

SHERIFFDOM OF GLASGOW AND STRATHKELVIN at GLASGOW

SUBMISSIONS FOR THE BRITISH AIRLINE PILOTS' ASSOCIATION

in the  
FATAL ACCIDENT INQUIRY  
into the deaths of

GARY LOUIS ARTHUR  
ANTHONY LYNDON COLLINS  
JOSEPH ROBERT CUSKER  
COLIN GIBSON  
ROBERT JAMES JENKINS  
JOHN MCGARRIGLE  
SAMUEL BELL MCGHEE  
KIRSTY MARY NELIS  
MARK EDWARD O'PREY  
DAVID IAIN TRAILL

GLW-B1473-18

## **1 Introduction**

1.1 The British Airline Pilots' Association (BALPA) does not take issue with the submissions made by the Crown.

1.2 BALPA makes submissions in relation to three areas:

- 1.2.1 The legal framework
- 1.2.2 Proposed findings in fact
- 1.2.3 Consolidated List of Issues

## **2 The Legal Framework**

2.1 BALPA does not take issue with the submissions made by the Crown concerning legal framework.

2.2 The evidence before the Inquiry consists of the oral testimony of witnesses, joint minutes of agreement and the unchallenged Notices to Admit Information.

2.3 An Inquiry is essentially a fact-finding exercise. The Determination must proceed solely on the evidence led at the Inquiry and is defined by the matters set out in section 26 of the Inquiries into Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016 (the 2016 Act).<sup>1</sup>

2.4 BALPA makes further legal submissions below concerning the Consolidated List of Issues.

### **3 Proposed Findings in Fact**

3.1 BALPA does not take issue with the submissions made by the Crown concerning proposed findings in fact.

3.2 BALPA considers that the court may wish to make additional findings in fact in order to address matters raised in the Consolidated List of Issues. BALPA would propose that the court make findings in fact which reflect the Civil Aviation Authority (“CAA”) Notice to Admit Information<sup>2</sup>, the Crown Productions referred to therein, and the evidence of Mr Stobo: 14: 88:8 – 92:12. In particular, the court may consider it appropriate to record in the Determination the following matters:

3.2.1 That CP1163 is CAA Safety Directive SD2018-002 (“the Safety Directive”). The Safety Directive was made on 1 May 2018. The Safety Directive was issued under Article 248 of the Air Navigation Order 2016 (“ANO”). Article 248 permits the CAA to direct an operator by means of an Operational Directive on operational matters in the interests of safe operations. Annex A to the

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<sup>1</sup> *Inquiry into the death of Keane Wallace Bennett [2017] FAI 14 at [4]*

<sup>2</sup> No objection was taken to the CAA Notice to Admit Information in terms of Rule 4.12(5) of the Fatal Accident Inquiry Rules 2017 (SSI 2017/103)

Safety Directive contains an Operational Directive mandating action to improve the level of safety of State helicopter operations.

- 3.2.2 That the Safety Directive and associated Operational Directive was made in the interests of safe operations in response to Air Accident Investigation Branch (“AAIB”) SRs 2015 -032, -033 and -034.
- 3.2.3 That the Operational Directive directs operators of affected helicopter types specified in the Directive to ensure that those aircraft are equipped with certain forms of airborne image recorded systems by the relevant dates specified in the Operational Directive, according to the date of an aircraft’s Certificate of Airworthiness.
- 3.2.4 That the latest date for compliance with the Operation Directive, being for certain current in-service helicopters, is 31 March 2020.
- 3.2.5 That CP1161 is General Exemption E4698 (“E4698”) issued by the CAA on 16 May 2018. E4698 concerns “Flight Data Recorders and Cockpit Voice Recorders – Police Helicopters”. E4698 was issued under Article 266 of the ANO. Article 266 permits the CAA to grant exemptions from the ANO. E4698 exempts the police helicopters specified in paragraph 2 of the exemption from ANO Art 119 and Schedule 6 Paragraph 4(13)(c)(i) (certain public transport helicopters) from the requirement to carry FDR/CVR equipment as listed in Schedule 6 Paragraph 5, Scales SS(1) and SS(3). E4698 expires on 31 March 2020.
- 3.2.6 That notwithstanding the Safety Directive and associated Operation Directive, and E4698, all emergency service helicopters currently in service in Scotland already comply with the requirements set out in the Operational Directive and ANO and as such are now fitted with the appropriate flight recorders.

3.3 The court may wish to record what type of flight recorders would be fitted to an aircraft similar to G-SPAO now. G-SPAO had a MTOM of 2910kg.<sup>3</sup> From not later than 31 March 2020 (depending on date of Certificate of Airworthiness), the following would apply:

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<sup>3</sup> CP327, 1.11.8.1, epage 52

3.3.1 Class A Airborne Image Recording System (AIRS) capable of recording a general cockpit view;<sup>4</sup> and

3.3.2 A 4-channel cockpit voice recorder capable of recording and retaining data recorded during at least the last 30 minutes of operation and a flight data recorder capable of recording and retaining data recorded during at least the last 8 hours of operation; or a combined cockpit voice and flight data recorder to similar effect.<sup>5</sup>

#### **4 Consolidated List of Issues**

4.1 BALPA does not take issue with the submissions made by the Crown in the Appendix to their submission. BALPA makes additional submissions in respect of the specific Consolidated Issues listed below.

##### **4.2 Issue 4.3: whether it was within the competence of a helicopter pilot qualified to fly G-SPAO on police duties to comply with the requirement of the *Pilot's Checklist***

4.2.1 BALPA agrees with the Crown submission that it was within the competence of such a pilot to do so.

4.2.2 BALPA invites the court to conclude that compliance with the Pilot's Checklist was mandatory.

##### **4.3 Issue 4.5: why, having acknowledged the LOW FUEL warnings, did the pilot not complete the actions detailed in the Pilot's Checklist**

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<sup>4</sup> Safety Directive, paragraph 5.2(b), Operational Directive, paragraphs 3 and 4

<sup>5</sup> ANO Article 119 and Schedule 6 Part 1, paragraphs 4(13)(c)(i) and 5, Scale SS(1) and SS(3)

- 4.3.1 The Crown submission records the limitations placed on the AAIB investigation by the absence of, in particular, “CVFDR”<sup>6</sup> on G-SPAO, such that the AAIB was unable to discover what discussions took place among the crew in response to the warnings.<sup>7</sup> The Crown refers to the evidence of Mr Wivell 4: 52: 23. The court will also recall the evidence of Mr Cook 3: 30: 13-25 to similar effect.
- 4.3.2 The Crown submission records that the same absence of evidence hampered the police investigation, such that the Crown is in no better position than was the AAIB on this issue.<sup>8</sup>
- 4.3.3 BALPA recognises that the court may consider it appropriate for the Determination to narrate the factual and legal position concerning flight recorders, in order to give reassurance to the public, even if the court does not intend to make any recommendations in terms of section 26(1)(b) and (4) of the 2016 Act on this issue. BALPA recognises that there may be public concern that the investigation into G-SPAO was limited by the absence of a so-called “black box”.
- 4.3.4 As at 29 November 2013, legislation and operating rules did not require helicopters of the type involved in the accident to be fitted with flight recorders.<sup>9</sup> G-SPAO was not so fitted.
- 4.3.5 The AAIB made certain safety recommendations concerning the capture, storage and dissemination of flight data from state aircraft, including police

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<sup>6</sup> “CVFDR” is understood by BALPA to refer to a combined Cockpit Voice Recorder and Flight Data Recorder. Those recorders may be separate or combined. In addition, visual images may be recorded on an Air Image Recording System (“AIRS”). BALPA’s submission will refer to such devices collectively as “flight recorders” as this appears to be the collective term used by the CAA in the Safety Directive.

<sup>7</sup> paragraph 4.5.2 of the Crown submission

<sup>8</sup> paragraph 4.5.3 of the Crown submission

<sup>9</sup> Notice to Admit Information by the Civil Aviation Authority, paragraph 3. CP327, 1.11.8.1, epage 49-52

helicopters.<sup>10</sup> The CAA addressed those Safety Recommendations as narrated at paragraph 3.2 above.

4.3.6 The Safety Directive acknowledges that the absence of flight recorders hampers an investigation.<sup>11</sup> The Safety Directive recognises that images recorded by cameras in the cockpit should be afforded appropriate protection from misuse or abuse.<sup>12</sup> The Safety Direction emphasises that following any accident or incident, it would be necessary for the investigating authority to ensure that the information is not used for purposes other than the safety investigation.<sup>13</sup>

4.3.7 Aviation is regulated internationally and nationally. Certain UK legislation has changed since 29 November 2013. BALPA invites the court to conclude that the legislation currently in force concerning flight recorders is as follows:

4.3.7.1 The Convention on International Civil Aviation (Treaty Series No 8 (1953) (Cmnd 8742) (“the Chicago Convention”) is the cornerstone instrument of international aviation law. Annex 13 (11<sup>th</sup> Ed. 10 November 2016) paragraph 5.12 of the Chicago Convention contains controls on the use that may be made of cockpit voice and image recordings. Paragraph 5.12 (d) requires the State conducting the investigation of an accident or incident to not make cockpit voice recordings and transcripts from such recordings available for purposes other than the accident or incident investigation unless the appropriate authority for the administration of justice in that state determines that the disclosure outweighs the adverse domestic and international impact that may have on that or future investigations.

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<sup>10</sup> CP327 at epage 101 (AAIB Report 3/2015), SRs 2015-032 and 2015-033

<sup>11</sup> Safety Directive, paragraph 2.2

<sup>12</sup> Safety Directive, paragraph 2.5

<sup>13</sup> Safety Direction, paragraph 2.5

4.3.7.2 European Union Regulation 996/2010 on the Investigation and Prevention of Accidents and Incidents in Civil Aviation<sup>14</sup> (“Regulation 996/2010”) establishes within the EU the fundamental principles governing the investigation of civil aviation accidents and incidents, taking account of the Chicago Convention. Article 14 of Regulation 996/2010 is entitled “Protection of Sensitive Safety Information”. Article 14(1)(g) requires that cockpit voice and image recordings and their transcripts shall not be made available or used for purposes other than a safety investigation. Article 14(3) makes provision for national courts to authorise disclosure of such material for other purposes permitted by law where such disclosure outweighs the adverse domestic and international impact such disclosure may have on that or any future safety investigation.

4.3.7.3 The Civil Aviation Act 1982 (“the 1982 Act”) is the cornerstone statute in domestic UK aviation law. Section 60 of the 1982 Act provides for the making of Orders in Council in furtherance of obligations under the Chicago Convention or for the general regulation of air navigation. Section 75 of the 1982 Act provides for the making of statutory instruments concerning the investigation of any accident occurring in the course of air navigation and for carrying out any annex to the Chicago Convention.

4.3.7.4 The Air Navigation Order 2016 (2016 No. 765)<sup>15</sup> (“the ANO”) was made under section 60 of the 1982 Act. The ANO contains detailed provisions for the conduct of civil aviation within the United Kingdom. Articles 231-235 of the ANO make provision for the collection and retention of cockpit voice recorder and flight recorder data. The ANO makes no similar provision in respect of AIRS data, although similar provision is made in the Operational Directive itself.<sup>16</sup>

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<sup>14</sup> Made on 20 October 2010

<sup>15</sup> In force from 25 August 2016

<sup>16</sup> Operational Directive, paragraph 5

4.3.7.5 The Civil Aviation (Investigation of Air Accidents) Regulations 2018<sup>17</sup> (“the 2018 Regulations”) were made under section 75 of the 1982 Act. The 2018 Regulations regulate the investigation of air accidents and incidents in the United Kingdom in furtherance of EU Regulation 996/2010.<sup>18</sup>

4.3.7.5.1 As regards the investigation of an air accident, the AAIB is designated as the accident investigation authority for the purpose of the Chicago Convention and as the safety investigation authority for the purposes of Regulation 996/2010.<sup>19</sup> Regulation 14 of the 2018 Regulations empowers AAIB inspectors to seize records, including records from flight recorders, for the purpose of a safety investigation.

4.3.7.5.2 Regulation 25 of the 2018 Regulations makes provision for the confidentiality of material seized during an accident investigation. In so far as relevant to Scotland, Regulation 25(4)-(6) of the 2018 Regulations makes provision for the Court of Session to order that material falling within Article 14(1) of EU Regulation 996/2010 be made available to another person where that court is satisfied that the benefits of the disclosure of the record concerned outweigh the adverse domestic and international impact which that disclosure might have on the safety investigation to which the record relates or any future safety investigation.

4.3.8 Copies of the relevant legislation and case law listed in the Annex to this submission can be provided to the court in advance of 5 August 2019 should the court so wish.

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<sup>17</sup> In force from 1 April 2018

<sup>18</sup> As at 29 November 2013, the Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 1996 (SI 1996/2798) were in force.

<sup>19</sup> Regulation 7 of the 2018 Regulations

- 4.3.9 BALPA submits that there is no evidence before the Inquiry that the fitting of flight recorders, and data capture therefrom, might realistically prevent other deaths in similar circumstances, such that a recommendation concerning flight recorders might be made under section 26(4) of the 2016 Act. Rather, the evidence suggests that such data, if available, would be beneficial to an AAIB or police investigation into such an accident. BALPA submits that the current law on this issue is adequate and there is no need to recommend procedural or legislative change. Current law permits the AAIB to recover all available flight recorder data for the purpose of a safety investigation.
- 4.3.10 BALPA considers that it is entirely appropriate that the AAIB, but only the AAIB, be entitled to access flight recorder data as of right. The current legal and factual position adequately addresses, or will adequately address from 1 April 2020 (the latest date for compliance with SD 2016/006), the concerns expressed by AAIB witnesses in evidence and in the AAIB Report 3/2015.
- 4.3.11 In light of the Crown submission at paragraph 4.5.3, BALPA submits that it would not be appropriate for the police, or any other natural or legal person, to have the same right of access. Persons other than the AAIB, including the Lord Advocate<sup>20</sup> or a police force<sup>21</sup>, who wish access to flight recorder data are not without a remedy. In Scotland, application can be made to the Court of Session for an order for disclosure of such data. It is appropriate that such issues be decided by that court on a fact-specific, case-by-case, basis.
- 4.3.12 In short, were an accident to happen today involving a police helicopter in Scotland, that helicopter would be fitted with flight recorders which would operate during flight. The flight recorder data would be available as of right to the AAIB to assist it in its safety investigation. Were the Lord Advocate to wish access to flight recorder data for the purpose of a criminal proceedings or a Fatal Accident Inquiry, application could be made by him to the Court of Session for an order under Regulation 25 of the 2018 Regulations, being an order ordaining the Secretary of State for Transport to make the data

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<sup>20</sup> *Lord Advocate, Petitioner 2015 SLT 450*

<sup>21</sup> *Chief Constable of Sussex Police v Secretary of State for Transport and British Airline Pilots' Association [2016] EWHC 2280 (QB)*

available for that purpose. The Court of Session would consider the application on its merits. The limitations faced in the G-SPAO Inquiry are unlikely to recur.

4.3.13 BALPA notes that the Crown does not invite the court to make any recommendation on this issue. BALPA shares that position. Having regard to Consolidated Issues 7.1 and 7.3, BALPA submits that the Civil Aviation Authority has adequately addressed the said safety recommendations concerning flight recorders and that the current law is adequate to allow AIB access to relevant available flight recorder data where available.

**4.4 Issue 6.3: whether any aspect of the training of pilots, in particular, with regard to fuelling, pre-flight checks, the pilot handover procedure, the operation of the fuel contents indication system, erroneous fuel indications, the appropriate response to fuel cautions and warnings, and the execution of an autorotation at night, contributed to the accident occurring**

**4.4.1 Training in respect of LOW FUEL warnings**

4.4.1.1 The Crown submission states that there may be a question whether pilots were provided with sufficient practical training in relation to low fuel situations, specifically the procedure to be followed in response to a FUEL caution or a LOW FUEL warning. The Crown find it difficult to say whether the absence of practical training in relation to low fuel situations contributed to the accident.<sup>22</sup>

4.4.1.2 BALPA notes that the Crown do not invite the court to make any recommendations under section 26(1)(b) and (4) of the 2016 Act. BALPA does not invite the court to make such recommendations. Nevertheless, and for the avoidance of doubt, BALPA does not argue against further or enhanced training on such issues, should the court consider that to be an appropriate recommendation.

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<sup>22</sup> Crown submission, paragraphs 6.3.2 – 6.3.6.

4.4.1.3 BALPA submits that there is no evidence before the court upon which it could be satisfied to the required standard of proof that an absence of training was a contributory factor to the accident.

4.4.1.4 Crown Notice to Admit Information No.1 at paragraph 51 (incorporating what would have been the evidence from CW42 Captain Stevens) records the training given to Captain Traill in 2008 and subsequently by Captain Stevens. Paragraph 51 ff and gg records the training given in 2008 concerning fuel cautions and fuel warnings. In particular, paragraph 51 ff records that it was Captain Stevens normal practice to train pilots that in the event of a LOW FUEL warning the pilot should refer to and comply with the flight reference card emergency checklist.<sup>23</sup> As the Crown submission records, there is no evidence to suggest that training was provided to Captain Traill other than in the manner in which it was normally provided. Whilst there is no specific evidence before the Inquiry as to Captain Traill's understanding of the LOW FUEL flight reference card instruction and "land within 10 minutes" memory item, the evidence suggests it to be likely that he was specifically trained on those items in 2008. Further, the evidence before the Inquiry suggests that Captain Traill was a highly capable, conscientious and accomplished pilot. The court may find it easy to infer that he would have been fully aware of the required action in the event of a LOW FUEL warning, at least to the extent of the need to consult the flight reference card in conjunction with the memory item. That Captain Traill had previously experienced a LOW FUEL warning in flight might lend further weight to that conclusion.

4.4.1.5 BALPA invites the court to conclude that Captain Traill was appropriately trained that in the event of a LOW FUEL warning he should refer to, and comply with, the relevant flight reference card.

4.4.1.6 Compliance with the flight reference card procedure is not dependent upon training in a simulator. BALPA invites the court to conclude that the appropriate pilot response to a LOW FUEL warning is to consult

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<sup>23</sup> Paragraph 51ff refers to CP212 e226. This is the same as CP66 e22.

the relevant flight reference card and comply with it. The simulator is not required for training in that action *per se*. In any event, the “land within 10 minutes” instruction is a memory item, not dependent either on the simulator or the flight reference card. There is no evidence before the Inquiry that pilots were not aware of that memory item; indeed, pilots who gave evidence were aware of that entry on the flight reference card.

#### 4.4.2 Autorotation Training

4.4.2.1 BALPA agrees with the Crown submission that there are obvious practical constraints in carrying out autorotation training. A full autorotation procedure in live flight is normally carried out only in an emergency situation<sup>24</sup>. BALPA acknowledges the need to conduct any live flight autorotation in a safe environment, having regard to the capabilities of the crew (whether under instruction or assessment) and the characteristics of the aircraft.

4.4.2.2 BALPA agrees with the Crown submission that it would be difficult to conclude that any failure in training regarding pilot awareness of the 75% Nr limit contributed to the accident occurring, for the reasons identified by the Crown.<sup>25</sup>

4.4.2.3 Pilots were trained to maintain rotar speed in accordance with the appropriate flight reference card instruction, CP66 e95.<sup>26</sup> BALPA notes that the Crown do not invite the court to make any recommendations under section 26(1)(b) and (4) of the 2016 Act. BALPA does not invite the court to make such recommendations. Nevertheless, and for the avoidance of doubt, BALPA would not argue against the enhancement of autorotation training so as to include

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<sup>24</sup> Evidence of Mr Cook: 3: 108: 24 – 109:4

<sup>25</sup> Crown submission, paragraph 6.3.9.

<sup>26</sup> Crown Notice to Admit Information No. 1, paragraph 51 ii

information concerning the relevance of Nr falling below 75%. Should the court recommend that autorotation training, or assessment, include attempts to establish autorotation from an Nr below normal limits (ie. below 97%), such attempts ought only to take place in a simulator for obvious reasons of safety.

Gavin J. Anderson

Advocate

Counsel for the British Airline Pilots' Association

30 July 2019

#### ANNEX

1. The Convention on International Civil Aviation (1953)
2. Civil Aviation Act 1982
3. EU Regulation 996/2010
4. *Lord Advocate, Petitioner 2015 SLT 450*
5. *Chief Constable of Sussex Police v Secretary of State for Transport and the British Airline Pilots' Association [2016] EWHC 2280 (QB)*
6. Air Navigation Order 2016 (2016 No. 765)
7. *Keane Wallace Bennett Fatal Accident Inquiry [2017] FAI 14*
8. The Civil Aviation (Investigation of Air Accidents) Regulations 2018 (2018 No. 321)