

## AgustaWestland AW 189

### AW189 SOFTWARE HANDBOOK

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	AREA AF	PPROVAL	
	AUTHOR	RIZATION	
	EMANUE	date LE BIANCHI	
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#### **REVISION HISTORY**

ISSUE	CHANGE DESCRIPTION	ISSUE DATE
A N. Pag 8	First Issue	10 September 2015
B N. Pag 8	Updated Software package identification logic in Paragraph 5.1; Update CRC of AMMC software in Paragraph 6.2.1; Updated approvals for Phase 2.0 and Phase 2.1 in Paragraph 6.1 and 6.2;	23 October 2015
C N. Pag 9	Added Phase 3.0; Deleted REPU CONFIG TABLE from Phase 2.0 and Phase 2.1 table.	March 2016
D N. Pag 9	Updated approvals for Phase 2.0 and Phase 2.1 in Paragraph 6.1 and 6.2.	August 2016
E N. Pag 10	Updated approvals for Phase 2.1 & Phase 3.0 Paragraph 6.2 and 6.3; Added Paragraph 6.4.	March 2017
F N. Pag 10	Updated approvals for Phase 3.0 Paragraph 6.3. Correct CRC for AFCS OPERATIONAL SOFTWARE in Paragraph 6.4	May 2017





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G N. Pag 11	Added Paragraph 6.4.2: Phase 4.0.1	July 2017
H N. Pag 12	Updated approvals for Phase 2.0 Paragraph 6.1 Updated approvals for Phase 2.1 Paragraph 6.2 Updated approvals for Phase 4.0 Paragraph 6.4 Added Paragraph 6.5: Phase 5.0	May 2018
I N. Pag 13	Added Paragraph 6.3.2: Phase 3.0.1 Updated Phase 4.0 Paragraph 6.4.1 and 6.4.2 Added Paragraph 6.4.3: Phase 4.0.2 Updated Phase 5.0 Paragraph 6.5.1 Added Paragraph 6.5.2: Phase 5.0.1	June 2019
J N. Pag 13	Updated approvals for Phase 5.0 Added Paragraph 6.6: Phase 6.0	July 2019
K N. Pag 15	Added Paragraph 6.5.3: Phase 5.0.2	Feb 2020
L N. Pag 16	General review Updated approvals for Phase 6.0 Added Paragraph 6.7: Phase 7.0.1	May 2020
M N. Pag 16	Updated approvals for Phase 5.0	Sep 2020



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N N. Pag 18 Updated approvals for 3.0.0 Paragraph 6.3.1 Updated approvals for 4.0.0 and 4.0.1 Paragraph 6.4.1 & 6.4.2 Updated approvals for 5.0.0 and 5.0.1 Paragraph 6.5.1 & 6.5.2 Updated approvals for Phase 7.0 Added Paragraph 6.8: Phase 8.0.0

May 2021

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#### **DISTRIBUTION LIST**

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#### 1 SCOPE

Scope of this Handbook is to provide a list of the software installation applicable to the AW189 helicopter fleet. The handbook will also describe the Software package identification logic.

#### 2 APPLICABILITY

This Handbook is applicable to all AW189 helicopters.

#### 3 RELATED DOCUMENTS

#### 3.1 Applicable Documents

[1] 189G0290X002 AW189 Rotorcraft Flight Manual for helicopter equipped with GE

engine.

[2] **189G0290X006** AW189 Rotorcraft Flight Manual for helicopter equipped with Safran

Aneto-1K engine.

#### 4 ACRONYMS AND DEFINITIONS

#### 4.1 Acronyms

**RFM** Rotorcraft Flight Manual

**CRC** Cyclic Redundancy Check

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#### 5 SOFTWARE RELEASE

#### 5.1 Software package identification logic

- The first digit is dedicated to the Software Phase. It identify the Software packages having an impact on the limitation on the Rotorcraft Flight Manual;
- The second digit is dedicated for changes that haven't impact limitation to the flight crew like (modification due to hardware obsolescence) but having an impact on the Rotor Flight Manual. This included also changed that having impact on emergency procedure.
- An eventually third digit, not shown to the customer, is dedicated for software updating to cover bug fixing which have no impact on the Rotorcraft Flight Manual and they are transparent to the flight crew.

These rules will be fully applicable from next software phase. Phase 2.1 doesn't fully comply with the above rule.

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#### **6 SOFTWARE INSTALLATION**

Following is the list of the available software installation packages with reference to the AW189 Rotorcraft Flight Manual issue.

In the tables is including the CRC of the most important software.

#### 6.1 Software Installation Phase 2.0 (for GE engine only)

The Software Phase 2.0 is no more applicable to the AW189 helicopter fleet

Part Number	Description	CRC	NOTE
8G4600A00112	SOFTWARE INSTALLATION PHASE 2.0	N.A.	
	AVIONICS FLIGHT SOFTWARE	N.A.	
8G4640A00112	INSTALLATION		
8G4620AA0202	AMMC OPSW	FFBA7C01	
4F4620VM0100	AMMC DMG SW REL	1F7505FA	
8G4640AO0001	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0202	AFCS OPERATIONAL SOFTWARE	B5EA9E4B	
8G4630AS0200	CDS OPERATIONAL SOFTWARE	00008CE7	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0105	AMMC VAM SW REL.	ED72B9AD	
8G4600A00312	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0400	ECDU APSW	27FCA05F	
8G4620AS0300	ECDU APSW (ALT)	C8FE5B04	



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#### 6.2 Software Installation Phase 2.1 (for GE engine only)

The Software Phase 2.1 is no more applicable to the AW189 helicopter fleet

Part Number	Description	Not Applicable
8G4600A00113	SOFTWARE INSTALLATION PHASE 2.1	-

#### 6.2.1 Software Installation Phase 2.1.0

Part Number	Description	CRC	NOTE
8G4640A00113 - A	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0205	AMMC OPSW	C4C4B9C5	
4F4620VM0100	AMMC DMG SW REL	1F7505FA	
8G4640AO0002	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0202	AFCS OPERATIONAL SOFTWARE	B5EA9E4B	
8G4630AS0201	CDS OPERATIONAL SOFTWARE	000084DD	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0105	AMMC VAM SW REL.	ED72B9AD	
8G4600A00313 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 2.1 is applicable only with FADEC GE EECU SW V4.0.

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#### 6.3 Software Installation Phase 3.0 (for GE engine only)

Part Number	Description	Not Applicable
8G4600A00114	SOFTWARE INSTALLATION PHASE 3.0	-

#### 6.3.1 Software Installation Phase 3.0.0

The Software Phase 3.0.0 is no more applicable to the AW189 helicopter fleet

Part Number	Description	CRC	NOTE
8G4640A00114 - A	AVIONICS FLIGHT SOFTWARE	N.A.	
004040A00114 - A	INSTALLATION		
8G4620AA0301	AMMC OPSW	0xA9F92026	
4F4620VM0100	AMMC DMG SW REL	1F7505FA	
8G4640AO0003	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0300	AFCS OPERATIONAL SOFTWARE	0xDC7476B1	
8G4630AS0300	CDS OPERATIONAL SOFTWARE	00004495	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0105	AMMC VAM SW REL.	ED72B9AD	
8G4600A00314 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 3.0 is applicable only with FADEC GE EECU SW V4.0.

#### 6.3.2 Software Installation Phase 3.0.1

Part Number	Description	CRC	NOTE
8G4640A00114 - A	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0301	AMMC OPSW	0xA9F92026	
4F4620VM0100	AMMC DMG SW REL	1F7505FA	
8G4640AO0003	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0300	AFCS OPERATIONAL SOFTWARE	0xDC7476B1	
8G4630AS0300	CDS OPERATIONAL SOFTWARE	00004495	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0106	AMMC VAM SW REL.	0x8B49BEB7	
8G4600A00314 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 3.0 is applicable only with FADEC GE EECU SW V4.0.

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#### 6.4 Software Installation Phase 4.0 (for GE engine only)

Part Number	Description	Not Applicable
8G4600A00115	SOFTWARE INSTALLATION PHASE 4.0	IAC

#### 6.4.1 Software Installation Phase 4.0.0

The Software Phase 4.0.0 is no more applicable to the AW189 helicopter fleet

Part Number	Description	CRC	NOTE
8G4640A00115 - A	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0401	AMMC OPSW	0x00567d7b	
4F4620VM0100	AMMC DMG SW REL	1F7505FA	
8G4640AO0003	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0400	AFCS OPERATIONAL SOFTWARE	0x195161D6	
8G4630AS0401	CDS OPERATIONAL SOFTWARE	9D93	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0105	AMMC VAM SW REL.	ED72B9AD	
8G4600A00315 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 4.0 is applicable only with FADEC GE EECU SW V5.0.

#### 6.4.2 Software Installation Phase 4.0.1

The Software Phase 4.0.1 is no more applicable to the AW189 helicopter fleet

Part Number	Description	CRC	NOTE
8G4640A00115 - B	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0402	AMMC OPSW	0x51B55F43	
4F4620VM0100	AMMC DMG SW REL	1F7505FA	
8G4640AO0003	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0400	AFCS OPERATIONAL SOFTWARE	0x195161D6	
8G4630AS0401	CDS OPERATIONAL SOFTWARE	9D93	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0105	AMMC VAM SW REL.	ED72B9AD	
8G4600A00315 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 4.0.1 is applicable only with FADEC GE EECU SW V5.0.





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#### 6.4.3 Software Installation Phase 4.0.2

Part Number	Description	CRC	NOTE
8G4640A00115 - B	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0402	AMMC OPSW	0x51B55F43	
4F4620VM0100	AMMC DMG SW REL	1F7505FA	
8G4640AO0003	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0400	AFCS OPERATIONAL SOFTWARE	0x195161D6	
8G4630AS0401	CDS OPERATIONAL SOFTWARE	9D93	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0106	AMMC VAM SW REL.	0x8B49BEB7	
8G4600A00315 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 4.0.2 is applicable only with FADEC GE EECU SW V5.0.





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#### 6.5 Software Installation Phase 5.0 (for GE engine only)

Part Number	Description	Not Applicable
8G4600A00116	SOFTWARE INSTALLATION PHASE 5.0	IAC; ANAC

#### 6.5.1 Software Installation Phase 5.0.0

The Software Phase 5.0.0 is no more applicable to the AW189 helicopter fleet

Part Number	Description	CRC	NOTE
8G4640A00116 - A	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0500	AMMC OPSW	0x4710aa16	
4F4620VM0201	AMMC DMG SW REL	0x2F4AF052	
8G4640AO0004	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0500	AFCS OPERATIONAL SOFTWARE	0xAE6788C9	
8G4630AS0500	CDS OPERATIONAL SOFTWARE	5E01	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0105	AMMC VAM SW REL.	ED72B9AD	
8G4620VS0200	DTD	N.A.	
8G4600A00316 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 5.0 is applicable only with FADEC GE EECU SW V5.0. Software Installation Phase 5.0 is applicable only with software cabin PC P/N 8G4620FS0105.

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#### 6.5.2 Software Installation Phase 5.0.1

The Software Phase 5.0.1 is no more applicable to the AW189 helicopter fleet

Part Number	Description	CRC	NOTE
8G4640A00116 - A	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0500	AMMC OPSW	0x4710aa16	
4F4620VM0201	AMMC DMG SW REL	0x2F4AF052	
8G4640AO0004	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0500	AFCS OPERATIONAL SOFTWARE	0xAE6788C9	
8G4630AS0500	CDS OPERATIONAL SOFTWARE	5E01	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0106	AMMC VAM SW REL.	0x8B49BEB7	
8G4620VS0200	DTD	N.A.	
8G4600A00316 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 5.0 is applicable only with FADEC GE EECU SW V5.0. Software Installation Phase 5.0 is applicable only with software cabin PC P/N 8G4620FS0105.

#### 6.5.3 Software Installation Phase 5.0.2

Part Number	Description	CRC	NOTE
8G4640A00116 - A	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0500	AMMC OPSW	0x4710aa16	
4F4620VM0201	AMMC DMG SW REL	0x2F4AF052	
8G4640AO0007	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0500	AFCS OPERATIONAL SOFTWARE	0xAE6788C9	
8G4630AS0500	CDS OPERATIONAL SOFTWARE	5E01	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0106	AMMC VAM SW REL.	0x8B49BEB7	
8G4620VS0200	DTD	N.A.	
8G4600A00316 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 5.0 is applicable only with FADEC GE EECU SW V5.0. Software Installation Phase 5.0 is applicable only with software cabin PC P/N 8G4620FS0105.



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#### 6.6 Software Installation Phase 6.0 (for GE engine only)

Part Number	Description	Not Applicable
8G4600A00117	SOFTWARE INSTALLATION PHASE 6.0	FAA; IAC; ANAC

#### 6.6.1 Software Installation Phase 6.0.0

Part Number	Description	CRC	NOTE
8G4640A00117 - A	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0600	AMMC OPSW	0x67839790	
4F4620VM0201	AMMC DMG SW REL	0x2F4AF052	
8G4640AO0005	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0600	AFCS OPERATIONAL SOFTWARE	0x52278146	
8G4630AS0600	CDS OPERATIONAL SOFTWARE	9819	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0106	AMMC VAM SW REL.	0x8B49BEB7	
8G4620VS0200	DTD	N.A.	
8G4600A00317 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

Software Installation Phase 6.0 is applicable only with FADEC GE EECU SW V5.0.



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#### 6.7 Software Installation Phase 7.0

	Not Applicable
GE Engine	FAA; IAC; ANAC; FATA
The Software Phase 7.0.1 is no more applicable to the AW189 helicopter fleet with GE Engine	
Safran Aneto-1k Engine FAA; IAC; ANAC; FATA	

Part Number	Description
8G4600A00118	SOFTWARE INSTALLATION PHASE 7.0

#### 6.7.1 Software Installation Phase 7.0.1

Part Number	Description	CRC	NOTE
8G4640A00118 - B	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.	
8G4620AA0701	AMMC OPSW	0x38c52dcc	
4F4620VM0201	AMMC DMG SW REL	0x2F4AF052	
8G4640AO0006	AFDX CONFIGURATION SWITCH	N.A.	
8G2210AS0700	AFCS OPERATIONAL SOFTWARE	0x6D2B315A	
8G4630AS0700	CDS OPERATIONAL SOFTWARE	01D4	
8G4640IS0100	AFDX SWITCH OPSW	N.A.	
8G4620AB0106	AMMC VAM SW REL.	0x8B49BEB7	
8G4620VS0200	DTD	N.A.	
8G4600A00318 - A	SSEPMS SOFTWARE INSTALLATION	N.A.	
8G4620AS0401	ECDU APSW	A8CD1459	

For GE Engine:

Software Installation Phase 7.0 is applicable only with FADEC GE EECU SW V6.0.

For Safran Aneto-1K Engine:

Software Installation Phase 7.0 is applicable only with FADEC A110.



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#### 6.8 Software Installation Phase 8.0

	Not Applicable
GE Engine	FAA; IAC; ANAC; FATA

Part Number	Description
8G4600A00119	SOFTWARE INSTALLATION PHASE 8.0

#### 6.8.1 Software Installation Phase 8.0.0

Part Number	Description	CRC NOTE
8G4640A00119 - A	AVIONICS FLIGHT SOFTWARE INSTALLATION	N.A.
8G4620AA0803	AMMC OPSW	0xdbca6e36
6F4620VA0201	AMMC DMG SW REL	0xe2189daa
8G4640AO0008	AFDX CONFIGURATION SWITCH	N.A.
8G2210AS0700	AFCS OPERATIONAL SOFTWARE	0x6D2B315A
8G4630AS0800	CDS OPERATIONAL SOFTWARE	41D3
8G4640IS0100	AFDX SWITCH OPSW	N.A.
8G4620AB0106	AMMC VAM SW REL.	0x8B49BEB7
8G4620VS0200	DTD	N.A.
8G4600A00319 - A	SSEPMS SOFTWARE INSTALLATION	N.A.
8G4620AS0401	ECDU APSW	A8CD1459

For GE Engine:

Software Installation Phase 8.0 is applicable only with FADEC GE EECU SW V6.0.

Software Installation Phase 8.0 is applicable only with software cabin PC P/N 8G4620FS0200