



# TECHNICAL COMMITTEE NOTES 25<sup>th</sup> MAY 2016

<b>Attendees/</b>																																																																																																
<b>Apologies</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Dai</td><td>Whittingham (CP)</td><td>Chair</td><td>Present</td></tr> <tr><td>Marion</td><td>Wooldridge (CP)</td><td>Vice-Chair</td><td>Present</td></tr> <tr><td>Richard</td><td>Hall (CP)</td><td>Vice-Chair</td><td>Present</td></tr> <tr><td>Peter</td><td>Benn (CP)</td><td>Master</td><td>Apologies - flying</td></tr> <tr><td>Chris</td><td>Spurrier (CP)</td><td>ME</td><td></td></tr> <tr><td>John</td><td>Turner (CP)</td><td>DAA</td><td>Present</td></tr> <tr><td>Michael</td><td>Cleaver (CP)</td><td>Australia</td><td>Present from 1420 by Skype</td></tr> <tr><td>Nicholas</td><td>Clutton</td><td></td><td>Present</td></tr> <tr><td>David</td><td>Cockburn</td><td></td><td>Present</td></tr> <tr><td>Geoff</td><td>Connolly</td><td></td><td>Apologies - working</td></tr> <tr><td>Peter</td><td>Cox</td><td></td><td>Present</td></tr> <tr><td>Harvey</td><td>Crush</td><td></td><td>Present</td></tr> <tr><td>John A</td><td>Denyer (CP)</td><td></td><td>Present</td></tr> <tr><td>Alex B</td><td>Fisher</td><td></td><td>Present</td></tr> <tr><td>Nick</td><td>Goodwyn</td><td></td><td>Present to 1600</td></tr> <tr><td>Brent</td><td>Hawkins (CP)</td><td>Hong Kong</td><td>Present 1<sup>st</sup> 30 min by SKYPE</td></tr> <tr><td>Kent</td><td>Johnson (CP)</td><td>North America</td><td></td></tr> <tr><td>Richard</td><td>Lotinga</td><td></td><td>Apologies – flying</td></tr> <tr><td>Chris</td><td>Norton</td><td></td><td>Apologies</td></tr> <tr><td>Phil</td><td>Smith</td><td></td><td>Present</td></tr> <tr><td>Miles</td><td>Stapleton (CP)</td><td></td><td>Present</td></tr> <tr><td>Syd</td><td>Utting</td><td></td><td>Present</td></tr> <tr><td><u>Observer</u></td><td colspan="3">Chris Hodgkinson</td></tr> </table>				Dai	Whittingham (CP)	Chair	Present	Marion	Wooldridge (CP)	Vice-Chair	Present	Richard	Hall (CP)	Vice-Chair	Present	Peter	Benn (CP)	Master	Apologies - flying	Chris	Spurrier (CP)	ME		John	Turner (CP)	DAA	Present	Michael	Cleaver (CP)	Australia	Present from 1420 by Skype	Nicholas	Clutton		Present	David	Cockburn		Present	Geoff	Connolly		Apologies - working	Peter	Cox		Present	Harvey	Crush		Present	John A	Denyer (CP)		Present	Alex B	Fisher		Present	Nick	Goodwyn		Present to 1600	Brent	Hawkins (CP)	Hong Kong	Present 1 <sup>st</sup> 30 min by SKYPE	Kent	Johnson (CP)	North America		Richard	Lotinga		Apologies – flying	Chris	Norton		Apologies	Phil	Smith		Present	Miles	Stapleton (CP)		Present	Syd	Utting		Present	<u>Observer</u>	Chris Hodgkinson		
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1.1 Chairman's introductory remarks	<ul style="list-style-type: none"> <li>• Interesting period for aviation with recent aircraft losses</li> <li>• Following suggestions of increased monitoring of flight crew psychological status, there is an increasing view that assessment is not possible without expertise in the medical population and that expertise is lacking within the AME community at present.</li> </ul>																																																																																															
<b>2. NOTES OF PREVIOUS MEETING &amp; MATTERS ARISING</b>																																																																																																
2.1 UK Civ Av Med Forum	<ul style="list-style-type: none"> <li>• The Air Pilots are now represented on the UK Civil Aviation Medicine Forum by Prof Mike Bagshaw who forwards minutes to DAA for the TC meeting page.</li> </ul>																																																																																															
2.2 CAA 5 year strategic plan	<ul style="list-style-type: none"> <li>• DAA had made available a link to the plan within the notes of the previous meeting; it is also included here for reference: <a href="https://www.caa.co.uk/Our-work/Corporate-reports/Strategic-Plan/Our-five-year-strategic-plan/">https://www.caa.co.uk/Our-work/Corporate-reports/Strategic-Plan/Our-five-year-strategic-plan/</a></li> </ul>																																																																																															
<b>3. TOPICS FOR DISCUSSION</b>																																																																																																
3.1 Lasers Update	<ul style="list-style-type: none"> <li>• Government ministers agree there is a need for legislation, which is good news and down to the efforts of the reformed UK Laser Working Group chair and members. Legislation is likely to: <ul style="list-style-type: none"> <li>○ Limit the power of lasers</li> <li>○ Prohibit the use of a laser against any mode of transport - including horses or to influence the outcome of a sporting event.</li> <li>○ Provide police with powers of entry and search and powers of stop and search</li> </ul> </li> <li>• Legislation must avoid criminalising legitimate use of lasers – golf range finding,</li> </ul>																																																																																															

	<p>presentation pointers, etc. – and it is not yet clear which legislative vehicle will be used.</p> <ul style="list-style-type: none"> <li>○ Purely ‘transport’ legislation would not address importation etc. f</li> <li>• In Hong Kong, Class 2 &amp; 3a lasers are available for public use but Class 3b and 4 rare restricted to special needs applications. Some shops have recently been found selling lasers of up to 1000mW and dealt with by police.</li> <li>• In the UK it is still possible to buy a 5W laser from the Far East for as little as US\$60 – An ophthalmic specialist described such devices as ‘a knife with a 150m blade’!</li> <li>• There have been instances of people being deliberately blinded in Germany and in Saudi Arabia as informal/gang punishments.</li> <li>• UK Laser Working Group will continue to lead on this work</li> </ul>
3.2 CAA Review of Air Display Regulations	<ul style="list-style-type: none"> <li>• CAA had published a report into its review and, more importantly, updated CAP403. The latter contained some errors and contradictions and was in places at variance with the former.</li> <li>• The issue of CAA’s resource &amp; SQEP capability was discussed.</li> <li>• Display community confusion was a potential threat to safety, as was late Article 162 Permission delivery, the record being on the morning of show.</li> <li>• Discussions with CAA ongoing.</li> </ul>
3.2.1 Air Pilots’ promotion of Self Administration	<ul style="list-style-type: none"> <li>• HAA proposal still on hold due GA Unit over-stretch on air displays; response estimated in Autumn.</li> <li>• With CAA short on resource and SQEP, there was a clear need for something like self administration to alleviate the pressures.</li> </ul>
3.3 Requests to join TC	<ul style="list-style-type: none"> <li>• Not discussed at this meeting</li> </ul>
<b>4. WORKING GROUPS (NOT COVERED ABOVE)</b>	
4.1 WG- Admissibility of AAIB reports in court	<p><b>Led by DAA</b></p> <ul style="list-style-type: none"> <li>• There was little progress to report, with on-going work in the courts not available in the public eye.</li> <li>• Last June a court had instructed release of AAIB material and Harvey hoped to work this with BALPA</li> <li>• However, recent events post Shoreham suggested that evidence provided during a safety investigation – and without the usual caveats provided in advance of giving a police statement – was now being requested by police to assist in their parallel criminal enquiry.</li> <li>• This potential conflation of safety and criminal investigation was of particular concern</li> <li>• <b>ACTION: DAA+Chair+Harvey+Tudor to liaise – SKYPE, FaceTime or email as required – to produce an Air Pilot statement/position paper soonest</b></li> </ul>
4.2WG – True North Heading Reference for CAT	<p><b>Led by Miles</b></p> <ul style="list-style-type: none"> <li>• DAA had contacted Jeremy Tracy to investigate our support to Transport Canada’s move; response awaited</li> <li>• We’ve now seen this is an ongoing issue with ICAO, with evidence of attempts to change from RIN as far back as 2006.</li> <li>• CFIT accident at Resolute Bay with 24 degrees of variation (<i>See Resolute Bay CFit 2011 pdf</i>)</li> <li>• Airlines with 8 aircraft removed from service for mag var database updates!</li> <li>• We need to continue to push for True North</li> <li>• Proposed to push Miles synopsis to a wider audience though aviation magazines – <b>actions as follows:</b></li> <li>• <b>Flight International – Chris Hodgkinson</b></li> <li>• <b>Aviation Week - DAA</b></li> <li>• <b>Wall street journal - Chair</b></li> </ul>
4.3 WG- Human Factors – Fatigue & FRMS	<p><b>Led by Nick Clutton</b></p> <ul style="list-style-type: none"> <li>• CAA is looking for a world-wide view of fatigue – hence it is going with EASA as most British public fly with non-UK airlines</li> <li>• But fatigue management standards vary widely and Fatigue Risk Management Systems (FRMS) are only effective with a Just Culture</li> <li>• CAA have disbanded their FTL dept!</li> <li>• Working Group Paper sections will include: <ul style="list-style-type: none"> <li>○ Medical – EASA were obliged but did not take on medical advice in drafting their</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>regulations <ul style="list-style-type: none"> <li>o Mood change – impacts on CRM</li> <li>o Insurance companies do not recognise circadian issues</li> <li>o Germanwings confidentiality of medical/psychological issues – mandatory disclosure should be applied to fatigue as well.</li> </ul> </li> <li>• SMO at ICAO has asked to see our paper as soon as it is ready</li> <li>• EASA used operational experience rather than science in developing their FTL</li> <li>• CAA say there is science in these FTLs</li> <li>• Fatigue is a holistic issue – no one factor or model will look after the issue. - Two operators on same route may find that one is able to operate at times when others cannot - because each will have different protections within their management systems.</li> <li>• Corporate Jet sector – no scientific research on fatigue in this sector</li> <li>• BALPA believe there should be a common core of fatigue and sleepiness metrics that could be applied world-wide - CAA say they will look at this with EASA</li> <li>• EASA FTLs were meant to be drawn in and codified by a FTMS – regardless of airline size &amp; with a Performance Based model – which means Just Culture is essential or the airline should not operate.</li> <li>• EASA document wording is European – CAA dept. no longer available to advise. EASA rules open to interpretation/abuse. Training in airlines is only just starting. Yet a law can't be introduced if it cannot be understood</li> <li>• Ground staff need to understand &amp; manage fatigue too.</li> <li>• Airlines outside of EASA - e.g. Star Alliance code-share – should be audited because non-European airlines have some non-compliant employment mechanisms and practices that negate the FTL.</li> <li>• WG have seen that FAA wording, in legal speak, is supported by union interpretation which makes it easier for a pilot to understand and to decline a duty when it is appropriate.</li> <li>• CAA only started training flight ops inspectors in August.</li> <li>• CBT is used for much of the fatigue training – but that means there is no opportunity to ask questions and CBT does not engender ownership, yet crews are responsible to managing their fatigue.</li> <li>• The old formulation used to be pretty easy to understand but any 'off schedule' event now means the Capt must get the books out to understand the implications.</li> <li>• Gulf states apply rest, exercise and eating guidance for extra-long ops. - This should be applied to all aspects of ops.</li> <li>• Culture barriers – Just culture is always subject to commercial pressures – while a senior Capt feels able to put in a fatigue report, junior cabin staff do not because they fear being sacked.</li> <li>• There are also instances of crew submitting a report only to be told – “yes, we recognise there is an issue, but there is nothing we can do about it because it is within the rules.”</li> <li>• Australia: <ul style="list-style-type: none"> <li>o Airlines are moving to FRMS.</li> <li>o Some are unhappy but operators can retain the old prescriptive rule or a tailored prescriptive rule or adopt full FRMS.</li> <li>o There is some difficulty in getting FRMS approved by CASA. – due to a significant churn in Flt Ops Inspectors,</li> </ul> </li> <li>• EASA rules get much criticism but for many of the regulated it was the first time that fatigue was controlled at all; overall the situation in Europe improved, notwithstanding lowering of standards in the UK.</li> <li>• <b>The WG will produce a draft, review it internally then make it available for review by committee members in time for the next meeting.</b></li> <li>• Tilmann Gabriel at CityU does work on lack of stimulation – he will attend on 20 Sep to discuss City U work on this and other aviation topics.</li> </ul>
<p>4.4 WG- Human Factors – Flight Deck Automation &amp; Pilot skill erosion</p>	<p><b>Led by Nick Goodwyn but had to withdraw – no current leader</b></p> <ul style="list-style-type: none"> <li>• Marion – Benjamin PhD proposal to investigate Startle is still pending.</li> <li>• DAA had contacted and introduced Chris McGee &amp; Marion.</li> </ul> <p>This meeting</p> <ul style="list-style-type: none"> <li>• Little ongoing WG work with Nick's standing down. Links to CityU work need to be refreshed from both sides</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Tilman from CityU will present to next TC in September.</b></li> </ul>
4.4.1 Addressing 'skill fade' – a Low Cost Training Aid	<p><b>Led by Alex Fisher</b></p> <ul style="list-style-type: none"> <li>• Committee will consider this separately from the above topic to ensure this retains appropriate focus.</li> <li>• Alex had met with Jim Nixon of Cranfield and things appeared to be going well until Jim was re-directed.</li> <li>• He had written to Nick, Marion and Tilman, of City U but no response.</li> <li>• He would like to write to CAA</li> <li>• CAA have employed <b>Mark Searle</b> Head of Safety Programs – championing 4 programs around pilot training and performance <ul style="list-style-type: none"> <li>○ Contracted Fraser Nash to investigate trends in pilot training – loss of recurrent pilot skills and need for training around automations.</li> <li>○ Loss of flying skills</li> <li>○ Upset Recover</li> <li>○ Automation</li> <li>○ Trying to secure resource to launch his programs. (Might replace LOCAG.)</li> </ul> </li> <li>• Mark Searle could be invited to the Committee</li> </ul>
4.5 UK Flight Instructors	<ul style="list-style-type: none"> <li>• SKYbrary 'Inadvertent flight from VMC into IMC' article completed</li> <li>• WG last met 17 March – next in July.</li> <li>• Teaching guides for newly qualified instructors to use a s reference <ul style="list-style-type: none"> <li>○ Upset prevention/recovery for LAPL etc.</li> <li>○ Forced landing</li> <li>○ Degraded visual environments – subsequent SKYbrary article.</li> <li>○ Lesson plans on Air Pilot web site.</li> <li>○ Next forum 4 Apr 2017 proposed to Cranwell.</li> <li>○ Membership drive – numbers light on FI Examiners - scan membership for right experience and invite to WG.</li> </ul> </li> </ul>
4.6 Air Pilots' Good Neighbour Initiative	<ul style="list-style-type: none"> <li>• Noted that Denham airfield had had issues of noise complaints from neighbours –Judge has decided that protections afforded take off and landing do not apply to helicopters hovering because hovering is not a part of flight!</li> <li>• Marion has approached people to take this forward. Tried to canvas assistance from the flying club.</li> <li>• Slow progress but now has space to re-invigorate.</li> </ul>
4.7 Pilot Contracts	<ul style="list-style-type: none"> <li>• No progress - needs a review of WG membership .</li> </ul> <p><b>DA to review membership and update</b></p>
4.8 Unmanned Air Vehicles	<ul style="list-style-type: none"> <li>• See report &amp; recommendation</li> <li>• Queens Speech mentioned additional regulation on the operation of drones 19/23 commercial air transport risk bearing incidents involving Drone in 2015.</li> <li>• Investigation into engine response – windscreen, flying surfaces etc. will need work too.</li> <li>• A new UK issue is private quad-copters being flown over accident sites &amp; getting in the way of emergency response helicopters.</li> <li>• Issue of drone strike on GA aircraft should not be ignored.</li> </ul> <p><b>Australia:</b></p> <ul style="list-style-type: none"> <li>• Nothing in particular concerning commercial air transport – quad-copter over last post pilot was fined A\$900 in avoidance of court which could have fined A\$9,000. Not within 30' of any person and to over a crowd. Patrick Murray of air pilots is on the rule making group.</li> <li>• De-regulating 2 kg flying over their own property – rural , below 400' in VLOS,</li> <li>• Our report passed to Pat Murray &amp; Rob Dicker. Will be interesting to see impact of &lt;2kg de-regulating. And a 2 kg drone into A380 engine. CASA suggesting drone pilot certification will be put out to self administration.</li> <li>• Drones being used to map out accident scenes by AAIB and Australian investigators.</li> </ul>
<b>5. NOTICES/UPDATES FROM OTHER COMMITTEES, EVENTS, ETC.</b>	
5.1 UK FSC	<ul style="list-style-type: none"> <li>• MOR system – 45 minutes to raise a simple report: Danger that people will stop reporting.</li> <li>• Data-driven programmes lack the resource to process the data!</li> <li>• Ground handling continues to be a problem area, especially where non-standard signals are used.</li> <li>• Last meeting was yesterday – redacted minutes in due course</li> </ul>

5.2 GAP	<ul style="list-style-type: none"> <li>Minutes of last meeting issued but without financial data. DAA had questioned CAA and was awaiting a reply</li> <li>Next meeting 21 July</li> </ul>
5.3 Met Users Forum	<ul style="list-style-type: none"> <li>Met Office consultation on automatic wx stations – period now extended.</li> <li><b>Peter Cox to provide details of extended period to DAA</b></li> <li><b>DAA to put consultation details on TC page for next meeting</b></li> <li>UK/European authorities are not responding to Met Office observations on temperature corrections in cold weather</li> <li>Met office also looking at hold over times of composite aircraft structures. Senior met people fly their own aircraft? Surprised the CAA are not progressing – have they passed this to EASA?</li> </ul>
5.4 NATMAC	<ul style="list-style-type: none"> <li>No report - Next meeting 27 Oct</li> </ul>
5.5 DfT/EASA Briefings	<ul style="list-style-type: none"> <li>EGAST disbandment and other structural changes covered. - Twin track stakeholder advisory boards, State and Technical boards with advisory groups - CAGS, CAT, GA, ATM, sport &amp; recreation.</li> <li>Advisory material will be produced in EASA English and left for states to translate into their own languages</li> <li>Next meeting tba mid/late June</li> </ul>
<b>6. Any Other Business</b>	
6.1 Meeting critique	<ul style="list-style-type: none"> <li>Need to review SKYPE group set-up; audio from Australia much better than using a mobile phone as on last meeting!</li> <li>Timing: 1030-1100 UK start followed by late lunch would be better for Far East but 1400+ would be better for North America. <b>Agreed for next meeting to stay with 1330.</b></li> </ul>
6.2 Interaction with Australian regulator	<ul style="list-style-type: none"> <li>CASA director Aviation Safety - Mark Skidmore - has announced he is setting up a Director's advisory panel and will invite people of his choosing. It is difficult for the Air Pilots to get representation. Can we help?</li> <li><b>DAA will investigate options - e.g. Master's tour, etc.</b></li> </ul>
6.3 Fatigue	<ul style="list-style-type: none"> <li>Thomas Cook cabin staff vote to strike over changing fatigue rules</li> </ul>
6.4 SKYbrary	<ul style="list-style-type: none"> <li>Monitored Approach article updated</li> </ul>
6.5 ICAO	<ul style="list-style-type: none"> <li>ICAO have changed Annex 6 part 2 – if a pilot is aware he is unable to make a safe landing with final reserve fuel, should say "MAYDAY, MAYDAY, MAYDAY, FUEL".</li> </ul>
6.6 CAA Press Releases	<ul style="list-style-type: none"> <li>CAA Press releases have announced: <ul style="list-style-type: none"> <li>Intention to suspend a licence if suspected of infringing Controlled Airspace – is this the way to promulgate changes of this nature?</li> <li>UK PPL pilots no longer needing Class 2 medical could/has led some pilots with EASA licences to believe they no longer need a Class 2 medical too.</li> </ul> </li> <li>Press Releases were considered a very poor way to release detailed regulatory information which should as a minimum point to the CAP/ANO amendment that carries the detail.</li> </ul>
6.7 BREXIT	<ul style="list-style-type: none"> <li>There was a clear view that, with current limited CAA capability, UK would have little option but to stay regulated by EASA (but without a vote) if UK opts to leave EU.</li> </ul>
<b>Next meeting(s)</b>	
Date of next meeting	20 September 2016 <b>TIME: 1330</b> was agreed  Future meetings – Jan 2017 date tba

**Closed at: 1700**