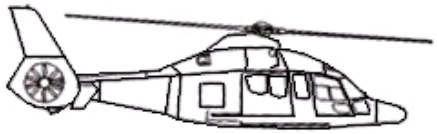


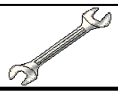
No. EC155-31-026

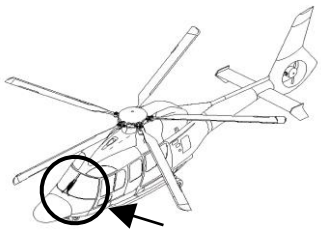
Civil version(s): B

SERVICE BULLETIN

PRODUCT IMPROVEMENT

INDICATING AND RECORDING SYSTEMS - VEMD and CAD
VEMD and CAD obsolescence
Related to modification 0731C05

For the attention of




Revision No.	Date of issue
Revision 0	2021-12-20

Summary:

The function of this Service Bulletin is to allow the replacement of the "Old Generation (OG)" Vehicle and Engine Management Display (VEMD) with the "New Generation (NG)" VEMD because of obsolescence. With the introduction of a new Central Panel Display System (CPDS) software (from 03 to 04), it will also make the reliability and performance of the VEMD better.
This Service Bulletin allows the installation of Night Vision Goggles (NVG) CPDS on non-NVG Helicopters because the supportability of non-NVG equipment cannot be granted in all cases because of obsolescence on the non-NVG hardware.

Compliance:

It is the operator's decision to comply or not to comply with this Service Bulletin.

1. PLANNING INFORMATION

CAUTION

MAKE SURE THAT THE MODIFICATIONS RELATED TO THIS SERVICE BULLETIN AGREE WITH THE HELICOPTER CONFIGURATION AT THIS TIME. IF THE MODIFICATIONS DO NOT AGREE WITH THE HELICOPTER CONFIGURATION:
- **PREPARE THE NECESSARY ADAPTATION WORK.**
- **GET THE APPROVAL BY THE APPLICABLE LOCAL AIR TRANSPORT AUTHORITIES.**
- **COMPLY WITH THE AIRWORTHINESS REQUIREMENTS.**

THIS SERVICE BULLETIN IS WRITTEN FOR THE INITIAL HELICOPTER CONFIGURATION SPECIFIED IN THE INDIVIDUAL INSPECTION LOG BOOK. IT INCLUDES ONLY THE POST-DELIVERY CONFIGURATION CHANGES WHICH ARE KNOWN AND APPROVED BY AIRBUS HELICOPTERS.

1.A. EFFECTIVITY

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

Helicopters:
- PRE MOD 0731C05
- That have a VEMD and a Caution and Advisory Display (CAD) with one of the MP/Nos. identified in paragraph 2.C.

NOTE 1

You can identify the delivery date of the helicopter in the Certificate of Conformity (included in the Individual Inspection Log Book).

NOTE 2

You can identify the modification status of the equipment in the Log Cards (FM).

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

Non-NVG equipment

- VEMD MP/N: B19030HB03 (P/N: 704A47270163)
- Configured CAD MP/N 365A61-1775-01
- Configured CAD MP/N 365P61-4906-00
- Configured CAD MP/N 365P61-4908-00
- Configured CAD MP/N 365P61-4904-00
- Configured CAD MP/N 365P61-4908-05.

NOTE 3

The configured CAD MP/Nos. above contain CAD MP/N C19243CB03 (P/N 704A47270164).

Or

NVG equipment

- VEMD MP/N: B19030LB03 (P/N: 704A47270165)
- Configured CAD MP/N 365P61-4902-00
- Configured CAD MP/N 365P61-4900-04
- Configured CAD MP/N 365P61-4900-05.

NOTE 4

The configured CAD MP/Nos. above contain CAD MP/N C19243DB03 (P/N: 704A47270166).

1.B. ASSOCIATED REQUIREMENTS

CAUTION

THIS SERVICE BULLETIN INSTALLS THE VEMD AND THE CAD. BEFORE YOU COMPLY WITH THIS SERVICE BULLETIN, MAKE SURE THAT THERE WAS NO ALERT SERVICE BULLETIN RELATED TO THIS INSTALLATION. IF THERE IS SUCH ALERT SERVICE BULLETIN, MAKE SURE THAT IT IS NOT ISSUED BETWEEN THE DATES THAT FOLLOW:

- **THE DATE OF APPROVAL OF THIS SERVICE BULLETIN**
- **THE TIME YOU DO THE WORK (GIVEN IN THIS SERVICE BULLETIN) ON THE HELICOPTER.**

1.C. REASON

The function of this Service Bulletin is to allow the replacement of the "Old Generation (OG)" Vehicle and Engine Management Display (VEMD) with the "New Generation (NG)" VEMD because of obsolescence. With the introduction of a new Central Panel Display System (CPDS) software (from 03 to 04), it will also make the reliability and performance of the VEMD better.
This Service Bulletin allows the installation of Night Vision Goggles (NVG) CPDS on non-NVG Helicopters because the supportability of non-NVG equipment cannot be granted in all cases because of obsolescence on the non-NVG hardware.

1.D. DESCRIPTION

This Service Bulletin includes the replacement of the former generation VEMD and CAD with the new generation VEMD and CAD.

1.E. COMPLIANCE

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

Not applicable.

1.E.2. Compliance in service

It is the operator who does the work on the helicopter.

Helicopters/installed equipment or parts:

Comply with paragraph 3.B. of this Service Bulletin.

Non-installed equipment or parts:

It is the operator who makes the decision on the level of stock related to the compliance with this Service Bulletin.

1.F. APPROVAL

Approval of modifications:

The information or instructions relate to modification 0731C05, which was approved through CRD DA07.31C05A Revision 2, on November 05, 2021 under the authority of EASA Design Organization Approval No. 21J.700 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 17, 2021 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

1.G. MANPOWER

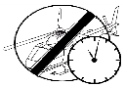
Airbus Helicopters recommends that the personnel who will do this Service Bulletin have these qualifications:

Qualification: 1 Avionics Technician.

Specialist: 1 Pilot.

The man-hours are an estimate given for information only and for a standard helicopter configuration.

Estimated Man-hours: - 3 hours for the Avionics Technician
- 30 minutes for the Pilot.



The helicopter downtime is an estimate given for information only and for a standard helicopter configuration.

The estimate of the helicopter downtime is half a day.

1.H. WEIGHT AND BALANCE

Not applicable.

1.I. POWER CONSUMPTION

This Service Bulletin has no effect on the electrical load analysis.

1.J. SOFTWARE UPGRADES/UPDATES

Not applicable.

1.K. REFERENCES

These documents are necessary to comply with this Service Bulletin:

Aircraft Maintenance Manual (AMM)

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 System

Standard Practices Manual (MTC)

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 inspection or repair - Technical instructions
MTC: 20-08-05-101: Drafting and updating the log card (FM) - General rules applicable to aircraft
MTC: 20-80-20-107: Identification of electrical systems - Standard Practices - Electrical Power

Information Notice (IN)

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 NECESSARY FOR THE MAINTENANCE OF THIS INSTALLATION ARE AVAILABLE. IF THEY ARE NOT AVAILABLE, THE OPERATOR MUST CONTACT AIRBUS HELICOPTERS TO GET THESE DOCUMENTS.

Airbus Helicopters will update the Illustrated Parts Catalog (IPC) when the customer sends an order for it.

1.M. PART INTERCHANGEABILITY OR MIXABILITY

Interchangeability:

The PRE MOD and POST MOD V.E.M.D/CAD equipment items are interchangeable if you replace them at the same time and as a couple. Refer to paragraph 2.C.

Mixability:

The mixability does not apply to this modification because of the replacement by couple of the V.E.M.D /CAD. Refer to paragraph 2.C.

2. EQUIPMENT OR PARTS INFORMATION

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

Contact THALES. Refer to paragraph 2.D.

In the purchase order, write the information that follows:
- The mode of transport
- The destination
- The serial numbers of the helicopters to change.

NOTE 1

The MP/N of the equipment item on the helicopter helps you select the CAD or VEMD for which you will send an order (paragraph 2.C.).

2.B. LOGISTIC INFORMATION

Not applicable.

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

Kits to be ordered for one helicopter or one assembly:

Send an order for one of the VEMDs below and the CADs, as necessary.

Key Word	Qty	New P/N	Item	Former P/N →	Instruction
VEMD	1	B19030LB04 (704A47270176) or B19030LC04 (704A47270180)	1	B19030HB03 (704A47270163)	Return. Refer to paragraph 2.D. See NOTE 2
VEMD configured file	info	707A49439394	-	707A49438039	
Configured CAD	1	365P614961.08 or 365P614961.00	2	365A611775.01	Return. Refer to paragraph 2.D.
CAD indicator	info	C19243DB04 (704A47270177) or C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	See NOTE 4
Configuration file	info	707A49439387		707A49438040	
Configured CAD	1	365P614961.09 or 365P614961.01	2	365P614906.00	Return. Refer to paragraph 2.D.
CAD indicator	info	C19243DB04 (704A47270177) or C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	See NOTE 4
Configuration file	info	707A49439388		707A49438050	
Configured CAD	1	365P614961.10 or 365P614961.02	2	365P614908.00	Return. Refer to paragraph 2.D.
CAD indicator	info	C19243DB04 (704A47270177) or C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	See NOTE 4
Configuration file	info	707A49439389		707A49438060	
Configured CAD	1	365P614961.12 or 365P614961.04	2	365P614904.00	Return. Refer to paragraph 2.D.
CAD indicator	info	C19243DB04 (704A47270177) or C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	See NOTE 4
Configuration file	info	707A49439391		707A49438072	
Configured CAD	1	365P614961.13 or 365P614961.05	2	365P614908.05	Return. Refer to paragraph 2.D.
CAD indicator	info	C19243DB04 (704A47270177) or C19243DC04 (704A47270182)	-	C19243CB03 (704A47270164)	See NOTE 4
Configuration file	info	707A49439392		707A49438080	

Key Word	Qty	New P/N	Item	Former P/N →	Instruction
VEMD	1	B19030LB04 (704A47270176) or B19030LC04 (704A47270180) or B19030LD04 (704A47270224) or B19030LE04 (704A47270238)	1	B19030LB03 (704A47270165)	Return. Refer to paragraph 2.D. See NOTE 3
VEMD configured file	info	707A49439394		707A49438039	
Configured CAD	1	365P614961.12	2	365P614902.00	Return. Refer to paragraph 2.D.
CAD indicator	info	C19243DB04 (704A47270177)	-	C19243DB03 (704A47270166)	See NOTE 4
Configuration file	info	707A49439391		707A49438072	
Configured CAD	1	365P614961.14	2	365P614900.04	Return. Refer to paragraph 2.D.
CAD indicator	info	C19243DB04 (704A47270177)	-	C19243DB03 (704A47270166)	See NOTE 4
Configuration file	info	707A49439393		707A49438291	
Configured CAD	1	365P614961.15	2	365P614900.05	Return. Refer to paragraph 2.D.
CAD indicator	info	C19243DB04 (704A47270177)	-	C19243DB03 (704A47270166)	See NOTE 4
Configuration file	info	707A49439709		707A49438385	

NOTE 2

The combination of VEMD (1) MP/N B19030LB04 (P/N 704A47270176) and its configured file reference is configuration 365P614960.08.

The combination of VEMD (1) MP/N B19030LC04 (P/N 704A47270180) and its configured file reference is configuration 365P614960.09.

NOTE 3

The combination of the VEMD (1) MP/N B19030LB04 (*P/N 704A47270176) and its configured file reference is configuration 365P614960.08.*

The combination of the VEMD (1) MP/N B19030LC04 (P/N 704A47270180) and its configured file reference is configuration 365P614960.09.

The combination of the VEMD (1) MP/N B19030LD04 (P/N 704A47270224) and its configured file reference is configuration 365P614960.10.

The combination of the VEMD (1) MP/N B19030LE04 (P/N 704A47270238) and its configured file reference is configuration 365P614960.07.

NOTE 4

If the VEMD is MP/N B19030LD04 (P/N 704A47270224) or MP/N B19030LE04 (P/N 704A47270238), you will use the CAD MP/N C19243DB04 (P/N 704A47270177).

If the VEMD is MP/N B19030LB04 (P/N 704A47270176) or MP/N B19030LC04 (P/N 704A47270180), you will use the CAD MP/N C19243DB04 (P/N 704A47270177) or MP/N C19243DC04 (P/N 704A47270182).

Consumables to be ordered separately:

Refer to the Work Cards and Tasks identified in this Service Bulletin.

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

Special tools:

Refer to the Work Cards and Tasks identified in this Service Bulletin.

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Send the material back to:

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 Rise
498788 SINGAPORE
SINGAPORE

3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- Comply with the general electrical instructions. Refer to Task 24-00-00-911 (AMM).
- Comply with the general instructions on the removal and installation principle for a part or LRU. Refer to Task 31-00-00-061 (AMM).
- Comply with the general instructions on the navigation system. Refer to Task 34-00-00-911 (AMM).
- Comply with the general instructions applicable for a helicopter parked in a repair shop. Refer to Work Card 20-07-02-201 (MTC).
- Comply with the general instructions on the identification of electrical installations. Refer to Work Card 20-80-20-107 (MTC).

Unless specified differently, apply the standard tightening torque values. Refer to Work Card 20-02-05-404 (MTC).

3.B. WORK STEPS

3.B.1. Preliminary steps

- Park the helicopter in a hangar.
- Install the applicable access equipment.
- Disconnect all the electrical power supplies.
- Remove and/or open all applicable cowlings, panels, doors and other items of equipment to get access to the different work areas.

3.B.2. Procedure

Before you remove the equipment items, do a check of the PRE MOD MP/N of the CAD (a) and the VEMD (b). Refer to paragraph 2.C.

Refer to Figure 1
- Remove the VEMD (b) and the CAD (a). Refer to Task 31-60-01-061 (AMM) and Task 31-51-01-061 (AMM).
- Send back the VEMD (b) and the CAD (a). Refer to paragraph 2.D.
- Make sure that the VEMD (2) and the CAD (1) MP/Nos. sent back by the manufacturer are correct. Refer to paragraph 2.C.
- Install the VEMD (2) and the CAD (1). Refer to Task 31-60-01-061 (AMM) and Task 31-51-01-061 (AMM).

3.B.3. Tests

- Set the helicopter to test condition.
- Connect all the electrical power supplies again.
- Energize the helicopter electrical systems.
- Do a test of VEMD and CAD. Refer to Task 31-60-01-061 (AMM) and Task 31-51-01-061 (AMM).

3.B.4. Final steps

- De-energize the helicopter electrical systems.
- Clean and apply the close-up procedure to the work areas and the helicopter. Refer to Work Card 20-07-03-408 (MTC).
- Install or close all cowlings, panels, doors and items of equipment that you 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 condition.

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

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

NOTE 1

It is necessary to disconnect the electrical power supply at the "BAT/ESS" button on the "12 ALPHA" control panel between the two run-ups.

3.C. RECORD OF COMPLIANCE

Compliance with this document:

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

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

NOTE 2

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:

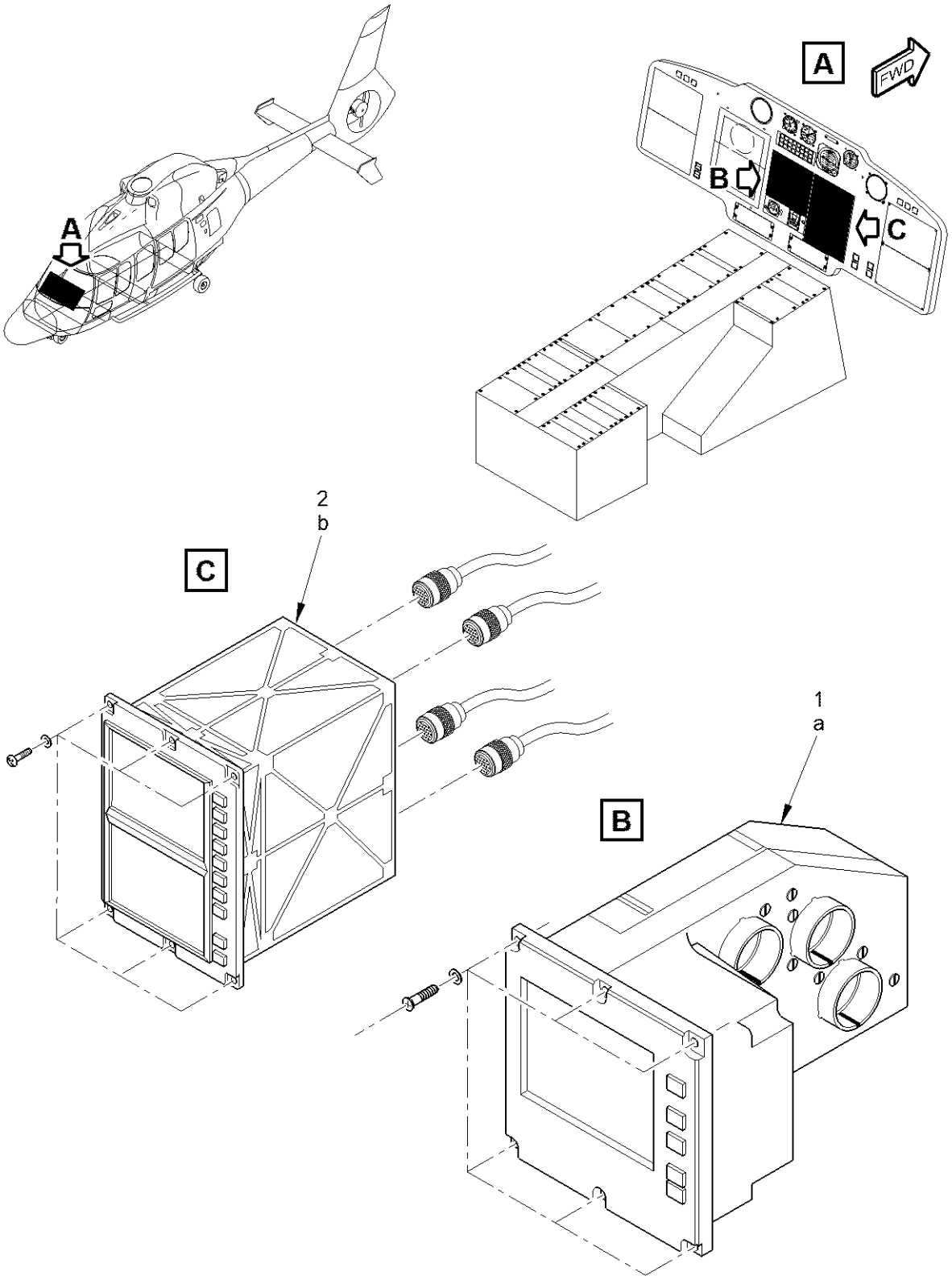
- Record the full embodiment of modification 0731C05 in the helicopter documents.

- Record the removal of the VEMD and CAD in its Log Card. Refer to Work Card 20-08-50-101 (MTC).

- Record the installation of the VEMD and CAD in its Log Card. Refer to Work Card 20-08-50-101 (MTC).

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Not applicable.



Back to paragraph 3.B.2.

Figure 1