIS CRACK DOESN'T INFLUENCES THE SAFETY OF THE FLIGHT. SOMETIMES THE LEAKAGE ACCOMPANIED BY THE UNUSUAL NOISE.

HOWEVER, SUCH SUDDEN PUNCTURE AND UNUSUAL NOISE IS RARELY EXPERIENCED WITH THIS DEFECT, THAT'S WHY THE CREW WAS NOT ABLE TO IDENTIFY THE DEFECT PROPERLY.

IN EVERY 300 FHRS MX WORKS, THE INSPECTION OF THE CONDITION OF THE COMPENSATORS ARE PRESCIBED AND IT IS CARRIED OUT BY THE MAINTENANCE GROUP I.A.W. THE APPROVED MAINTENANCE SCHEDULE OF THE AIRCRAFT. INSPITE OF THE INSPECTION, THIS KIND OF MALFUNCTION IS POSSIBLE DURING OPERATION, HEAT COMPENSATOR LEAKAGE IS OBSERVED BETWEEN THESE INTERVALS. ON THE HA-LAS REG. AIRCRAFT THIS COMPENSATOR WAS REPLACED DURING THE LAST 12 MONTHS MS WORKS (ON 13RD OF MAY 2005).

3. Conclusions / Következtetések

THIS KNOWN DEFECT DOES NOT EFFECT FLIGHT SAFETY AND DOES NOT REVIEWED BY THE MANUFACTURER. FAH SHOULD HIGHLIGHT THIS PROBLEM FOR THE FLIGHT CREWS AND FOR THE G/E STAFF AS WELL AND CONTINUE TO KEEP THE CONDITION OF THE COMPENSATORS UNDER REVIEW.

4. Flight Safety Recommendations / Biztonsági ajánlások

FOR CREWS: COMMUNICATE THE CONCLUSIONS OF THE EVENT AND INCORPORATE INTO THE REFRESHER TRAININGS THIS DEFECT'S OCCURANCE AND THE ACCOMPANYINGEFFECTS OF THE DEFECTS ON AIRCRAFT SYSTEMS (HEATING – DE-ICING).

FOR G/Es: HIGHLIGHT FOR THEM THE CONCLUSIONS AND THE IMPORTANCE OF THE INSPECTION OF THE COMPENSATOR PLUS THE CREW REPORTS THAT CAN POINT OUT BEGINNING COMPENSATOR LEAKAGE.

5. Appendices / Függelékek

None

Date of Report Completion / A jelentés lezárásának időpontja:

16/FEB/2006.

Signatures of Investigation Team Members / A bizottság tagjainak aláírása: