



Issued: 12 April 2022

Identification of Critical Parts in Operator's Maintenance Programmes

This Safety Notice contains recommendations regarding operational safety.

Recipients must ensure that this Notice is copied to all members of their staff who need to take appropriate action or who may have an interest in the information (including any CAMO sub-contractors or 'in-house' or contracted maintenance organisations).

Applicability:	
Aerodromes:	N/A
Air Traffic:	N/A
Airspace:	N/A
Airworthiness:	All Airworthiness Organisations
Flight Operations:	All AOC Holders
Licensed/Unlicensed Personnel:	Not primarily affected

Interpretation

In this Safety Notice, references to EU regulations are to those regulations as retained and amended in UK domestic law under the European Union (Withdrawal) Act 2018 and are referenced as "UK Regulation (EU) year/number" or "UK Regulation (EU) No. number/year".

1 Introduction

1.1 The failure of a critical part(s) has been highlighted as the cause for numerous fatal accidents, particularly in Rotorcraft. Although the Continuing Airworthiness regulations only refer to life limited parts, correctly managing the continuing airworthiness and maintenance of critical parts play an essential role in overall civil aviation safety system.

The CAA previously published guidance for organisations managing and maintaining Critical Parts in Information Notice IN-2016/026, which has been superseded by the following CAA webpage: Critical parts awareness and training | Civil Aviation Authority (caa.co.uk).

1.2 UK Regulation (EU) No. 2015/1018 provides details of occurrences to be mandatorily reported under UK Regulation (EU) No. 376/2014. Annex II, paragraph 3(10) requires organisations to report to the CAA any defect in a life-controlled critical part causing retirement before completion of its full life. For further information please refer to the following CAA webpage: Occurrence reporting | Civil Aviation Authority (caa.co.uk).

- 1.3 UK Regulation (EU) No.1321/2014, point M.A.301, Continuing Airworthiness Tasks, requires that the aircraft continuing airworthiness and the serviceability of both operational and emergency equipment of all complex motor-powered aircraft or aircraft used by licenced air carriers in accordance with UK Regulation (EU) No.1008/2008, is ensured by performing analysis of the effectiveness of the approved Aircraft Maintenance Programme (AMP).
- 1.4 The Acceptable Means of Compliance (AMC) to M.A.301(e) further requires the Continuing Airworthiness Management Organisation (CAMO) managing the continuing airworthiness of the aircraft to have a system in place for analysing the effectiveness of the maintenance programme and to amend it accordingly.

2 Compliance/Action to be Taken

- 2.1 In order for operators to carry out the appropriate analysis of the effectiveness of their approved aircraft maintenance programmes (AMP) in relation to critical parts and report any defects in life-controlled critical parts causing retirement before completion of its full life, the CAA recommends operators and organisations to identify in the respective maintenance programmes, which parts are classified as Critical Parts. For the identification of Critical Parts, refer to the information published by the respective design approval holders (aircraft, engines, propellers). Please note this may also include design approval holders of Supplemental Type Certificates (STC) for any major changes.
- 2.2 For those aircraft that are required to have a formal Reliability Programme under UK Regulation (EU) No. 1321/2014, point M.A.302(g), the CAA recommends that operators specifically monitor the reliability of Critical Parts and feed this information back to the applicable design approval holder to enable them to take any necessary actions to improve their reliability.
- 2.3 Where the system allows, operators are requested to identify life controlled critical parts in their computerised maintenance control systems (E.G. AMOS, SAP, CAMP etc.) to assist with analysing the effectiveness of the AMP and producing the necessary reliability data, if applicable.
- 2.4 In addition to paragraph 2.3 above, identifying Critical Parts within the systems used in the storage facilities under Part 145 and Part CAO approvals will assist organisations with meeting their responsibilities for ensuring the correct handling and storage of Critical Parts. Please refer to the following CAA webpage: Critical parts awareness and training | Civil Aviation Authority (caa.co.uk).
- 2.5 As detailed in paragraph 1.2, all operators and organisations managing aircraft fitted with Critical Parts are required by UK Regulation (EU) No. 2015/1018 and UK Regulation (EU) No. 376/2014, to report all occurrences of early removal of life-controlled Critical Parts to the CAA under the Mandatory Occurrence Reporting system.

3 Further Information

- 3.1 The CAA would like to remind operators and organisations that under the applicable Airworthiness regulations they have a responsibility to also report any identified condition of an aircraft or component which endangers or has the potential to endanger 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.
- 3.2 In turn, the CAA will monitor all MORs relating to early removal of Critical Parts and engage with the applicable State of Design and/or design approval holder where the cause for early removal has the potential to impact on safety.

4 Queries

4.1 Any queries or requests for further guidance because of this communication should be addressed to continued.airworthiness@caa.co.uk

5 Cancellation

5.1 This Safety Notice will remain in force until further notice.

6 Related Documents and useful information

Continuing Airworthiness Regulation:

Continuing Airworthiness | Civil Aviation Authority (caa.co.uk)

Occurrence Reporting Regulation:

Occurrence Reporting | Civil Aviation Authority (caa.co.uk)

CAA Critical Parts webpage:

Critical parts awareness and training | UK Civil Aviation Authority (caa.co.uk)

Occurrence Reporting for operators of Onshore Helicopters:

CAP2158: Onshore Helicopter Occurrence Reporting (caa.co.uk)