



No. EC155-31-023

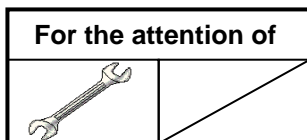
Civil version(s): B

SERVICE BULLETIN

PRODUCT IMPROVEMENT

INDICATING AND RECORDING SYSTEMS - VEMD AND CAD VEMD and CAD obsolescence

Corresponds to modifications 0739C92 and MC39C93



Revision No.	Date of issue
Revision 0	2020-12-22
Revision 1	2021-08-27

Summary:

The purpose of this Service Bulletin is to replace the previous generation Vehicle and Engine Management Display (VEMD) and the Caution and Advisory Display (CAD) with a new generation VEMD and CAD following obsolescence.

Reason for last Revision

The purpose of Revision 1 of this Service Bulletin is to:

- Indicate to order to THALES
- Update the paragraph [2.C](#).

Compliance:

Compliance with this Service Bulletin is left to the operator's initiative.

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1. PLANNING INFORMATION



CAUTION

THIS SERVICE BULLETIN IS WRITTEN BASED ON THE ORIGINAL HELICOPTER CONFIGURATION (AS DEFINED IN THE INDIVIDUAL INSPECTION LOG BOOK (RIC)). IT ALSO TAKES INTO ACCOUNT ALL AIRBUS HELICOPTERS APPROVED CONFIGURATION CHANGES MADE AFTER DELIVERY, IF AIRBUS HELICOPTERS WAS INFORMED OF THEM. IT IS THE RESPONSIBILITY OF THE OPERATOR TO CHECK THE COMPATIBILITY OF ANY MODIFICATIONS WITH THE CURRENT HELICOPTER CONFIGURATION. IF MODIFICATIONS ARE INCOMPATIBLE, IT IS THE RESPONSIBILITY OF THE OPERATOR TO DEFINE THE NECESSARY ADAPTATION WORK AND HAVE THEM APPROVED BY THE AIR TRANSPORT AUTHORITIES IN THE COUNTRY CONCERNED, AND TO MAKE SURE THAT THEIR AIRWORTHINESS IS FOLLOWED UP.

1.A. EFFECTIVITY

1.A.1. Helicopters/installed equipment or parts

Helicopters:

- POST MOD 0739B78,
- PRE MOD 0739C92 and MC39C93,
- which have a VEMD and a CAD with a P/N listed in paragraph [2.C.](#)

Helicopters No. 6544, 6545, 6546, 6547, 6557, 6558, 6559, 6562, 6563, 6569, 6575, 6576, 6577, 6580, 6581, 6583, 6586, 6591, 6592, 6594, 6595, 6599, 6600, 6602, 6607, 6608, 6610, 6611, 6613, 6615, 6623, 6630, 6633, 6634, 6637, 6639, 6641 and 6643 with a configured VEMD P/N 365P61-4900-03 or 365P61-5537-00 and a configured CAD P/N 365P61-4900-04, 361P61-4902-00 or 365P61-5537-01 are not affected by this Service Bulletin.

They are the subject of Service Bulletin No. 31C024 (VEMD and CAD Obsolescence).

Helicopters which have already complied with revision 0 of this Service Bulletin are not concerned by revision 1 of this Service Bulletin.

NOTE 1

Refer to the Individual Inspection Log Book (RIC AMS) and/or Aircraft Log Book to identify the current modification status of the helicopter.

NOTE 2

Refer to the Log Cards (FM) to identify the current modification status of the helicopter/equipment.

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1.A.2. Non-installed equipment or parts

- VEMD P/N B19030HB03 (704A47270163)
- Configured CAD P/N 365P61-4904-00
- Configured CAD P/N 365P61-4906-00
- Configured CAD P/N 365P61-4908-00
- Configured CAD P/N 365P61-4908-05

NOTE 3

The configured CAD P/N above contain CAD P/N C19243CB03 / 704A47270164.

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

Revision 0:

The purpose of this Service Bulletin is to replace the previous generation Vehicle and Engine Management Display (VEMD) and the Caution and Advisory Display (CAD) with a new generation VEMD and CAD following obsolescence.

Revision 1:

The purpose of Revision 1 of this Service Bulletin is to:

- Indicate to order to THALES
- Update the paragraph [2.C.](#)

Revision 0 of this Service Bulletin has no effect on the application of revision 1 of this Service Bulletin.

1.D. DESCRIPTION

This Service Bulletin consists in replacing the previous generation of VEMD and CAD with the new generation.

1.E. COMPLIANCE

1.E.1. Compliance at H/C manufacturer level

Not applicable.

1.E.2. Compliance in service

Helicopters/installed equipment or parts:

The work must be performed on the helicopter by the operator.

Comply with paragraph [3.B.](#) of this Service Bulletin.

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Non-installed equipment or parts:

The build-up of stocks for compliance with this Service Bulletin is left to the operator's initiative.

1.F. APPROVAL

Approval of modifications:

The information or instructions relate to modification 0739C92 which was approved through Compliance Record Document (CRD) DA07.39C92A on December 18, 2020 by the EASA for civil version helicopters subject to an Airworthiness Certificate.

The information or instructions relate to modification MC39C93 which was approved through Compliance Record Document (CRD) DAMC.39C93B on August 12, 2021 by the EASA for civil version helicopters subject to an Airworthiness Certificate.



Approval of this document:

The technical information contained in this Service Bulletin, Revision 0 was approved on December 22, 2020 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

The technical information contained in this Service Bulletin Revision 1 was approved on August 24, 2021 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

1.G. MANPOWER



For compliance with this Service Bulletin, Airbus Helicopters recommends the following staff qualifications:

Qualifications:

- 1 Avionics Technician,
- 1 Pilot.



The estimated Man-hours are indicated for reference purposes only and based on a standard helicopter configuration.

Estimated man-hours:

- 3 hours for the Avionics Technician,
- 30 minutes for the Pilot.



Estimated helicopter downtime is indicated for reference purposes only, based on a standard helicopter configuration.

Helicopter downtime is estimated at half a day.

1.H. WEIGHT AND BALANCE

Not applicable.

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1.I. POWER CONSUMPTION

Not applicable.

1.J. SOFTWARE UPGRADES/UPDATES

Not applicable.

1.K. REFERENCES

The following documents are required for compliance with this Service Bulletin.

Aircraft Maintenance Manual:

AMM: 24-00-00-911: General Safety Instructions - Electrical Power

AMM: 31-00-00-061: Removal / Installation Principle Applicable to a Part / LRU

AMM: 31-51-01-061: Removal / Installation - CAD

AMM: 31-60-01-061: Removal / Installation - VEMD

AMM: 34-00-00-911: General Safety Instructions - Navigation

Standard Practices Manual:

MTC: 20-02-01-102: Identification of electrical equipment - General

MTC: 20-02-05-404: Assembly by Screws and Nuts - Joining

MTC: 20-07-02-201: Helicopter parked in a repair shop - Safety instructions

MTC: 20-07-03-408: Appearance checks on an aircraft after an inspection or repair - Technical instructions

MTC: 20-08-05-101: Drafting and updating the log card (FM) - General rules applicable to aircraft

Flight manual

FLM: Flight Manual

Information Notice

IN: 2832-I-00: Instruction to send the material back

IN: 3481-I-00: The Marketplace: an AirbusWorld eOrdering service

IN: 3643-I-00: Introduction of the digital Service Bulletin reporting service R-TEX

1.L. OTHER AFFECTED PUBLICATIONS



CAUTION

TO COMPLY WITH THIS SERVICE BULLETIN, THE OPERATOR MUST MAKE SURE THAT ALL THE MAINTENANCE DOCUMENTS REQUIRED FOR THE MAINTENANCE OF THIS INSTALLATION ARE AVAILABLE. IF NOT, IT IS THE OPERATOR'S RESPONSIBILITY TO OBTAIN THE DOCUMENTS FROM THE USUAL AIRBUS HELICOPTERS CONTACT.

Publication to be updated:

Revision of the IPC documents will be updated on the customer's order.

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1.M. PART INTERCHANGEABILITY OR MIXABILITY

Interchangeability:

PRE MOD and POST MOD CAD and VEMD are not interchangeable.

Mixability:

Not applicable.

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2. EQUIPMENT OR PARTS INFORMATION

2.A. EQUIPMENT OR PARTS: PRICE - AVAILABILITY - PROCUREMENT

Refer to THALES in accordance with paragraph [2.D.](#)

NOTE 1

On the purchase order, please specify the mode of transport, the destination and the serial numbers of the helicopters to modify.

NOTE 2

To define which CAD to order for a helicopter (paragraph [2.C.](#)), check the P/N of the equipment item on the helicopter.

2.B. LOGISTIC INFORMATION

Not applicable.

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2.C. EQUIPMENT OR PARTS REQUIRED PER HELICOPTER/COMPONENT

Kits to be ordered for one helicopter or one assembly:

Order one of the 4 configured CADs below, as well as the VEMD, as required

Key Word	Qty	New P/N	Item	Old P/N →	Instruction
VEMD	1	B19030LE04 (704A47270238)	(1)	B19030HB03 (704A47270163)	Return as per paragraph 2.D
	For ref.	707A49439394		707A49438039	See NOTE 3
Configured CAD	1	365P61-4961-04	(2)	365P61-4904-00	Return as per paragraph 2.D
	For ref.	C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	
	For ref.	707A49439391	-	707A49438072	
Configured CAD	1	365P61-4961-01	(2)	365P61-4906-00	Return as per paragraph 2.D
	For ref.	C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	
	For ref.	707A49439388	-	707A49438050	
Configured CAD	1	365P61-4961-02	(2)	365P61-4908-00	Return as per paragraph 2.D
	For ref.	C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	
	For ref.	707A49439389	-	707A49438060	
Configured CAD	1	365P61-4961-05	(2)	365P61-4908-05	Return as per paragraph 2.D
	For ref.	C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	
	For ref.	707A49439392	-	707A49438080	

NOTE 3

The combination of the VEMD (1) and this software reference correspond to the configuration 365A61-1775-00.

Consumables to be ordered separately:

As per Work Cards and Tasks indicated in this Service Bulletin.

You can order the consumables from the AirbusWorld Marketplace through e-ordering (IN 3481-I-00). If you can't get access to e-ordering, please contact your Logistic Focal Point.

Special tools:

As per Work Cards and Tasks indicated in this Service Bulletin.

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2.D. EQUIPMENT OR PARTS TO BE RETURNED

Return the equipment or parts to the following address:

SDV Aerospace c/o Thales Avionics
Zone de Fret 3 - SAGAFRO
3 Rue du Remblai
BP 16355
95706 Roissy Charles de Gaulle Cedex
FRANCE

or

Thales Avionics, Inc.
140 Centennial Ave
Piscataway, NJ 08854
USA

or

Thales Solutions ASIA PTE. LTD
21 Changi North Rise498788 SINGAPORE
SINGAPORE

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3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- As per Task 24-00-00-911 (AMM), read and comply with the general electrical instructions.
- As per Task 31-00-00-061 (AMM), read and comply with the general instructions concerning the removal - installation principle for a part or LRU.
- As per Task 34-00-00-911 (AMM), read and comply with the general navigation system instructions.
- As per Work Card 20-02-01-102 (MTC), read and comply with the general instructions concerning the identification electrical installations.
- As per Work Card 20-07-02-201 (MTC), read and comply with the general instructions applicable for a helicopter parked in a repair workshop.

Unless indicated otherwise, tighten the screws to standard torque as per Work Card 20-02-05-404 (MTC).

3.B. WORK STEPS

3.B.1. Preliminary steps

- Park the helicopter in a maintenance workshop.
- Install the appropriate access equipment.
- Disconnect all the electrical power supplies.
- Remove and/or open all cowlings, panels, doors and all equipment items to enable adequate access to the various work areas.

3.B.2. Procedure

NOTE 1

The CAD can be customized.

Before the removal of the equipment items, check as per paragraph [2.C.](#):

- the PRE MOD P/N of the CAD and the VEMD,
- the configuration P/N associated with the CAD.

As per [Figure 1](#)

- Remove the concerned VEMD (a) and the configured CAD (b) as per Task 31-60-01-061 (AMM) and Task 31-51-01-061 (AMM).
- Return the VEMD (a) and the CAD (b) as per paragraph [2.D.](#)
- Install the VEMD (1) and the configured CAD (2) as per Task 31-60-01-061 (AMM) and Task 31-51-01-061 (AMM).

3.B.3. Tests

- Set the helicopter to test conditions.
- Reconnect all the electrical power supplies.
- Energize the helicopter.
- Perform the VEMD and CAD tests as per Tasks 31-60-01-061 (AMM) and 31-51-01-061 (AMM).

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3.B.4. Final steps

- De-energize the helicopter.
- Clean the work areas and the helicopter and return them to their initial condition as per Work Card 20-07-03-408 (MTC).
- Install all cowlings, panels and doors and all equipment items removed and/or opened during the preliminary steps (paragraph [3.B.1.](#) of this Service Bulletin).
- Remove the access equipment.
- Set the helicopter to flight conditions.

3.B.5. Ground run-up/ flight test

Perform two run-ups to update the NG cycles (Gas generator rpm) and NF (Free Turbine rpm) as per the Flight Manual (FLM).

NOTE 2

The electrical power supply must be disconnected at the "BAT/ESS" button on the "12 ALPHA" control panel between the two required run-ups.

3.B.6. Work steps for non-installed equipment or parts

The replacement and build-up of stocks is left to the operator's initiative.

3.C. RECORD OF COMPLIANCE

Compliance with this document:

Record full compliance with this Service Bulletin, with the revision number, in the helicopter documents.

Record compliance with this Service Bulletin (see IN 3643-I-00 for instructions):
QR-Code or hypertext link



[SB EC155 31-023](#)

NOTE 3

The recording of compliance with Service Bulletins in the R-Tex tool does not replace the recording in the helicopter documents.

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Tracking of modifications in the documentation:

Record full embodiment of modifications 0739C92 and MC39C93 in the helicopter documents.

In the Log Card (FM) of the VEMD and the CAD, record, as per Work Card 20-08-05-101 (MTC):

- date of removal.

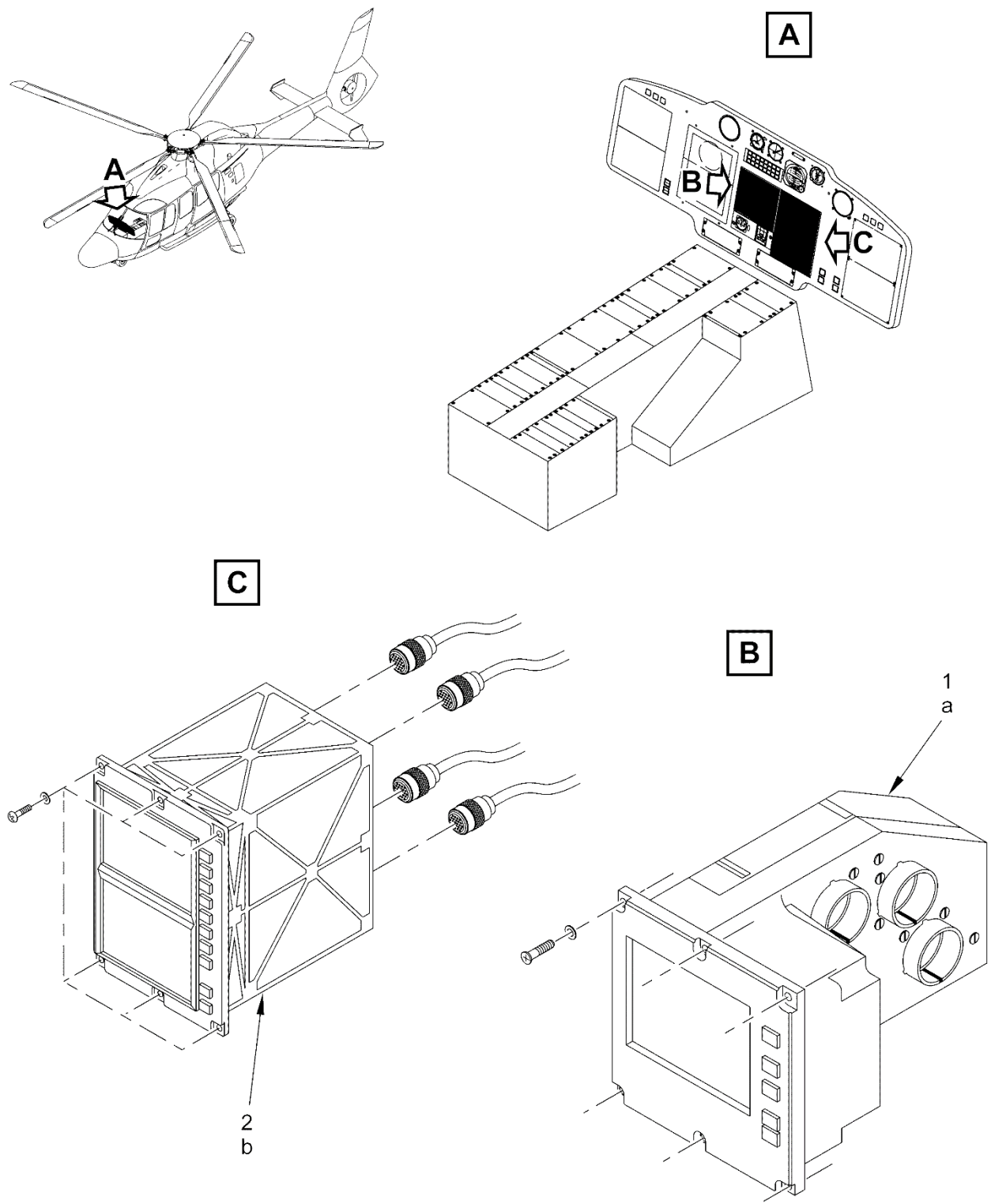
In the Log Card (FM) of the VEMD and the CAD, record, as per Work Card 20-08-05-101 (MTC):

- installation date.

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Not applicable.

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Back to paragraph [3.B.2.](#)

Figure 1