EXECUTIVE SUMMARY – 433rd UKFSC SIE MEETING – 8 NOVEMBER 2016

1. **High Court Judgments preventing disclosure of safety information. (4.2)**

2. **RJ100 stick shaker and stick pusher activate shortly after take-off, requiring second pilot to assist with maintaining pitch attitude. (5.1)**

3. **Narrow escape for ground personnel closing hangar door – falling object. (5.2)**

4. **Control restriction: incorrectly stowed EFB fouled collective pitch lever during night training flight. (5.5)**

5. **Vibration from undiagnosed engine surge (no captions) led to RTO. Sub-optimal training – simulator not capable of replicating noise/vibration symptoms. (5.5)**

6. **Crews were not always complying with the requirement to maintain at least 500fpm when making cleared altitude changes, or to advise ATC if unable. (5.6)**

7. **Potential for confusion due to delayed UK introduction of PANS-ATM changes to SID/STAR phraseology. (5.6)**

8. **Runway incursion after deportee escaped from escort at aircraft steps and went 'on the run' and then onto the runway… Recaptured, deported. (5.8)**

9. **ECAM message indicated shock absorber fault during pax disembarkation; nose oleo was found to be 5-10 mm from full extension. CG 45-47% MAC, tipping point 57% MAC. (5.10)**

10. **Wake vortex encounter after levelling at FL310; AP disengaged and aircraft rolled rapidly, causing some minor injuries. (5.11)**

11. **On-airport SAR helicopter drone encounter (5.12)**

12. **Inadvertent helicopter flight: pilot accidentally caught collective pitch lever during checks. Aircraft landed immediately, no damage. (5.13)**

13. **FDM survey of US business operators showed 17% do not conduct full and free control checks. (5.15)**

14. **B747 hard landing, possible fatigue and pilot monitoring issues. (5.17)**

15. **A330 hit by loose baggage cart. Baggage being towed too fast, uneven ground caused the rear cart to separate, rear safety latch not engaged and in poor condition. (5.17)**

Dai Whittingham
Chief Executive
5 December 2016

MINUTES OF THE 432nd MEETING OF THE UK FLIGHT SAFETY COMMITTEE HELD ON 8 NOVEMBER 2016 AT BAE PARK CENTRE FARNBOROUGH

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 The Brexit implications for aviation were being considered by the Govt. The NATMAC meeting in October was informed that the CAA Board believed the most practical solution would be to remain within the EASA system. Bespoke national aviation legislation would take at least 5 years and would have to worked into the priorities for all post-Europe legislation. There was also the question of regenerating regulatory capacity and capabilities within the CAA itself. One quick solution would be for some form of 'lift and shift' of the European legislation into UK law via an Act or Statutory Instrument that made the contents of the Basic Regulation (and supporting regs) binding within the UK.

4.2 There had been 2 landmark legal judgments handed down by the High Court in September, both of which enhanced the protection of safety information. The first related to a police request for the release of AAIB witness statements and other recorded material following the Shoreham Hunter accident. The request was refused because of the chilling effect on future accident investigations and because witnesses were not afforded the normal legal protections available during police investigations. The second case referred to orders and fines imposed by a Coroner who wished to have the FDR and CVR (or a full transcript) for a helicopter accident in Norfolk. The High Court quashed the orders and fines as the Coroner had no power to direct an act that would be in breach of the European laws on protection of safety information. Coroners were also directed that specialist (eg AAIB) safety investigations should simply be accepted unless there was clear evidence the investigation was incomplete or flawed. More detailed information would be included in the next edition of FOCUS.

4.3 There had been a presentation at the recent ISASI conference in Iceland given by an Austrian pilot who had researched stress generated by commuting before and after flight. Of the 500+ pilots surveyed, those commuting for more than 45 minutes were more conscious of stress and their self-perceived stress levels were 3 x higher than the non-commuters. Cost of commuting was not a factor, but duration was. Follow-on work would look at measurements of pilot performance to gain a more objective assessment of commuting impacts.

ITEM 5 **Information Exchange and Extracts from MORs**

5.1

- There had been a general increase in the number of smoke and fume events. An RJ100 had rejected in Geneva after fumes were smelt during take-off. There had also a report from a cabin crew member (another type) that bypassed the operator and was submitted direct; the report referred to the flight crew being on oxygen when those in the cabin were not.
- An RJ100 in Malmo (29 Sep) had the stick shaker and stick pusher activate shortly after take-off, which required the second pilot to assist with maintaining the pitch attitude to prevent terrain impact. The activation was spurious.
- An A319 had a nose-gear torque link failure that led to the nose-wheel being deflected through 90 deg after landing at Manchester (19 October).
- A new version of ICAO Annex 13 was effective from 10 November. Its provisions improve protections for safety information.

5.2

- A civilian helicopter had flown through an active range while a live-firing exercise was being conducted.
- An aircraft was being moved into a hangar. While a tradesman was closing the hangar door a large metal item fell from the top of it, missing him by 1 ft; he was wearing a hard hat.

5.3

- A number of EFB tablet failures had occurred. Work was in hand to determine whether there was a significant trend, or support or user issues.

5.4

- There was concern about the increasing rate of drone encounters. Further encounters were expected in the Low Flying System as the volume of low flying increased.

5.5

- A XXX pilot on a night training sortie observed that the collective pitch lever was slightly stiff to operate even though the friction control was at its minimum (off) setting. Diagnostic checks with a combination of autostab and hydraulic systems failed to fix the problem and the crew recovered the aircraft to base via a running landing. On shutdown, the EFB tablet was found distorted and stuck under the collective lever. There was no formal stowage for the tablet and it had been placed in a map holder but the co-pilot placed it on the cockpit floor thinking it was required imminently. This was another instance of new equipment introduction not being properly thought through.
- **Discussion.** Distortion and damage to EFBs also posed a fire risk from lithium batteries.

5.6

- During the 2 months Sep/Oct there had been 50 level bust events, 3 of which led to loss of separation. In the same period there were 83 airspace infringements (14 loss of separation) and 13 PLOC incidents.
- Luton had been having some runway incursion issues involving crews reading back the correct clearance and then over-running the holding point. Pushback errors had increased (a mix of ATCO and operator problems) and the airport had now mandated use of headsets for all non-standard pushbacks, and radios in tugs. Full compliance had not yet been achieved.

- Crews were not always complying with the requirement to maintain at least 500fpm when making cleared altitude changes; this had led to some loss of separation incidents. Crews should always advise the controller if they were unable to maintain 500fpm (or the requested speed).
- Operators were reminded of a change to the Heathrow LVPs, where full LVP would only be activated when the RVR was <600m. There would be no additional ILS protection at higher visibilities.
- The CAA had issued IN-2016/98 on SID and STAR phraseology to reflect PANS-ATM changes. Work had been started but the CAA was not planning to implement changes before late 2017. UK ATM could expect mixed/new phraseology to be used by overseas operators; UK crews would need to apply the new phraseology overseas but not in the UK. **Discussion.** Members failed to understand why the CAA could not adopt the new phraseology in order to avoid any misunderstandings between controllers and crews.

5.7

- There had been 225 Airprox reports YTD, against a 5-year average of 170. Of these, 77 involved drones or other objects, of which 56 were positively identified as drones; this compared with 40 reports for 2015.
- There had been 70 CAT incidents YTD, of which only 18 were non-drone related; one of the incidents had been risk-bearing (2 x RJ at LCY).
- CAT risk assessments for operations in Class G needed to take the uncontrolled presence of GA into account. Crews were not always taking the correct decision of giving way – there would be occasions when the GA traffic had right of way even when the CAT was established on an ILS.
- Some Airprox reports revealed misunderstandings of the level of priority IFR pilots were afforded in Class G airspace: there is no priority.
- Other reports showed pilots were not acting on the traffic information they received. Two A109s near Battersea were both trying to operate VFR/SVFR in 'marginal' weather. Traffic information was passed to both but both crews pressed on, one at 140 kts.

5.8

- The rate of aircraft damage incidents had been declining to the end of July but had increased during the Sep/Oct period.
- There had been 2 Runway Incursion, neither involving aircraft. An experienced airport driver entered the runway by error having found himself in a wide area of the taxiway in a complex part of the airport; realising he was not very familiar with the location he looked for the signage but did not see it as he was looking in the wrong direction. Signage placement is being reviewed.
- In the second incident, a passenger being deported broke away from his escort at the aircraft steps (parked near T2) and ran; he made it onto the runway before being detained (again…). He was within 700 ft of a landing aircraft.

5.10

- An A320 had been loaded tail-heavy (but within limits). As the pax were disembarking an ECAM message indicated a shock absorber fault; the nose oleo was found to be 5-10 mm from full extension. Pax movement was managed in order to control the amount of oleo extension. The CG was found to be in the 45-47% MAC range, whereas the actual tipping point of the aircraft would have been 57% MAC.

5.11

- There had been an increase in the number of go-arounds, several of which were caused by windshear events.
- An aircraft had a wake vortex encounter shortly after levelling at FL310; the AP disengaged and the aircraft rolled rapidly before full control was resumed. There were some minor injuries on board.
- Incorrectly loaded or not-disabled EMAs incidents were occurring more frequently.
- The number of Practice PAN calls on 121.5 MHz was making sensible monitoring of the frequency more difficult in the UK. Poor RT discipline elsewhere (especially over Germany) was causing similar problems.

5.12

- A laser attack had led to one pilot requiring 2 days sick leave.
- A SAR aircraft was in the hover when the crew noted an unusual red light in the 3 o'clock. The searchlight was used and the object was identified as a drone in the area of the airfield approach. One aircraft was sent round. The drone was seen to ditch into the sea; the operator was not traced.

5.13

- Building companies were using drones on site (Aberdeen), but the airport seemed to have no control over how they operated.
- The North Sea industry was still 'depressed' and further redundancies may occur. The Super Puma accident in Norway had initially grounded the aircraft; EASA had lifted the prohibition on flight but there was still no root cause analysis in place to support the change. The UK and Norway had so far not released the type for CAT operations. Pressure from customers was obviously increasing, but there would be passenger concerns to overcome as well.
- A helicopter arrived on its spot and the post-taxy checks were being actioned when the pilot accidentally caught the collective pitch lever, causing the helicopter to lift a short distance. It was landed safely and no damage was caused.
- **Discussion.** An S-92 had an engine fire warning offshore and was preparing to ditch in accordance with published procedures, though the crew were concerned about the potential for casualties because of the sea state. There were no other signs of fire and a passing vessel confirmed none was visible; the aircraft landed on safely. The incident was 'reported' via social media. Discussion centred on whether a fire warning was itself sufficient to confirm a fire in such circumstances.

5.14

- XXX had received several FOI requests for details of laser MORs but these were protected safety information (EU 376/2014) and therefore should not be released. It took some time to convince the FOI office that this was the case.

5.15

- XXX had conducted some research for the NTSB following a fatal Gulfstream IV accident in which the control gust locks were not removed prior to take-off. Data from US operators over the period Jan-Aug 2016 showed that 17% of US operators did not complete full and free control checks before flight. Non-compliance rates for G IV operators (US) was 99%, whereas in Europe it was only 18.9%. The study had only considered corporate operators.
- **Discussion.** The AAIB uses full and free check parameters to calibrate downloaded FDR data. Operators should consider sampling their own FDM data to see if control checks were being carried out.

5.16

- Problems had been experienced with a ground handling agent at a UK destination, including load sheet errors, incorrect loads and loading processes, and pushback errors. New audit procedures were now in place. There was a high turnover rate for dispatchers. The airport operator was aware and would be monitoring.

5.17

- A B747-800F had a hard landing at LUX on its second sector of the day (Huntsville – STN- LUX). The FO was the PF, the approach was normal until the flare which was late and less than required. The FO had flown his own aircraft to the duty location whereas the 2 captains had used company HOTAC prior to the flight. The FO had arrived 30 mins late for the first sector (in civilian dress), which had been flown by the 2 captains. It was the FO's first landing at LUX and his 8th on the B747. He was known to be a 'good student' so monitoring was less active than it might otherwise have been. The hard landing caused $400K damage and the aircraft was AOG for 9 days.
- An A330 nose cowling was struck by a free-running baggage cart. The safety coordinator tried to intervene but (fortunately) failed to intercept the cart. The baggage train had 'arrived' at high speed and the uneven ground caused the rear cart to separate from the train. The rear safety latch had not been engaged and the rear hitch was in poor condition; there was no preventative maintenance regime in place, though this had now been remedied.
- A Fox News helicopter had been attacked with a blue laser in Denver. The on-board cameras were used to assist the police in apprehending the culprit.

5.18

- The helicopter had been hit with a green laser while on task in Greenford. The MOR process proved to be more of a challenge than the laser attack.
- The fire crew at the London Free Hospital had been approached by a member of the hospital security staff, who asked them to look for his friend's drone as it may have ended up on the roof. Advice was given…
- **Discussion.** There was an increase in drone encounters at night.

ITEM 8 **Any Other Business**

8.1 There was no other business pre-notified or raised at the meeting.

Next Meeting: Wednesday 18 January 2017 at BAE Park Centre, Farnborough.