

UNCLASSIFIED

MSG DTG 021215Z JUN 03

FROM CDRAMCOM, REDSTONE ARSENAL, AL //AMSAM-SF-A//

SUBJECT - AVIATION SAFETY ACTION MESSAGE, MAINTENANCE
MANDATORY, RCS CSGLD-1860(R1), OH-58A/C AIRCRAFT,
VERTICAL FIN, OH-58-03-ASAM-06.

.....NOTE.....
....This message is effective until rescinded or superseded.

.....NOTE.....
....This message is issued IAW AR 95-1 and has not been
....transmitted to units subordinate to addressees.
....Addressees will immediately retransmit this message
....to all subordinate units, activities or elements
....affected or concerned. MACOMs will immediately
....verify this transmission to the AMCOM SOF Compliance
....Officer (AMSAM-SF-A, safeadm@redstone.army.mil).

.....NOTE.....
....MACOM commanders may authorize temporary exception from
....message requirements IAW AR 95-1, Ch 6. Exception may
....only occur when combat operations or matter of life or
....death in civil disasters or other emergencies are so
....urgent that they override the consequences of continued
....aircraft operation.

1. SUMMARY -

1.1. Background - An OH-58A on a routine flight incurred a crack
in the vertical fin that spanned the entire width of the vertical
fin and went through the aluminum honeycomb. The aircraft that
incurred the crack was notified by another aircraft that the
vertical fin was folded over and made a precautionary landing
where the extent of the damage was verified. The vertical fin
was replaced and the aircraft returned safely. Analysis
concluded that the crack in the vertical fin started at the top
aft insert.

1.2. Message Purpose -

1.2.1. To require the daily visual inspection of the vertical
fin for cracks propagating from the four attachment inserts.

1.2.2. To require an initial and recurring Eddy Current
inspection of the aircraft vertical stabilizer for cracks
originating from the four attachment inserts.

1.2.3. To update the Phased Maintenance Checklist (TM 55-1520-
228-PM) and Preventive Maintenance Daily Inspection Checklist (TM
55-1520-228-PMD) to reflect new recurring inspections.

2. END ITEMS AFFECTED - All OH-58A/C series aircraft.

3. ASSEMBLIES/COMPONENTS/PARTS AFFECTED -

..Nomenclature	Part No.	NSN
..Stabilizer, Vertical	206-022-113-1	1560-00-179-4052
	5790032-501	1560-01-318-3856
..Fin Assembly	206-022-113-3	None Assigned

.....NOTE.....
....When complying with the requirements of this message,
....complete forms and records entries IAW DA PAM 738-751.
....ULLS-A units will use appropriate "E" forms.

4. INITIAL TAMMS (THE ARMY MAINTENANCE MANAGEMENT SYSTEM)
COMPLIANCE REQUIREMENTS -

4.1. Upon receipt of this message, make the following entry on
the DA Form 2408-13-1. Enter a Red Horizontal Dash //-// status
symbol with the following statement: "Comply with requirements of
OH-58-03-ASAM-06 during next PMD." Commanders who are unable to
comply with the requirements of this message within the time
frame specified will upgrade the affected aircraft status symbol
to a Red //X//.

.....NOTE.....
....T [REDACTED] is available at
...." [REDACTED] (use lower case
...." [REDACTED] in the units
....servicing LAR. Alternate forms may be approved by
....the AMCOM SOF Compliance Officer.

.....NOTE.....
....The TAMMS Compliance Report only confirms the unit has
....made the initial logbook entry for assigned aircraft.
....TAMMS Compliance Reports will include aircraft serial
....numbers (in numerical order), date of entry on DA Form
....2408-13-1, unit address, local POC name and phone number.

4.2. TAMMS Compliance [REDACTED] liance Report
via priority email to [REDACTED] NLT 9 Jun 03
IAW AR 95-1. If email [REDACTED] ort may be faxed

to: SOF Compliance Officer at [REDACTED]

5. TASK/INSPECTION COMPLIANCE

.....NOTE.....

..... is available at
..... (use lower case
..... from the units
.....servicing LAR. This report will cite the message
.....number, date of inspection, aircraft serial number,
.....aircraft hours, component serial number, component
.....hours, and results of the inspection.

5.1. Aircraft - Submit Task/Inspection Compliance Report for the Visual and Initial Eddy Current Inspections required by this message to Log POC NLT 2 Jul 03.

5.2. Retail Stock (Installation level and below) - N/A.

5.3. Wholesale Stock (Including Depot stock, Depot Maintenance and Single Stock Fund) - N/A.

6. SPECIAL PROVISIONS TO MESSAGE REQUIREMENTS (AIRCRAFT) -

6.1. Aircraft in AVUM, AVIM, or Depot level maintenance - Commanders, facility managers and contractors will not issue aircraft until they are in compliance with this message.

6.2. Aircraft at Contractor Facility - Bell Helicopter Textron will inspect DD 250 aircraft prior to those aircraft departing for ferry to final destination.

6.3. Maintenance Trainers (Cat A and B) - Comply with message requirements NLT 30 Jun 03.

7. TECHNICAL PROCEDURES/INSTRUCTIONS -

.....NOTE.....

.....Three inspections are required by this ASAM: .

....They are: a recurring daily visual inspection of the fin on
....aircraft; an initial Eddy Current inspection of the fin off-
....aircraft; and a recurring 300-hour Eddy Current inspection of
....the fin off aircraft.

.....NOTE.....

....The vertical fin is also known by part nomenclature as the
....vertical stabilizer.

7.1. At the next PMD visually inspect the inboard skin of the vertical fin for cracks originating from the four attachment inserts. If any cracks are detected, replace the vertical stabilizer. If no cracks are detected, the inspection is complete.

7.2. Make the following recurring Red Dash //-// entry on the DA Form 2408-13-1 "Conduct daily inspection of Vertical Fin for cracks IAW OH-58-03-ASAM-06." This entry may be removed when TM 55-1520-228-PMD is changed to reflect this inspection as a Mandatory Safety of Flight Inspection Item.

7.3. Make the following entry on the DA Form 2408-13-1: Enter a Red Horizontal Dash //-// status symbol with the following statement: Complete initial Eddy Current inspection IAW Para 7.4 OH-58-03-ASAM-06 NLT 30 Jun 03."

7.4. Eddy Current Inspection of Vertical Stabilizer(initial and recurring) - Inspect the inboard area near the four attachment inserts using the following Eddy Current procedure and the inspection in Para 7.5 for cracks. This inspection is applicable to the inboard side of the vertical stabilizer. The area of interest is the aluminum skin immediately around the four mount bolt inserts. Defects may occur in the skin propagating from underneath the mount bolt inserts (Reference Figure 4-6, TM 1-1520-254-23). No cracks allowed.

7.4.1. NDI Equipment and Materials (Refer to Appendix B, TM 1-1520-254-23) -

....Eddy Current Inspection Unit, Nortec 19eII or equivalent.

....Probe, 90 degree 1/2 inch drop, shielded surface, 50-500 KHz.

....Cable Assembly.

....Reference Block, three-notched aluminum (0.008, 0.020, 0.040
....EDM notches).

....Teflon tape, refer to Table 1-8, TM 1-1520-254-23.

....Aircraft Marking Pencil, refer to Table 1-8, TM 1-1520-254-23.

7.4.2. Preparation of Helicopter: The helicopter shall be prepared for safe ground maintenance. A partial inspection for cause (visual indications, sites of mechanical damage, corrosion, etc.) may be performed on all exposed surfaces of the installed part using this procedure.

7.4.3. Access: Remove the vertical fin assembly IAW with procedures contained in TM 55-1520-228-23 to access the inboard side of the vertical stabilizer.

7.4.4. Preparation of Part: The inspection area shall be clean of any surface contamination that may interfere with adequate probe-surface contact. Refer to Preparation of Part or Area for NDI, Para 1.4.4, TM 1-1520-254-23.

7.4.5. NDI Equipment Settings - Make the following initial settings on the Eddy Current Inspection Unit:

..Frequency F1 200KHz F2 OFF
..HdB 57.0
..Vdb 69.0
..Rot 56 deg.
..Probe Drive mid
..LPF 100
..HPF 0
..H Pos 80%
..V Pos 20%

7.4.6. Set up on test block as follows: (Refer to Eddy Current Method, Para 1.4.11, TM 1-1520-254-23).

7.4.7. Null probe on test block.

7.4.8. Adjust phase as required to obtain horizontal lift-off. Move probe over all three notches in the test block. Adjust gain to obtain a three block vertical signal when probe is passed over 0.040-inch notch in the test block. (See the standard instrument display shown in Figure 1-7). Tape may be added to the notch standard to simulate thick paint on the stabilizer surface. Adjust gain to meet calibration requirements.

.....CAUTION.....
....There are two drilled holes at approximately the 12 and 6
....O'clock positions on all inserts. These will give edge
....effect signals similar to that of a crack. Disregard these
....non relevant indications.

7.5. Inspection Procedure - Refer to Eddy Current Method, Para 1.4.11, TM 1-1520-254-23.

7.5.1. Place probe on a good area in the inspection location and null. Adjust phase as required to obtain horizontal lift-off.

7.5.2. Inspect entire skin area 1/2 inch around each of the four mount bolt inserts.

7.5.3. Any signal similar to the notches in the test block is cause for rejection.

7.5.4. Marking And Recording Of Inspection Results. Mark and record inspection results IAW Para 1.3 TM 1-1520-254-23.

7.5.5. If no cracks are found the inspection is complete. Install the vertical stabilizer IAW TM 55-1520-228-23. If any cracks are detected make appropriate entry on DA Form 2408-13-1 and contact the technical POC listed at Para 13.1.

7.6. Annotate the DA Form 2408-18 with a 300 hour recurring Eddy Current inspection IAW the procedures contained in Para 7.4. of this message. The 300 hour recurring inspection shall be accomplished during the next and all subsequent 300 hour phase inspections unless the next phase is planned within 50 flight hours, then the implementation of the recurring Eddy Current vertical stabilizer inspection will be delayed one phase. ULLS-A units will use an 800 inspection number for the 300 Hour Phase inspection until the PM manual is changed.

7.7. Clear the initial entry from Para 4.1. and note compliance on the Aircraft DA Form 2408-15 once the initial visual inspection is completed and entries from Para 7.2. and Para 7.6 are completed.

8. PROCEDURES/INSTRUCTIONS FOR ASSEMBLIES/COMPONENTS/PARTS IN WORK OR IN STOCK (AT ALL LEVELS INCLUDING WAR RESERVES) - N/A.

9. SPECIAL TOOLS AND FIXTURES REQUIRED - Eddy Current Inspection Unit, NORTEC-19eII, NSN 6635-01-419-0694.

10. SUPPLY/PARTS (Requisition/Disposition) -

10.1. Parts Required -

..Nomenclature	Part no. / NSN	Qty	Cost ea.
..Stabilizer, Vertical			
.....5790032-501 / 1560-01-318-3856	1ea		

10.2. Bulk and consumable materials - N/A.

10.3. Requisitioning instructions - Requisition replacement vertical stabilizer using normal supply procedures. All requisitions shall use Project Code (cc 57-59) "X2D" (X-ray-Two-Delta).

.....NOTE.....

....Project Code "X2D" is required to track and establish

....a data base of stock fund expenditures incurred by

....the field as a result of message actions.

10.4. Disposition of discrepant parts/components - Dispose of using normal supply procedures. All turn-in documents must include Project Code (cc 57-59) "X2D" (X-ray-Two-Delta).

10.5. Disposition of hazardous material - N/A.

11. MAINTENANCE APPLICATION -

11.1. Category of maintenance - AVUM.

11.2. Estimated time required -

11.2.1. Time to complete Eddy Current inspection - Total of 2 man-hours using 2 persons with 1 hour downtime per end item.

11.2.2. Time to complete visual inspection - total of 0.25 man-hours using 1 person with 0 hours downtime per end item.

11.2.3. Time for repair/replacement - Total of 2 man-hours using

2 persons with 1 hour downtime per end item.

12. Publication requirements -

12.1. References -

12.1.1. AR 95-1.

12.1.2. DA Pam 738-751.

12.1.3. TM 55-1520-228-23.

12.1.4. TM 55-1520-228-PMD.

12.1.5. TM 55-1520-228-PM.

12.1.6. TM 1-1520-254-23.

12.2. Publication changes - TM 55-1520-228-PM, TM 55-1520-228-PMD, and TM 1-1520-254-23 shall be changed to reflect this message. A copy of this message will be used as authority to implement the change until the official change is received.

13. Points of contact -

13.1. Technical PO

13.1.1. Primary - [REDACTED], AMSAM-RD-AE-I-D-O, [REDACTED]

[REDACTED]

[REDACTED] Johnson, AMSAM-RD-AE-I-D-O, [REDACTED]

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