

# Helicopter Safety Research Management Committee

**Subject** Minutes of 74<sup>th</sup> HSRMC  
**Date** Wednesday 1<sup>st</sup> November 2017  
**Location** Aviation House, Gatwick  
**Organised by** Kevin Payne/David Howson, UK CAA

## List of Participants

Attendees	<p>Captain Rick Newson, UK CAA (Chairman)</p> <p>Mr David Howson, UK CAA</p> <p>Mr Kevin Payne, UK CAA (Secretary)</p> <p>Mr Tony Eagles, UK CAA</p> <p>Mr Matthew Weeks, UK CAA</p> <p>Mr Brian Pattinson, UK CAA</p> <p>Mr Mario Ranito, UK CAA</p> <p>Captain Ken Allison, UK CAA</p> <p>Mr Mark Searle, UK CAA</p> <p>Mr Stephen Long, UK CAA International</p> <p>Miss Andrada Conti, UK CAA International</p> <p>Captain Steve O'Collard, BHA</p> <p>Mr Andrew Dettl, Airbus Helicopters</p> <p>Mr Alex Knight, Helideck Certification Agency</p> <p>Mr Jim Lyons, Royal Aeronautical Society</p> <p>Mr David Leithner, Shell/ HeliOffshore</p> <p>Captain Ornulf Lien, Norwegian CAA</p> <p>Mr Alan Wilson, Leonardo Helicopters</p> <p>Mr Mark Prior, M Prior Consulting Limited</p> <p>Dr Polly Dalton, Royal Holloway, University of London</p>
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Apologies	Mr J McColl, UK CAA Mr Lionel Tauszig, EASA Mr Neil Taylor, DSTL Captain Jon Hopkinson, CHC Helicopters Mr Dan Chicoyne, C-NLOPB Mr Simon Brailsford, BP Mrs Gretchen Haskins, HeliOffshore Mr Gilles Bruniaux, Airbus Helicopters Mr Michael Cerneck, Sikorsky Helicopters
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## AGENDA

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1. Introduction
2. Review of Minutes of 73rd meeting (4th May 2017)
  - 2.1 Accuracy
  - 2.2 Actions/matters arising
3. Review of Current Research Projects
  - 3.1 UK CAA managed projects
  - 3.2 EASA managed projects
  - 3.3 C-NLOPB initiatives
4. Research Programme Funding
  - 4.1 Funding status of current programme
5. Presentations
  - 5.1 Progress Update on HTAWS Alert Form/Format Research
  - 5.2 New Helideck Monitoring System
6. AOB
7. Date of Next Meeting
8. Close

## Minutes of meeting

### 1. Welcome & Introduction

Captain Newson welcomed all participants to the 74th meeting of the HSRMC and, in particular, Mr David Leithner from Shell, representing HeliOffshore, Mr Mark Prior of M Prior Consulting Limited, attending in connection with the HTAWS project and Dr Polly Dalton of Royal Holloway University of London attending to provide an update on the HTAWS alerting research. In addition, new members were introduced from UK CAA: Mr Mario Ranito and Captain Ken Allison from Flight Operations Department, Mr Matthew Weeks from Innovation, Strategy and Policy and Mr Steve Long and Miss Andrada Conti from UK CAA International. All participants introduced themselves for the benefit of the new members.

### 2. Minutes of 29 September 2016 Meeting

#### 2.1 Accuracy:

The minutes (version 3) from the 73rd meeting of 4th May 2017 were approved without any further comments or corrections.

#### 2.2 Actions:

There were no outstanding actions held from the minutes of the 73rd meeting on 4th May 2017.

### 3. Review of Current Research Projects

#### 3.1 UK CAA Managed Projects (Mr Howson, UK CAA)

In addition to the Research Update document circulated to members on 23rd October 2017, Mr Howson delivered a PowerPoint presentation dated 20 October 2017, during which the following points were noted/emphasised:

#### Survivability

On the subject of Ditching & Water Impact it was suggested that, with the co-operation of HeliOffshore, CAA should bring all the principal stakeholders around the table to move forward the technical discussion on the side floating helicopter scheme.

**Action 356: Mr Howson to convene a workshop with the support of HeliOffshore on side floating helicopters during 2Q 2018.**

Mr Howson emphasised that the project needed to move forward in close formation with HeliOffshore and IOGP to offer the best chance of getting it implemented. Mr Dettl remarked that it was unlikely to happen unless mandated by EASA or by the Oil and Gas Industry. Responding to a statement that some manufacturers still had concerns, Mr Howson pointed to the high-level requirement for the provision of an air pocket, where the side-floating scheme was one means, not the only means, of compliance.

Captain Newson asked if survivability issues were among the helicopter operator's top 10 risks. As this was unknown to the members present, Captain Newson stated his intent to raise the issue formally at the next OHLSG.

### Operational Issues

- H-TAWS – under Phase One, Progress, Mr Prior gave a briefing on a meeting convened by EASA and held at their offices on 26<sup>th</sup> October 2017. He reported that the meeting had been productive with all the major stakeholders present: EASA, FAA (by phone), Airbus, Leonardo, Sikorsky, Bell, Rockwell-Collins, Garmin and Honeywell. It was agreed that HTAWS manufacturers will develop equipment modifications and produce service bulletins, while helicopter manufacturers will cover the introduction of modified HTAWS with aircraft service bulletins (classed as a major modification due to the update required to the HTAWS Flight Manual supplement). Some OEMs had queried the need for the new Mode 7 as they had included alternative solutions in their autopilots, but this would not apply to the retrofit for most of the current fleet. Mr Prior raised the issue of the definition of Class A HTAWS which is mandated for new helicopter registrations from 01 January 2019 under the EASA air operating rules (SPA.HOFO). It was agreed that this would be addressed during Phase 2 of the project during which formal MOPS were to be developed, probably by a EUROCAE working group. It was suggested that EASA might need to form a HTAWS Rule Making Task (RMT) if the project is to be fully adopted.
- Triggered Lightning Strike Forecasting – Mr Howson confirmed that the research phase was essentially complete and the project was now effectively into the product development phase.
- GPS-Guided Offshore Approaches – Mr Howson advised that there would be a further update on the project at the next HSRMC in May 2018. A discussion took place between several members as to what should constitute the geometric centre of an installation. There was no firm consensus except a general agreement that geometric centre should be standardised. Mr Howson explained that Phase 2 of the current research was investigating how the current OEM systems address this issue, and that there is scope for a project to resolve this and other nav database issues. Captain O'Collard highlighted the issue of ICAO designators which had been raised previously with Anthony Stevens in CAA Airspace. A response was still pending.

Captain Newson advised that CAA had convened a Point-in-Space workgroup looking at PinS approaches to heliports at UK hospitals.

## Helidecks

Mr Howson advised that a presentation on the Operations to Moving Helidecks, focussing on the new Helideck Monitoring System, would be given later in the meeting (under item 5.2). Here he noted that the in-service trials to the Captain and Alba FSU vessels would now be completed by NHV helicopters during the winter of 2017/18. NHV has taken over servicing both vessels from Bristow.

### **3.2 EASA Managed Projects**

Mr Lionel Tauszig was unable to attend (due to a national holiday in Germany) and could not source a substitute. However, he reported that there had been little progress with EASA projects and so there was nothing new to report.

### **3.3 C-NLOPB initiatives**

Mr Dan Chicoyne was unable to attend in person but provided the following note which Mr Howson read out:

*EFS: We continue to believe there would be great benefit in having side floatation as it would provide an area of breathable air for occupants. It would be particularly beneficial for injured passengers who were unable to deploy EBS.*

*Rig approaches are also a priority for us as we feel there is inherent risk in helicopters doing non-precision approaches to offshore rigs in extremely challenging meteorological conditions to minima which are lower than the minima used for precision approaches at highly instrumented international airports.*

*Hot refuelling has become the norm at offshore facilities. This is a normalization of deviance as CAP 437, Transport Canada, EASA, FAA and almost every other aviation regulator and publication describes Hot Refuelling as an inherently dangerous activity This should only be performed if there is a "clear safety reason" to do so.*

*Seat/window placement is a concern for helicopters where the seats are not directly adjacent to an emergency escape window.*

## **4. Research Programme Funding**

Mr Howson provided a brief update on the funding status of the current CAA research programme. The funding status for all current projects is adequate and there is no urgent need for funding.

## 5. Presentations

### 5.1 Progress Update on HTAWS Alert Form/ Format Research [Dr Polly Dalton, Royal Holloway University of London]

Dr Polly Dalton, Director, Attention Lab, Royal Holloway, University of London delivered a presentation “HTAWS alerting strategy” which had been developed in conjunction with Dr Matthew Greaves, Head of Cranfield Safety and Accident Investigation Centre. During the subsequent Q&A Mr Lyons mentioned two related papers: Cockpit napping produced by M Spencer at Farnborough and a CAA Paper on Tactile Responses. Members were unaware of the existence of either paper. The presentation was distributed in pdf format on 15<sup>th</sup> November 2017.

### 5.2 New Helideck Monitoring System [Dave Howson, CAA]

Mr Howson delivered a presentation on the new Helideck Monitoring System (HMS). The presentation was distributed in pdf format on 15<sup>th</sup> November 2017.

## 6. AOB

Mr Newson reported on a telephone conversation between HSE and CAA regarding a gas leak which had occurred in June 2017 on the Davy 30/A normally unattended installation. It transpired that the wave off lights had not been connected to the fire & gas panel with the consequence there was no visual signal provided to the helicopter crew that would prevent them approaching a platform in a potentially unsafe condition (i.e. gas leak). Upon further investigation, it was discovered that there had been 1000's of missed warnings because wave-off lights were not being connected to fire and gas panels. The majority of the alarms were understood to be due to sensor faults, and it was speculated that their unreliability may have lie behind the incorrect integration.

## 7. Date of Next meeting

Mr Payne confirmed the 75th meeting of the HSRMC will take place on Wednesday 9<sup>th</sup> May 2018 at CAA, Aviation House, Gatwick between 1230 and 1700 hrs. The following, 76<sup>th</sup> meeting of the HSRMC is set for the same time on Wednesday 14<sup>th</sup> November 2018.

**8. Attachments circulated with an email dated 15<sup>th</sup> November 2017**

1. UK CAA Managed Projects (Research Update – Dave Howson).
2. HTAWS alerting strategy (Professor Polly Dalton and Dr Matthew Greaves)
3. New Helideck Monitoring System (Dave Howson)

**Table 1: List of actions:**

**Action 356:** Mr Howson to convene a workshop with the support of HeliOffshore on side floating helicopters during 2Q 2018.