

Onshore Helicopter Occurrence Reporting

Introduction

The CAA [Onshore Helicopter Safety Review](#), published in November 2019, reviewed the number of Mandatory Occurrence Reports (MORs) submitted between 2003 and 2017, with the aim of identifying trends within the onshore helicopter sector relating to operation, design and manufacture, maintenance and technical malfunction.

The review highlighted the fact that the number of occurrence reports received from the onshore helicopter sector compared to the proportion of total reports received in the UK, as a percentage of the onshore helicopter fleet size, is lower than other sectors within the UK. To put this into perspective:

The onshore helicopter fleet represents approximately 5% of the UK fleet by either flight hours flown, or by fleet size, yet the MORs reported to the CAA from onshore helicopter owners, operators and maintenance organisations represents only 1.6% of the total MORs received.

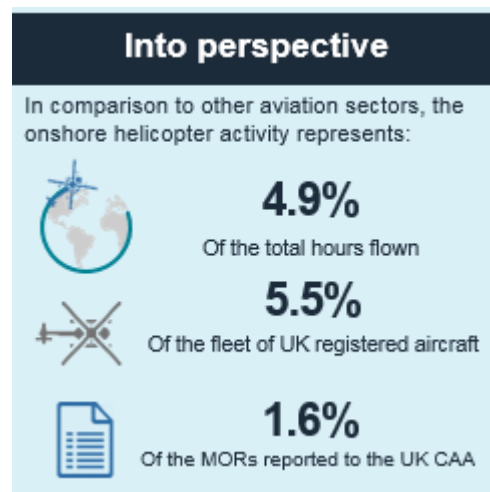
Why report to the CAA?

Some people may think that reporting occurrences to the CAA is just a data collection exercise with little or no output. This could not be further from the truth.

The CAA currently receives over 30,000 MORs per year, which are assessed, logged and where significant, action taken as appropriate. Even if individual action is not taken the occurrence contributes to the overall dataset which the CAA analyses to identify suitable safety interventions.

Many of these occurrences, particularly of a design related nature, will be discussed with the State of Design or other regulatory authorities and may ultimately result in Airworthiness Directives; or Design Approval Holders Service Bulletins being published; or with actions being taken against foreign organisations by their own regulatory authority.

For example, following an event on a Bell 429 helicopter in the UK the CAA reviewed the MOR and transferred it to EASA, as a potential design related concern, which ultimately resulted in Transport Canada issuing Emergency Airworthiness Directive TCCA EAD CF-2019-16.



In addition, those MORs of a lesser direct safety significance may be trended or monitored, in order to identify any underlying issues. Such events may result in the identification of safety risks, which may be managed through the CAA's Regulatory Safety Management System (RSMS).

Further information on the CAA's occurrence reporting system can be found via the following link: [Occurrence reporting | UK Civil Aviation Authority \(caa.co.uk\)](#)

Ensure you report to the design approval holder

Under the applicable Airworthiness regulations organisations have a responsibility to also report any identified condition of an aircraft or component which endangers flight safety, to the organisation responsible for type design or supplemental type design. Without this important link, the design organisation will not be able to effectively discharge its responsibility in regards of identifying any unsafe conditions.

Required actions

Regulation (EU) No 2015/1018 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 provides details of the type of occurrence that need to be reported as a Mandatory Occurrence Report. This includes the following but is not limited to:

Occurrences related to the operation of an aircraft.

- Tail, blade/wingtip or nacelle strike during take-off or landing.
- Precautionary or forced landing.
- Exceedance of aircraft flight manual limitation.
- Loss of redundancy of a system.
- Failure or significant malfunction of any part or controlling of a propeller, rotor or powerplant.

Occurrences related to technical conditions, maintenance and repair of an aircraft.

- Damage, failure or defect of main rotor gearbox/attachment, which could lead to in-flight separation of the rotor assembly and/or malfunctions of the rotor control.
- Serious structural damage (for example: cracks, permanent deformation, delamination, debonding, burning, excessive wear, or corrosion) found during maintenance of the aircraft or component.
- Significant malfunction of a safety-critical system or equipment including emergency system or equipment during maintenance testing or failure to activate these systems after maintenance.
- Any defect in a life-controlled critical part causing retirement before completion of its full life.
- Any occurrence where the human performance, including fatigue of personnel, has directly contributed to or could have contributed to an accident or a serious incident.
- The use of products, components or materials, from unknown, suspect origin, or unserviceable critical components.
- Misleading, incorrect or insufficient applicable maintenance data or procedures that could lead to significant maintenance errors, including language issue.
- Incorrect control or application of aircraft maintenance limitations or scheduled maintenance.

We would like to remind owners, operators and organisations of their responsibilities for reporting occurrences under the applicable occurrence reporting regulations as this information contributes to the complete helicopter sector safety data picture.

Protection of the reporter

Regulation (EU) No 376/2014 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 highlights the requirement for the information contained in occurrence reports to only be used for the purposes of safety. It also identifies the need to appropriately safeguard the confidentiality of the reporter and persons mentioned in occurrence reports, as well as the promotion of a 'just culture'. As a result, organisations should have policies and procedures in place to ensure the objectives of this regulation are met and personnel are encouraged to report matters affecting safety.

Reporting to the UK Air Accident Investigation Branch (AAIB)

In addition to the requirement to report occurrences to the CAA and design approval holder, Article 9 of Regulation (EU) 996/2010 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018, requires any person involved who has knowledge of the occurrence of an accident or serious incident shall notify without delay the competent safety investigation authority of the State of Occurrence. For the UK this is the AAIB: [Report an aircraft accident or serious incident - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/guidance/report-an-aircraft-accident-or-serious-incident)

Conclusion

The fundamental reason for reporting Occurrences is to improve aviation safety. Even if you don't see the direct link to safety, if it falls within the reporting criteria it is essential to report occurrences to the CAA and to the Design Approval Holder as appropriate.

Regulatory requirements

The regulations listed below have been retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018:

- European Commission regulation (EU) No 2015/1018
- European Commission regulation (EU) No 1321/2014
- European Commission regulation (EU) No 376/2014
- European Commission regulation (EU) No 965/2012
- European Commission regulation (EU) 996/2010

More information

Further guidance on mandatory occurrence reports (MORs) and voluntary occurrence reports (VORs) is available on the CAA website: [Occurrence reporting | UK Civil Aviation Authority \(caa.co.uk\)](https://www.caa.co.uk/occurrence-reporting)

Further guidance on reporting accidents and serious incidents is available on the AAIB website: [Report an aircraft accident or serious incident - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/guidance/report-an-aircraft-accident-or-serious-incident)

A final thought

Making a report may help prevent the next accident.