

Incident / Accident Investigation Report Form

Esemény üzemeltetői vizsgálati jelentés

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

Report No.: 01/2004

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-LAE

Repülőgép lajstromjele:

Occurrence: Incident

Esemény:

Occurrence date and location: BUD 07:45 LT 8/OCT/2004

Esemény dátuma és helye

Incident / Accident Report Form No.: 01/2004

Esemény / Baleset Bejelentő Nyomtatvány száma:

Composition of Investigation Team:

Repülőesemény vizsgáló bizottság összetétele:

Levente Varga, Flight Safety Officer of FARNAIR Hungary

Short Overview of Event and Actions Taken:

Az esemény és a foganatosított intézkedések rövid áttekintése:

On 8/OCT/2004 the flight FAH6994 departed from BUD in accordance with normal operational schedule. Shortly after departure, the ATC reported no correct transponder sign from the aircraft. The crew have tried to select #2 transponder set, but it did not cured the problem, still no transponder sign. Then the crew decided to cancel the flight and returned to BUD for defect rectification.

Short summary of possible causes:

Az esemény okainak rövid összefoglalása:

After the defect rectification it became clear that the transponder unserviceability was caused by a malfunctioning switch on the nose landing gear leg, which signalises takeoff for the transponder system.

1. Facts / Ténybeli Információk

1.1. Description of Flight / A repülés lefolyása

On 8/OCT/2004 the flight FAH6994 departed from BUD in accordance with normal operational schedule at 05:40UTC towards destination BBU. With no preliminary signs, shortly after departure, the ATC reported no correct transponder sign from the aircraft. The crew have tried to select #2 transponder set, but it did not changed the situation, the ATC was still not able to receive transponder sign from FAH6994. After this unsuccessful event, the crew have decided to cancel the flight and returned to BUD for defect rectification. The flight has ended uneventfully afterwards. The aircraft blocked on at 06:05UTC at BUD.

1.2. Personal Injuries / Személyi sérülések

None.

1.3. A/C Damage / A légi jármű rongálódása

FARNAIR Hungary Ltd.
PO BOX 173. H-1701 Budapest, Hungary
VAT No.: 10555415-2-43
☎ +36 1 347 60 40 Fax: +36 1 347 60 49
Email: fah@farnair.hu Web: www.farnair.com



Cert No.: 80064-1

None.

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 for the type. His medical certification was also valid on the given date. The F/O of the flight on the given date was a 54 years old L410 commander, Hungarian citizen, working permanently for FAH. He had valid ATPL Licence with proper type rating for the type. His medical certification was also valid on the given date.

1.6. A/C Data / A légi jármű adatai

The aircraft registered as HA-LAE was manufactured in 1990 and is in permanent operation with FARNAIR Hungary for a long time. The line and base maintenance organization is also FAH for the L410 aircraft type. The aircraft was released from an 600 FHRS base maintenance check + a TCAS system installation, the day before the event (7/OCT/2004), with 6755 TTSN and 6994 TCSN. The aircraft was released in serviceable condition with no incomplete maintenance remaining on it.

1.7. Meteorological Data / Meteorológiai adatok

Meteorological conditions were suitable for the planned flight on the given date. Weather conditions did not play any significant role in the event.

1.8. NAV Equipment / Navigációs berendezések

Besides the malfunctioning transponder set #1 and #2, all other NAV equipment were serviceable on board of the aircraft. There was no navigational problem reported during the entire flight, and no remarkable navigational aspect of the event was found.

1.9. Communication / Összeköttetés

Communication on the ATC frequencies, on FAH Company frequency and on board of the aircraft was continuously fully functioning during the entire flight. Communication problems did not emerge and did not play any significant role in the event.

1.10. Airport Data / Repülőtéri adatok

The incident happened in the close vicinity of BUD airport. There were no remarkable aspects of the event related to the airport itself.

1.11. Flight Data Recorders / Légijármű adatrögzítők

The analyses of FDRs were not found to be necessary during the assessment of the event.

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

Not Applicable.

1.13. Medical Data / Orvosi és igazságügyi-orvosszakértői adatok

Both pilots had valid medical certification at the time of the event. 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

None.

2. Analysis / Elemzés

The aircraft was released from a 600 FHRS base maintenance check (CRS No. 015/04) and a TCAS system installation (i.a.w. FAH bulletin No L-410-34-FAH 013), the day before the event (7/OCT/2004). The installation of the TCAS system meant the installation of new S-mode transponder system as well and also during the 600 FHRS MX check, all required NAV and COM equipment were maintained and checked i.a.w. the approved maintenance schedule of FAH for the L 410 UVP-E aircraft fleet. For the release to service of the aircraft after these maintenance tasks, all required ground tests were completed with successful result. TCAS and transponder systems were also tested and were serviceable at release. During defect rectification it became clear that the transponder unserviceability was caused by an unreliably functioning switch on the nose landing gear leg. This switch signals take-off also for the transponder system. This inhibits the functioning of the TCAS system on ground. The functioning of the switch was tested during the maintenance release, but at that time, there was no sign of unreliability. After the replacement of the defective switch, the systems were functioning again flawlessly.

3. Conclusions / Következtetések

After the assessment of the event, it can be concluded that the transponder system unserviceability was caused by an unreliably functioning inhibitor switch on the nose wheel leg. This switch did not show malfunctioning on the previous days during testing. Therefore, the defect was not predictable. After the replacement of this switch, the defect was rectified.

4. Flight Safety Recommendations / Biztonsági ajánlások

It is recommended by FAH that the reasons of the defect and the conclusions of the event should be communicated to the G/E staff of FAH for return of experience.

5. Appendices / Függelékek

None.

Date of Report Completion / A jelentés lezárásának időpontja:

3/JUN/2005

Signatures of Investigation Team Members / A bizottság tagjainak aláírása:

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke extending to the right.