



**PENELOPE SCHOFIELD – HM SENIOR CORONER FOR AREA OF WEST  
SUSSEX**

**INVESTIGATION INTO THE DEATHS OF REBECCA DOBSON, JASON HILL, STUART  
HILL, ELEANOR UDALL AND JONATHAN UDALL**

**CIVIL AVIATION AUTHORITY RESPONSE TO A REPORT ON ACTION TO PREVENT  
OTHER DEATHS PURSUANT TO PARAGRAPH 7, SCHEDULE 5 OF THE CORONERS  
AND JUSTICE ACT 2009 AND REGULATIONS 28 & 29 OF THE CORONERS  
(INVESTIGATIONS) REGULATIONS 2013**

The UK Civil Aviation Authority ('CAA') has considered the Regulation 28 report to prevent future deaths, including the following concerns raised by the Senior Coroner:

*1. The current requirements are laid out in EASA Certification Specification CS 27-952 for small rotorcraft and CS 29-952 for large rotorcraft, these regulations have been adopted by the UK. These requirements do not appear to be fit for purpose as they do not require retrofit to all previously certified rotorcraft.*

*2. EASA issued a safety bulletin No 2017-18R1 (updated on January 2021) this document states "EASA consider that the installation of any of the modifications listed in Table 1 (of the SIB) for AS 350/ EC 130 in service aircraft will reduce the risk of post-crash fires and contribute to increase the occupant escape time after survival. However, there is no mandatory requirement for the CRFS to be fitted on aircraft.*

*3. Flying in both small and large rotorcraft that have not been fitted with CRFS, either at initial build or as a retrofit, adds significant risk to the occupants in the event of a crash which disrupts the fuel system.*

*4. There is nothing in place to mandate the fitting of CRFS as a retrofit and so the risk of post-crash fire in non-CRFS fitted helicopters remains very high with the likelihood of loss of life*

*5. For the public there does not appear to be any way of knowing whether a particular aircraft has been fitted with the CRFS as there is no central register which records this. The public cannot therefore make an informed decision as to whether to fly on that aircraft.*

*6. There are still aircraft flying in UK airspace without CRFS which poses a high risk to occupants of the aircraft.*

*7. These aircraft also pose a risk to the general public who could find themselves in close proximity to an aircraft that has crashed where a fire occurs.*

*8. Serious consideration needs to be given to the issuing of an airworthiness directive to prevent further tragedies, similar to this case happening again.*

## **Introduction**

The CAA would first like to express its sincere condolences to the families, friends, and loved ones of those who lost their lives in this tragic accident.

The CAA was not an Interested Person at these inquests. As such, it did not have access to the evidence. When preparing this response, with a view to implementing future actions, the CAA has relied on the National Transportation Safety Board Investigation ('NTSB') Report dated 14<sup>th</sup> January 2021, information obtained in its capacity as a member of the International Civil Aviation Organisation ('ICAO'), as a former member of the European Aviation Safety Agency ('EASA')<sup>1</sup> and analysis of incident reports received under the UK's mandatory aviation occurrence reporting scheme<sup>2</sup>.

The CAA has further relied on engagement with the UK distributor for the EC 130 aircraft and representatives from the wider UK rotorcraft industry in the aftermath of this accident.

With effect from 1 January 2021 the CAA has established a national rule making programme, working with the Department for Transport, for managing proposed changes to the existing regulatory framework for aviation safety in the UK. This programme is designed to align, where appropriate, with technical specifications, known as Standards and Recommended Practices ('SARP's') adopted by the Council of ICAO and separate global rule making, including that directed by EASA and the US Federal Aviation Authority ('FAA').

Responsibility for overseeing the design and certification requirements for rotorcraft operating in the UK, including Certification Specifications CS 27-952 and CS 29-952<sup>3</sup> was transferred to the CAA on 1 January 2021 and now forms part of this rule making programme.

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<sup>1</sup> The UK CAA ceased its membership of EASA with effect from 31 December 2020.

<sup>2</sup> The CAA is responsible for receiving UK Mandatory Occurrence Reports in accordance with EU Regulation 376/2014 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018.

<sup>3</sup> EU Regulation 748/2012 Annex 1 Part 21 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018.

## **Next Steps**

EASA continues work to reduce the risks associated with rotorcraft post-crash fires which forms part of the European Plan for Aviation Safety 2021-2025 and the Rotorcraft Safety Roadmap. The FAA also continues similar work in conjunction with the Rotorcraft Occupant Protection Working Group ('ROPWG')<sup>4</sup>.

EASA issued Safety Information Bulletin ('SIB') 2017-18 (updated on 15<sup>th</sup> May 2019 and 14<sup>th</sup> January 2021) including recommendations for Crash Resistant Fuel System ('CRFS') modifications for AS 350/EC 130 rotorcraft. EASA subsequently published Terms of Reference for Rule Making Task ('RMT').0710 on 16 December 2021. The RMT is sub-divided into two areas; design certification and proposed retrospective action, and future production and is focussed on improving survivability in the event of a rotorcraft accident, specifically in relation to post accident fires through the installation of CRFS and Crash Resistant Seats and Structures ('CRSS'). The RMT will assess whether it is justifiable to retroactively apply the requirements for CRFS and CRSS to existing small CS-27 rotorcraft, small CS-27 Category A rotorcraft, and large CS-29 rotorcraft and/or to the future production of already type-certified rotorcraft.

An important step in the RMT process will be for EASA to carry out a Regulatory Impact Assessment designed to assess any proposed (mandatory) rule making decision against the economic, environmental, proportionality and social impacts of that decision. The UK will be represented during the EASA RMT review process by the British Helicopter Association ('BHA'). Should EASA conclude a mandatory rule change is required, it will issue a *Notice of Proposed Amendment* to the relevant EU Regulations and the Acceptable Means of Compliance that accompany those regulations.

The CAA will continue to review UK aviation safety data relevant to the concerns raised by the Senior Coroner and monitor related developments arising from EASA RMT.0710. The CAA will also contact the FAA to understand the rationale for recommendations from

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<sup>4</sup> The ARAC Rotorcraft Occupant Protection Working Group was established in the US on 22 December 2015. This Group has issued safety recommendations for rotorcraft operating in the US, including "*The FAA should require, in all rotorcraft, the installation (retrofit) of crash resistant fuel bladders that meet the requirements of the 50-foot fuel cell drop test in or out of structure, and that demonstrate a minimum of 250 lb puncture resistance*".

ROPWG, including requirements in all rotorcraft for the (retrofit) installation of crash resistant fuel bladders.

The CAA will then consider whether rule changes are required to align UK aviation safety requirements, where appropriate. Any decision reached to take mandatory action must follow extensive technical evaluation including, but not limited to, testing CRFS and CRSS to ensure compliance with design and certification requirements for each applicable aircraft type.

### **Conclusion**

The CAA will continue to work with international and domestic aviation stakeholders to mitigate the risks to public safety in accordance with the concerns highlighted in the Senior Coroner's Regulation 28 report. The CAA will conduct further detailed analysis of those risks, insofar as they relate to UK registered rotorcraft, together with an assessment of the impact of any subsequent proposals for rule changes and amendments to safety guidance. The CAA will be informed by analysis of UK aviation safety data, the progress of EASA RMT.0710 and work undertaken by the FAA arising from the ROPWG.

The CAA is willing provide the Senior Coroner with a supplemental report on the progress of this work on or before **31<sup>st</sup> July 2022**.

**CAA**

**13 January 2022**