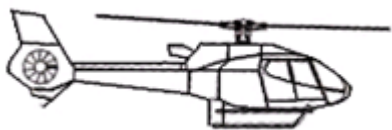


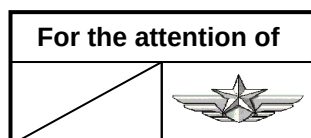
Civil version(s): T2



ALERT SERVICE BULLETIN

SUBJECT: LIMITATION - FUEL SYSTEM AND CHECK**FADEC - Flight manual procedure**

ATA: 73



Revision No.	Date of issue
Revision 0	2013-12-04
Revision 1	2014-01-30
Revision 2	2014-02-17

Summary:

Introduction of the flight manual procedure in the event of the amber GOV warning light coming on followed by the loss of the display on the VEMD.

Reason for last revision:

The purpose of Revision 2 of this ALERT SERVICE BULLETIN is to cancel the instructions given in this document for helicopters equipped with a FADEC C13165DA00 amendment A or C13165DA00PC00 amendment A or C13165FA00 amendment B.

Compliance:

Airbus Helicopters renders compliance with this ALERT SERVICE BULLETIN mandatory.

1. PLANNING INFORMATION

1.A. EFFECTIVITY

1.A.1. Helicopters/installed equipment

EC130 T2 helicopters equipped with an ARRIEL 2D engine and THALES FADEC P/N C13165DA00 or C13165DA00PC00 or C13165FA00, including all amendments.

1.A.2. Non-installed equipment

Not applicable.

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

Revision 0:

Following an event which occurred in flight 5 minutes after take-off, the pilot reported that the amber "GOV" warning light came on, followed by a decrease in rotor speed to 369 RPM and a partial then total shut-down of the VEMD screens. The pilot reported that there was no longer automatic or auxiliary regulation (EBCAU), maintained the NR and performed a running landing, during which the NR reached 400 RPM.

FADEC investigations have shown that this failure was caused by the short-circuit of a component (tantalum capacity), which led to the loss of a FADEC channel and the appearance of the amber GOV alarm. The induced chain reaction led, after a few dozen seconds, to the fuel metering unit freezing without a red GOV alarm and no possibility of switching to "EBCAU" emergency regulation, the amber "GOV" warning light switching off and the partial then total loss of the information displayed on the VEMD.

Airbus Helicopters makes compliance with the new flight manual procedures defined in this ALERT SERVICE BULLETIN mandatory.

Revision 1:

The purpose of Revision 1 is to extend compliance with this ALERT SERVICE BULLETIN to FADEC P/N C13165DA00PC00.

Compliance with Revision 1 does not affect compliance with the previous revision.

Revision 2:

TURBOMECA has issued Mandatory Service Bulletin No. 292_73_2852 in order to correct the anomaly on the FADECs. The embodiment of amendment A for FADEC C13165DA00 / C13165DA00PC00 or amendment B for FADEC C13165FA00 cancels the flight manual procedures defined in this ALERT SERVICE BULLETIN.

Compliance with Revision 2 affects compliance with the previous revisions.

1.D. DESCRIPTION

Compliance with this ALERT SERVICE BULLETIN consists in:

- Inserting the additional page given in Appendix 4.A into the flight manual.

1.E. COMPLIANCE**1.E.1. Compliance at the works**

Add the page given in Appendix 4.A to the flight manual paragraph "3.7 Various warnings, failures and incidents not indicated on the CWP" before delivery.

1.E.2. Compliance in serviceHelicopters/installed equipment:

Helicopters equipped with FADEC C13165DA00 without amendment A or C13165DA00PC00 without amendment A or C13165FA00 without amendment B:

- Add the page given in Appendix 4.A to the flight manual paragraph "3.7 Various warnings, failures and incidents not indicated on the CWP" within 7 days following receipt of ALERT SERVICE BULLETIN Revision 0 issued on December 04, 2013.

Helicopters equipped with FADEC C13165DA00 amendment A or C13165DA00PC00 amendment A or C13165FA00 amendment B:

- Remove the page introduced into the flight manual during compliance with the previous revisions of this ALERT SERVICE BULLETIN.

Non-installed equipment:

Not applicable.

1.F. APPROVAL

Approval of modifications:

Not applicable.

Approval of this document:



The technical information contained in this ALERT SERVICE BULLETIN Revision 0 was approved on December 04, 2013 under the authority of EASA Design Organization Approval No. 21J.056 for helicopters of civil versions subject to an Airworthiness Certificate.

The technical information contained in this ALERT SERVICE BULLETIN Revision 1 was approved on January 30, 2014 under the authority of EASA Design Organization Approval No. 21J.056 for helicopters of civil versions subject to an Airworthiness Certificate.

The technical information contained in this ALERT SERVICE BULLETIN Revision 2 was approved on February 17, 2014 under the authority of EASA Design Organization Approval No. 21J.056 for helicopters of civil versions subject to an Airworthiness Certificate.

1.G. MANPOWER

For compliance with this ALERT SERVICE BULLETIN, Airbus Helicopters recommends the following personnel qualifications:

- Qualification: 1 Operational Sector Technician to update the Flight Manual.



The time for the operation is given for information purposes, for a standard configuration.

- Time for the operation: approximately 5 minutes for 1 Operational Sector Technician

1.H. WEIGHT AND BALANCE

Not applicable.

1.I. EFFECT ON ELECTRICAL LOADS

Not applicable.

1.J. SOFTWARE MODIFICATION EMBODIMENT RECORD

Not applicable.

1.K. REFERENCES

Not applicable.

1.L. DOCUMENTS AFFECTED

Flight Manual.

1.M. INTERCHANGEABILITY OR MIXABILITY OF PARTS

Not applicable.

2. MATERIAL INFORMATION**2.A. MATERIAL: PRICE - AVAILABILITY - PROCUREMENT**

Not applicable.

2.B. INFORMATION CONCERNING INDUSTRIAL SUPPORT

Not applicable.

2.C. MATERIAL REQUIRED FOR EACH HELICOPTER/COMPONENT

Not applicable.

2.D. MATERIAL TO BE RETURNED

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

Not applicable.

3.B. OPERATIONAL PROCEDURE

Not applicable.

3.C. IDENTIFICATION

Identification of this document:

Record compliance with this document, its revision number and the FADEC P/No. and amendment, in the helicopter documents.

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Operating Instructions:

Refer to Appendix 4.A.

Maintenance instructions:

Not applicable.

4. APPENDIX

4.A. HELICOPTER EC130 T2

FLIGHT MANUAL EC130 T2

3.7.5 Engine governing failure without EBCAU activation

Failure description:

There is a small risk of an engine governing failure due to an internal FADEC failure concerning both FADEC channels. This failure may lead to a fuel flow frozen at the value prior to the failure. Fuel flow control is not taken over by the EBCAU. The FADEC channels may fail one after the other within a few dozen seconds.

Symptoms:

Following the failure of one FADEC channel the amber **GOV** caution comes on. Engine regulation still functions normally. Failure of the second FADEC channel will lead to a loss of all engine related information on the VEMD. The VEMD reverts to the 3-info page. No value is indicated for TRQ, N1 and TOT. These scales are displayed in yellow. The amber **GOV** caution may extinguish. Red **GOV** warning doesn't come on. The N2 is no more governed and varies depending to the flight condition. IDLE selection by the twist grip has no effect. Manual activation of EBCAU by the **[EBCAU TST]** pushbutton is not possible.

Recommended procedure:

1. Stabilize NR in the green range of the NR indicator by use of the collective control.
2. If the power level allows stabilize forward flight.
3. Within gliding distance of an area suitable for an autorotational landing, cut-off the engine by use of the engine starting selector or by the fuel shut-off control.
4. When the engine extinguishes proceed for an autorotational landing. Perform the appropriate engine flame-out procedure (Refer to FLM Section 3, paragraph 3.2.1 – 3.2.3)

LAND AS SOON AS POSSIBLE

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ORIGINAL ISSUE**