

# **SERVICE BULLETIN**

# **TITLE:** TIME LIMITS - SCHEDULED-UNSCHEDULED MAINTENANCE - Inspection of the mounting bushings of the horizontal stabilizer

#### SB Type: Protective measure

#### APPLICABILITY

Model:	AS365
Version:	N , N1 , N2 , N3 , F , Fs , K , K2

AS365 helicopters manufactured before 1984 and for which the horizontal stabilizer was never replaced

or

AS365 helicopters, whatever the manufacturing date, on which the horizontal stabilizer was replaced

or

AS365 helicopters, whatever the manufacturing date, equipped with horizontal stabilizer PRE MOD 074545.

#### NOTE

You can identify the modification status of the helicopter in the Aircraft Log Book or in the Log Card.

#### NOTE

Modification 074545 consists in replacing light alloy threaded bushings with riveted stainless steel bushings.

#### COMPLIANCE: RECOMMENDED

Airbus Helicopters recommends that you comply with this Service Bulletin not more than 24 months (+73 days of margin) after you received this Service Bulletin. Refer to the issue date on the cover page.

Then:Export Control:US Export Control - No US content. This Item does not contain any U.S. origin ITAR or EAR content.FR Export Control - Not Listed. This Item is not listed against the EC regulations in the EU/FR



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For helicopters PRE MOD 074545, comply with this Service Bulletin at intervals that do no exceed 24 months (+73 days of margin).

#### SUMMARY

The purpose of this Service Bulletin is to identify the configuration of the horizontal stabilizer and to do a periodic condition check of the mounting bushings of the horizontal stabilizer PRE MOD 074545.

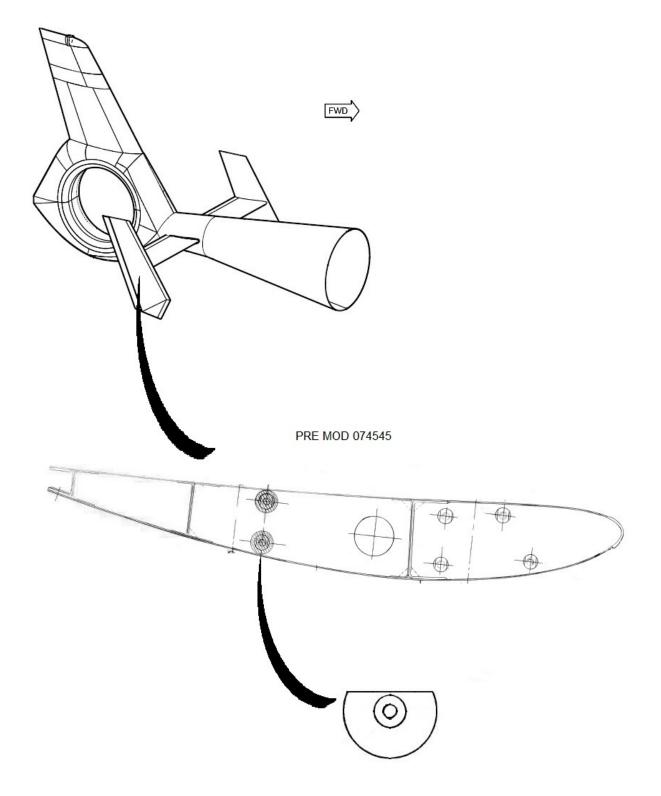
#### GENERAL EVALUATION

Evaluation table			
Perform once	NO	Recurring accom- plishment	YES



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### **GENERAL ILLUSTRATION**





# PLANNING INFORMATION

# 1. REASON

Airbus Helicopters was informed of the detection of an abnormal noise on the right side of the spoiler when returning from a flight. This flight was carried out after a daily inspection that had not shown any defects in the area of the horizontal stabilizer.

The investigation revealed that the half of the shoulder of the bushing had separated from the internal reinforcement of the horizontal stabilizer, at the rear of the right side spoiler attachment studs. The two rear studs were held in place but the shoulder of bushings inside the horizontal stabilizer were missing.

However, the studs remained tight and showed no looseness.

The four bushings were in place and showed some corrosion.

The presence of corrosion can lead to the failure of the bushings of the internal reinforcement of the horizontal stabilizer.

Consequently, the purpose of this Service Bulletin is to identify the configuration of the horizontal stabilizer and to periodically check the correct condition of the mounting bushings of the horizontal stabilizer PRE MOD 074545.

# 2. DESCRIPTION

This Service Bulletin includes the work steps that follow:

- Remove the two outboard fins.
- Inspect the lateral parts of the Horizontal Stabilizer under the studs.
- If the bushing is not riveted, do an endoscopic inspection on the inner surface of all the bushings.

# 3. CONFIGURATION DEFINITION

Not applicable.

# 4. CONCURRENT REQUIREMENTS

Not applicable.

# 5. APPROVAL

The technical content of this document is approved under the authority of the Design Organization Approval ref. EASA. 21J.700.

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The technical content of this document is approved under the prerogatives of the recognition of design capability ref. EMAR21J-015-DGA for French Government helicopters.

The technical content of this document is approved by Airbus Helicopters Airworthiness Department for export military versions.

### 6. MANPOWER

#### NOTE

The Purpose of Man Hours is to give Airbus Helicopters customers a guideline for maintenance scheduling. It is not a contractual information.

#### 6.1. Manpower for procedure

Number of Persons	Qualification	Estimated Man Hours
1	Mechanical technician	30min if absence of corro- sion two days if presence of cor- rosion

#### 6.2. Manpower for set-up and close-up

Number of Persons	Qualification	Estimated Man Hours
1	Mechanical technician	30min

# 7. WEIGHT AND BALANCE

There is no change in weight and moment.

### 8. ELECTRICAL LOAD DATA

Not changed.

### 9. DOCUMENTATION AFFECTED

Not applicable.

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# **10.MATERIAL INFORMATION**

#### 10.1. Price

For information about the price of the modification kits and/or components, or for aid, contact the Airbus Helicopters Network Sales and Customer Relations Department.

#### 10.2. Availability

Contact the Sales and Customer Relations Department to know the delivery lead times.

#### 10.3. Procurement

Send an order for the necessary quantities to the Airbus Helicopters Network Sales. In the purchase order, write the information that follows:

- The mode of transport
- The destination
- The serial numbers of the helicopters to change.

#### 10.4. Mixability

This Service Bulletin has no effect on the interchangeability and mixability.

#### 10.5. LIST OF NEW MATERIALS

Individual Spares List				
Item Designation Reference MFC QTY				QTY
None				

Consumables, Materials and Expendables				
Designation	Reference	MFC	QTY	
None				

Special Tools				
Item	Designation	Reference	MFC	QTY
1	Borescope assembly	AR4415 or commercial		AR

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### 10.6. LIST OF EXISTING PARTS

Not applicable.

# **11. ACCOMPLISHMENT INSTRUCTION**

Comply with the accomplishment procedure 05-00-0001, 933

# **12.ADDITIONAL INFORMATION**

Not applicable.

End of section

# ACCOMPLISHMENT PROCEDURE 05-00-0001, 933

# 1. APPLICABILITY

Model:	AS365
Version:	N , N1 , N2 , N3 , F , Fs , K , K2

# 2. GENERAL INFORMATION

- Acronym / Abbreviation List
- AR As Required

FOD - Foreign Object Damage

- IN Information Notice
- min Minutes
- MET Manuel d'Entretien (Maintenance manual)
- MTC Manuel des Techniques Courantes (Standard Practices Manual)
- SPN Safety Promotion Notice
- TE Technical Event

### 3. PRELIMINARY REQUIREMENTS

#### 3.1. Applicable Documents

- GENERAL The Marketplace: an AirbusWorld eOrdering service IN 3481-I-00
- GENERAL Introduction of the digital Service Bulletin reporting service SB Insight IN 3785-I-00
- GENERAL Foreign Object Damage prevention SPN 3703-P-00
- Instructions applicable when working on an aircraft electrical circuit and power generating systems - Technical instructions <u>MTC 20-07-03-406</u>
- Appearance checks on an aircraft after inspection or repair Technical instructions <u>MTC 20-07-03-408</u>
- Drafting and updating the log card (FM) General rules applicable to aircraft <u>MTC 20-08-05-101</u>
- Monitoring of parts in operation marking service life customization General rules applicable to aircraft <u>MTC 20-08-05-103</u>
- Detection by endoscopy Corrosion detection <u>MTC 20-90-03-103</u>



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- Horizontal stabilizer: Removal Installation Horizontal stabilizer <u>MET</u> <u>55-10-00-401</u>
- Replacement of bushings on the horizontal stabilizer Horizontal stabilizer <u>MRM</u> <u>55-10-10-777</u>
- Replacement of clinch nuts on edge strips Horizontal stabilizer <u>MRM</u> <u>55-10-10-776</u>

#### 3.2. Set up

- Comply with the MTC 20-07-03-406
- Install the access equipment.
- Remove the two lateral fins. Refer to MET 55-10-00-401

#### 3.3. Special Tools

Designation	Reference	QTY
Borescope assembly	AR4415 or commercial	AR

#### 3.4. Consumables, Materials and Expendables

None

#### 3.5. Spares

None



3.6. Safety conditions



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# 4. PROCEDURE

#### 4.1. Inspection of the mounting bushings of the lateral fin

#### NOTE

Only the procedure for the right side is given. Do the same procedure for the left side, unless differently specified.

#### 4.2. Identification of the configuration of the horizontal stabilizer

- 4.2.1. If necessary, remove the studs (3) (Section A-A, (Figure 2)).
- 4.2.2. Do a visual check of the attachment of all the bushings (6) or (8) to identify the configuration of the horizontal stabilizer (PRE or POST MOD 074545) ((Figure 1)):
- 4.2.2.1. If the horizontal stabilizer (7) is equipped with a bushing (8) and two rivets (2), refer to Detail B, Figure 1:
  - Open and complete a Log Card (FM) with the S/N and the configuration. Refer to Work Card <u>MTC 20-08-05-101</u>.
  - Identify the S/N of the horizontal stabilizer (7), as given below:
    - The Serial Number of the horizontal stabilizer (7) is defined as follows: helicopter S/N, followed by the date of compliance (DDMMYYYY) with this Service Bulletin.
    - Example: helicopter S/N 6710, date April 01, 2024, the S/N of the horizontal stabilizer is 671001042024.
  - Refer to the instructions of Work Card <u>MTC 20-08-05-103</u>. In an Area Z of the horizontal stabilizer (7) that is free of markings, write with an indelible marker:
    - The S/N as defined above
    - The configuration: POST MOD 074545 .

#### NOTE

It is the Airframe Technician who identifies the applicable position of the marking area (Area Z) on the horizontal stabilizer.

- if removed before, install the studs (3).
- Comply with paragraph 5. CLOSE UP.
- 4.2.2.2. If the horizontal stabilizer (5) is equipped with a bushing (6), refer to Detail A, Figure 1:

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- Open and complete a Log Card (FM) with the S/N and the configuration. Refer to Work Card <u>MTC 20-08-05-101</u>.
- Identify the S/N of the horizontal stabilizer (5), as given below:
  - The Serial Number of the horizontal stabilizer (5) is defined as follows: helicopter S/N, followed by the date of compliance (DDMMYYYY) with this Service Bulletin.
  - Example: helicopter S/N 5420, date June 12, 2024, the S/N of the horizontal stabilizer is 542012062024.
- Refer to the instructions of Work Card <u>MTC 20-08-05-103</u>. In an Area Z of the horizontal stabilizer (5) that is free of markings, write with an indelible marker:
  - The S/N as defined above
  - The configuration: PRE MOD 074545.

#### NOTE

It is the Airframe Technician who identifies the applicable position of the marking area (Area Z) on the horizontal stabilizer.

– Comply with paragraph 4.3.

#### 4.3. Inspection of the lateral parts of the horizontal stabilizer below the studs

- 4.3.1. If necessary, drill a 14 mm (.55 in) dia. hole (X) in the front part of the horizontal stabilizer outboard rib. Refer to the principle of Work Card <u>MRM 55-10-10-776</u>.
- 4.3.2. Do an endoscopic inspection with the Borescope assembly (1) (not shown) on the inner surface of all the bushings (6) (Figure 2) to make sure that there is no corrosion or crack. Refer to <u>MTC 20-90-03-103</u>.
- 4.3.3. Interpret the result:
- 4.3.3.1. If there is no corrosion and no crack:
  - If removed before, install the studs (3).
  - If necessary, seal the hole (X). Refer to the principle of Work Card <u>MRM</u> <u>55-10-10-776</u>.
  - Comply with paragraph 5. CLOSE UP.
- 4.3.3.2. If there is corrosion and/or a crack at least one bushing (6):
  - Replace all the bushings (6). Refer to Work Card <u>MRM 55-10-10-777</u>.
  - Open and complete a Log Card (FM) with the S/N and the configuration. Refer to Work Card <u>MTC 20-08-05-101</u>.

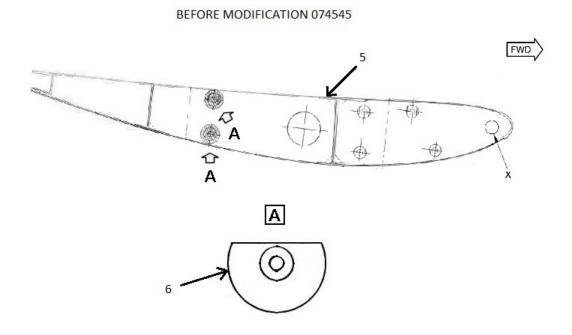


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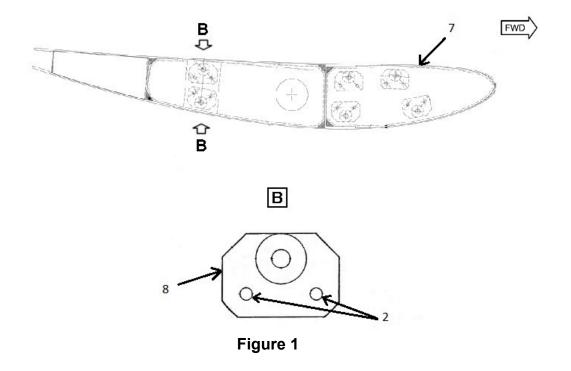
- Identify the S/N of the horizontal stabilizer (7), as given below:
  - The Serial Number of the horizontal stabilizer (7) is defined as follows: helicopter S/N, followed by the date of compliance (DDMMYYYY) with this Service Bulletin.
  - Example: helicopter S/N 6710, date April 01, 2024, the S/N of the horizontal stabilizer is 671001042024.
- Refer to the instructions of Work Card <u>MTC 20-08-05-103</u>. In an Area Z of the horizontal stabilizer (7) that is free of markings, write with an indelible marker:
  - The S/N as defined above
  - The configuration: POST MOD 074545 .
- If necessary, seal the hole (X). Refer to the principle of Work Card <u>MRM</u> <u>55-10-776</u>.



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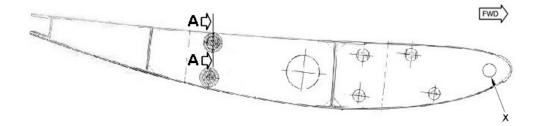


AFTER MODIFICATION 074545





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Section A-A

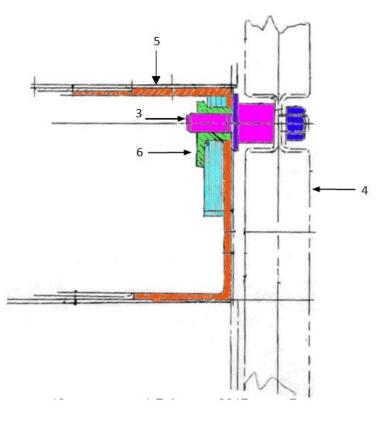


Figure 2

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# 5. CLOSE UP

- 5.1. Install the two lateral fins. Refer to MET 55-10-00-401
- 5.2. Clean and apply the close-up procedure to the work areas and the helicopter. Refer to Work Card <u>MTC 20-07-03-408</u>
- 5.3. Remove the access equipment.
- 5.4. Record the full compliance with this Service Bulletin in the helicopter documents and in the log card of the horizontal stabilizer. Refer to <u>MTC 20-08-05-101</u>
- 5.5. Record the full compliance with this Service Bulletin (see IN 3785-I-00 for instructions): QR code or hypertext link.



SB AS365-05-00-0001

End of Service Bulletin