

EXECUTIVE SUMMARY – 429th UKFSC SIE MEETING – 30 MARCH 2016

1. **Pilot incapacitated by eye irritation following incorrect soft contact lens use after unplanned night-stop. Corrective spectacles not being carried. (5.1)**
2. **Vehicle collided with parked aircraft on poorly lit area of ramp. (5.1)**
3. **Confusion and poor understanding of EASA FTL definitions of ‘duty at airport’ and ‘standby at airport’ (5.2)**
4. **Patchy adherence to flight deck door procedures reported. Questions on regulatory requirements. (5.2) (5.14)**
5. **Increase in drone and met balloon involvement in Airprox incidents. (5.4)**
6. **Pushback issues leading to ground damage and increased risk of injury. Proposal for harmonised terminology put to Airbus, Boeing, FAA and IATA. (4.4) (5.5) (5.10) (5.11) (5.13) (5.16)**
7. **Captain elected to continue sector following minor wing-tip strike and own inspection of damage. (5.6)**
8. **Anecdotal evidence of private operators opting for Isle of Man registration and postal addresses to avoid CAA scrutiny of UK-based operations. (5.6)**
9. **Potable water contamination due to maintenance regime? (5.11)**
10. **Tow bar shear pins broke twice during A330 pushback. Possible failure of bypass lever to disconnect NWS.**
11. **Increased incidence of incorrect flap selections. (5.13)**
12. **Avoidable TCAS RA events being triggered by autopilot rates of climb and descent. (5.13)**
13. **Vehicle runway incursion at XXX and YYY led to Go Around. (4.2) (5.16)**
14. **Airspace infringement MCR, private helicopter 1nm from 05L threshold. (5.19)**

**Dai Whittingham
Chief Executive
27 April 2016**

**MINUTES OF THE 429th MEETING OF THE UK FLIGHT SAFETY COMMITTEE
HELD ON 30 MARCH 2016 AT CAA AVIATION HOUSE, GATWICK**

Those present were reminded of the following Confidential Warning which applies to these minutes and to the contents discussed therein:

These Minutes record the proceedings of matters discussed under the Rule of Confidentiality. Circulation to non-UKFSC members, either in whole or part, is to respect the Rule of Confidentiality which states:

“Details of accidents, serious incidents and incidents which may be discussed at this meeting are to be regarded as confidential. You are entitled to make use of the information within your own organisation but please use it with discretion and do not quote anyone by name or organisation without their prior authority.”

ITEM 4 Chief Executive’s Report

4.1 On the theme of drones, one of the engine manufacturers was believed to have conducted informal tests on drone ingestion; the results were not encouraging. Work in the USA had suggested that the actual risk and consequences of a drone strike may be over-stated. The work was based on birdstrike data but no account had been taken of the ability of birds to avoid (or attempt to avoid) collisions.

4.2 On ground safety, there had been a serious runway incursion at XXX when a driver mistakenly turned towards the runway at night, possibly due to confusion caused by green leader lights for a recently landed aircraft. The incursion was detected by an ATCO from a small return on the surface radar; he stopped the vehicle as it approached the runway edge, and the TWR controller instructed the landing aircraft to go around about 15 seconds from its planned touchdown. The vehicle did not have a transponder fitted. CE had recommended that consideration be given to fitting Luneberg lenses (radar reflectors) to vehicles and suggested that use of simple rally compasses would also help drivers orient themselves on the airfield.

4.3 Pushback safety had been raised at the previous GHOST meeting. Conditional clearances were a regular source of error. The meeting discussed a number of pushback incidents leading to ground damage and, in one instance, a fatality (Mumbai, tug driver ingested by engine). CE noted that ‘pushback complete’ terminology was open to interpretation and had subsequently written to Airbus and Boeing with a proposal that SOPs and checklists be amended so that a pushback was only considered complete when the tug had been disconnected and all ground personnel were clear of the aircraft. Formal responses from both companies were awaited but informal feedback indicated that there was some merit in the proposal.

4.4 CE had attended a meeting at the Dept for Business, Innovation and Skills (BIS) with DfT, Health, Met Police and Home Office officials to discuss laser attacks. The EC General Product Safety Regulations were already being reviewed and this work was likely to lead to changes in acceptable power levels for laser devices in Europe. It was accepted that a change to primary legislation would be required to give police the necessary powers of arrest and search, and it was acknowledged that the problem of laser attacks was not limited to the aviation environment, which indicated the need for separate legislation to deal with the wider problem.

Discussion. New technology for laser protection was being developed and initial signs were promising. NPAS had been conducting trials with existing laser safety products and had commissioned airworthiness assessments on the best candidate systems; the intention was to provide NPAS crews with laser protection before the end of the year.

4.5 ECAST had held its last meeting at EASA as there was no role for this industry consultative body in the new EASA construct. Its work would be swept into a new Collaborative Analysis Group which would assist with the identification of safety issues that would then be raised to the new Stakeholder and Member State Advisory Boards (SAB and MAB). New technical boards will also feed into the SAB and MAB. There were no plans for the SAB and MAB to meet, share information or otherwise reach mutually agreeable positions on risks and priorities, and EASA staff briefed that the EASA Safety Board would reach its own conclusions and would not necessarily follow the SAB or MAB advice.

ITEM 5 Information Exchange and Extracts from MORs

5.1

- The pilot of a xxx declared an emergency because his eyesight had deteriorated and he was in extreme pain; he required assistance from his wingman and ATC to achieve a safe landing. He was returning from an unplanned night-stop and had used a proprietary 'saline' solution to disinfect his soft contact lenses after cleaning them with tap water (neither practice being recommended). He removed the lenses in flight because of pain and irritation, relying on his uncorrected vision being sufficient to land the aircraft but he subsequently became increasingly incapacitated, his right eye closed and his left eye started to cloud over. The pilot had not been made aware of the requirement for him to carry a spare pair of spectacles, nor had his log book been appropriately endorsed.
- A vehicle collided with a parked aircraft at 0159, causing significant damage to both but no injuries. The driver had not seen the aircraft at all; he had seen a similar type on the parking bay but the aircraft he hit was parked between the bay centreline and a grassed area. Lighting in the area was set to 50%, which resulted in only half the bay being illuminated, and the groundcrew for the visiting aircraft were not aware of the local requirement to use reflective avoidance cones.

5.2

- Poor fallback options for EFB services were causing concern. One operator had a 24-hour outage but the fallback system did not provide the same level of coverage. This raised questions about the need to ensure that key IT systems were resilient and that any EFB fallback options met the minimum regulatory requirement.
- There were reports of laxity in the application of flight deck door security procedures. Not all crews were checking the video picture or using the spy-hole before releasing the door.
- EASA FTL had been in place since 18 Feb but the new schemes had generated several reports that reflected poor understanding by the crews and hence possible shortfalls in training. In particular there was confusion over the difference between 'airport standby' and 'duty at airport' and there were suggestions the 'duty' description was being used to avoid having to provide accommodation. If a crew was at the airport with the FDP clock running, this constituted 'duty at airport' for which the operator did not have to provide accommodation, whereas 'standby at airport' meant the FDP clock was not running and that suitable accommodation was required. Crews were interested in the EASA FTL as well as their company scheme but as the schemes were either fully aligned or more stringent than EASA, training could be restricted to the company schemes.

- Health and Safety local enforcement was not always recognising other Human Factors requirements such as the need to avoid distractions during critical tasks. On the other side of the equation, pressure for on-time departures had led to a few incidents of pushbacks starting with passengers standing and overhead bins open.

5.4

- Kirkwall had seen a Cat B Airprox event between a Saab 340 and a PA30 that had joined visually in order to get ahead of the Saab but had ended up conflicting with it. There was no clear ATC plan in a non-radar environment and pilot behaviour was also an issue.
- There had been 2 x Cat A and 1 x Cat B Airprox reports involving drones in Jan 2016, and a further 2 x Cat and 2 x Cat B events in Feb. One of the latter events involved a drone at 100ft over the LGW threshold; the drone operator was not identified.
- Met balloons featured in 1 x Cat A and 1 x Cat B event in March. In the Cat A event, the crew of an A320 saw a balloon at an estimated 200ft range at FL 110; the balloon had been launched from Eastbourne and was not visible on radar.
- A Cat C event involving to Embraer aircraft was generated when the ATCO (for both aircraft) opted to level-swap. The timing was mis-judged and both pilots reduced their rates of climb/descent based on TA information, which led to a loss of separation.

5.5

- Pushback issues had emerged with the different interpretation of the company manuals amongst US colleagues. It appeared the rest of the world was moving towards the US position. The main differences were with coordination, as you could end up with one person showing the NLG pin while a second was still under the aircraft, and the coordinator could stand on either the left or the right of the flight deck.
- There had been issues on stand with ground power being connected before the beacon had been switched off. This was more frequent in the USA due to the prevalence of non-APU ops.

5.6

- Arrival of a new parent company had generated some change management issues. An influx of new people and an increase in tasks had coincided with the regulatory change required for Part NCC ops. As part of this work it had become apparent that there were no set standards for FTL schemes, and no clear guidance had been received from Isle of Man (registration) or the CAA. Some operators in the sector were believed to be aiming to use IoM postal addresses to avoid the need to comply with the CAA rules (because their operations were actually UK based rather than IoM).
- Ground handling at smaller airports was a risk area. An aircraft at Chambery was instructed to taxi clear of a congested parking area and ended up clipping the wing of a parked Cessna; the experienced captain inspected his own aircraft and decided to continue.

5.7

- Poor reporting of laser attacks was a known problem; an analysis in January suggested that only 1 of the 6 known attacks was reported. The issue had been highlighted, reporting was being encouraged and an EFB-based reporting facility was being introduced.

5.8

- The test pilot world had lost two friends recently with the deaths of Capt Winkle Brown (retd) and Ed Strongman (of Airbus). A number of journals had published obituaries for both men.

5.9

- The number of pushback events showed the IGOM was not being routinely followed, whereas the DG manual was treated as a bible. There was even disagreement between

players on events as significant as brake release. IATA members need to engage via the Flt Ops Group.

5.10

- Company used a centralised load control system, but accurate load sheets were an issue, with pilots frequently having to correct them and errors were still being introduced. In a recent incident, the crew only received a final load sheet via ACARS after take-off.
- Pushback incidents were also occurring. A B767 was damaged at Capetown while being towed from a remote stand. The aircraft towbar mounting point broke, possibly due to a tug shear-pin failure; analysis results were awaited. Following an A321 hitting a lighting gantry and one hitting steps on pushback, company has stopped all non- headset pushbacks; there were limitations at Orlando, as use of headsets is not permitted during (frequent) thunderstorm activity.

5.11

- FDM had shown a trend of unstable approaches being continued. One crew had reported a GA at 500ft; FDM showed the approach to be unstable at 1000ft and that the GA commenced at 300ft.
- During an A330 pushback, tow bar shear pins broke twice. The bypass pin was correctly inserted but the nose wheel steering disconnect indication on the ECAM was not showing. Flight deck had not noticed this. The steering bypass pin was then removed and the steering pin bypass lever exercised several times to see if this produce a NWS DISC indication on the ECAM display. As no indication was present, the crew was asked to cycle the brake anti-skid switch in the flight deck OFF/ON to reset the BSCU (Brake Steering Control Unit). Once this action was complete the steering bypass pin was refitted and the crew got the correct NWS DISC indication.
- Aircraft Ground Damage: Hi-loader hit rear hold door access panel.
- Pushback error: aircraft rolled forward on disconnection of the tug. Tow bar still connected to the aircraft made contact with the rear of the tug. The parking brake had not been set prior to tug disconnection.
- Potable water across the fleet had been found to be contaminated. The ground handling agents had been following a 7-day process from the manufacturer but the internal company process was for a 24-hr turnover. This had identified a possible weakness in wider engineering management processes.

5.12

- Reporting on encounters in Class G airspace was being encouraged, reports to include perceived severity. There had been 45 TCAS RA during Jan/Feb, of which 26 had occurred within 20nm of RAF Cranwell.
- Locations for glider competitions were being promulgated by NOTAM and there was liaison on operating areas but gliders were still being encountered close to active airfields and in approach lanes. There was anecdotal evidence to suggest pilots were turning FLARM off to avoid revealing their location and hence losing an advantage.

5.13

- Company was experiencing the same ground handling issues as other operators. The standard of English at the non-UK stations was variable and so the use of standard phraseology was being encouraged.
- There had been several avoidable TCAS RA triggered by rates of climb or descent. An awareness campaign was underway, but one of the issues was that crews were usually not privy to the ATCO's plan, so that the selected rates of altitude change were not always optimum. Better communication would help.
- The incidence of incorrect flap selections had been increasing. The recent change to manufacturer SOPs had introduced elements such as FO taxiing (as an option) which

had required captains to develop new scan patterns. The Airbus configuration warning system was detecting the events but errors were still occurring. The common thread was workload management.

- **Discussion.** Another operator had experienced similar problems but with its Boeing fleet, the move to an all-Airbus operation had seen a 3-4 fold reduction in the incident rate. One company was now doing the T/O configuration check before taxi. There was a question about whether repeated checks undermined the process or whether it generated the illusion of a safety net.

5.14

- ORO.SEC.100 required crew monitoring of the entire flight deck door area; the B737 was not equipped with cameras but had a peep-hole that was being deemed non-compliant. In discussion, a B737 operator advised that their peep-hole system was deemed to be compliant! AltMOC should be considered.

5.15

- The new MOR system needed to be ECCAIRS compliant (under EC 376/2014) but CAP 382 was no longer specific. In response to questions about how operators were handling individual reports, the CAA reps advised that reports should be submitted via the company in the normal way and that there was no need for individuals to report separately.
- **Discussion.** For trend analysis, technical and operational issues could overlap; technical data could be more opaque or subject to other protections for commercial reasons. Data would never be perfect, reliability data existed and that there was a need to compare 'normal' operations (between customers).

5.16

- Company operated with captains only (so it was occasionally possible to find the PIC in the jump seat) and this could cause difficulties with SOPs.
- Pushback errors had also been a problem, with many tug connect/disconnect errors occurring because of poor communication. All aircraft now carried a spare headset for pushback use and the SOP required a pilot to be outside the aircraft to monitor the pushback process.
- There had been a runway incursion at YYY, where the runway is 'owned' by ground ops and handed back to ATC for take-offs and landings. An incursion by a bird control unit vehicle had led to a go-around. A similar event had occurred at Schipol.
- A Falcon 7X crew had elected to divert after a display failure prior to an Atlantic crossing. 'Management' had demanded an investigation into the decision but the safety office declined to conduct it.

5.17

- The UK AOA would be holding a safety week 19-24 September in partnership with the CAA. Safety events would be held at a number of UK airports.

5.19

- A zone infringement had resulted in a privately-operated helicopter passing within 1nm of the 05L threshold. Two aircraft had to go around and several departures were delayed. The incident was being investigated by the CAA.

Next Meeting: Tuesday 24 May 2016.