

# URGENT

\*TB 1-2840-229-20-23

## DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

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### AH-1 AND UH-1 (T53 SERIES ENGINE), VERIFICATION OF TIME ON T53 ENGINE COMPONENTS REQUIRING HISTORICAL DATA REPORTS

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Headquarters, Department of the Army, Washington, D. C.  
27 October 1999

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#### NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. **Priority Classification.** URGENT.

#### NOTE

See AR 95-1, paragraph 6-6.a., for exception authority of major commanders.

a. **Aircraft in Use.** Upon receipt of the message/TB whichever occurs first, the condition status symbol of the cited aircraft will be changed to a **Horizontal Red -**. The **Horizontal Red -** may be cleared when the inspection of paragraph 8 is completed. The affected aircraft shall be inspected as soon as practical but no later than the task/inspection suspense date. Failure to comply with the requirements of this message/TB within the time frame will cause the status symbol to be upgraded to a **Red X**.

b. **Aircraft in Depot Maintenance.** N/A.

c. **Aircraft Undergoing Maintenance.** Same as paragraph 1.a.

d. **Aircraft in Transit.**

(1) **Surface/Air Shipment.** Within 7 days of arrival.

(2) **Ferry Status.** Within 7 days of arrival, inspect at final destination.

e. **Maintenance Trainers (Category A and B).** Same as paragraph 1.a.

\*This TB supersedes USAAMCOM Safety of Flight (SOF) Message, 181827Z, Oct 99, AH-1-00-ASAM-01 and UH-1-00-ASAM-02.

f. **Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves.** Upon receipt of the message/TB whichever occurs first, the material condition tags of all items in all condition codes listed in paragraph 6 shall be annotated to read "SOF AH-1-00-ASAM-01/UH-1-00-ASAM-02, (TB 1-2840-229-20-23), Verification of Time on T53 Engine Components requiring Historical Data Reports, Not Complied With."

(1) **Wholesale Stock.** N/A.

(2) **Retail Stock.** Upon receipt of this message/TB commanders and others maintaining retail stock at installation level and below shall contact the supported aviation unit to perform the inspection required by paragraph 8 and the correction procedures of paragraph 9. Report compliance with this message/TB IAW paragraph 14.d.(2).

g. **Components/Parts in Work (Depot Level and Others).** Items listed in paragraph 6 in work will not be issued until compliance with this message/TB.

2. **Task/Inspection Suspense Date.** 14 days from the DTG of this message/TB.

3. **Reporting Compliance Suspense Date.** No later than 9 Nov 1999 in accordance with paragraph 14.a. of this message/TB.

4. **Summary of the Problem.**

a. The army will be instituting a component life management program for the T53 series engine. Service life limits will be established for some rotating components in the engine.

b. **For Manpower/Downtime and Funding Impacts** see paragraph 12.

c. **The purpose of this TB is to:**

(1) To collect operating time data on affected rotating engine components. The data shall be used to establish life limits to be published in a follow on message/TB.

(2) To report if the N2 coated spur gear has been installed.

5. **End Items to be Inspected.** All UH-1 and AH-1 aircraft with T53-L-13B and T53-L-703 engines installed, P/N 1-000-060-22, NSN 2840-00-134-4803 and P/N 1-000-060-23, NSN 2840-00-621-1860.

6. **Assembly Components to be Inspected.** The engine records for the following components are to be inspected:

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Engine, Aircraft, Turbine	1-000-060-22	2840-00-134-4803
Engine, Aircraft, Turbine	1-000-060-23	2840-00-621-1860

7. **Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Second Stage GP Disc	1-100-063-05	2840-00-924-8521
Impeller	1-100-078-07	2840-00-176-3745
Impeller	1-100-078-13	2840-01-304-1058
First Stage GP Disc	1-100-133-01	2840-00-924-7933
First GP Sealing Disc	1-100-135-03	2840-00-925-2972

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
GP Spacer	1-100-294-03	5365-00-947-6225
Front Compressor Shaft	1-100-495-07	2840-01-006-1118
Power Shaft	1-100-800-04	2840-00-943-2206
Disc and Hub	1-101-250-04	2840-01-154-7142
Disc and Hub	1-101-250-03	2840-00-176-3746
Second PT Disc	1-140-272-04	2840-01-008-5986
First PT Disc	1-190-009-05	2840-00-925-9560
Coated Spur Gear	1-070-062-06	3020-01-455-7341

### 8. Inspection Procedures.

a. Review the engine DA Form 2408-16 to obtain the following data on all components listed in paragraph 7.

#### NOTE

The only information required on the coated N2 spur gear is if it is installed (yes/no).

- (1) Engine serial number and yes/no if the N2 coated spur gear is installed.
- (2) Component serial number.
- (3) Component current operating hours.
- (4) Unit identification code.
- (5) Unit.
- (6) Station.
- (7) Point of contact/phone number/e-mail.

b. If the exact part number in the list above is not in the engine record, please describe one of the following:

- (1) No record exists of this part in the engine record.
- (2) The actual part listed in the engine record is X-XXX-XXX-XX (fill in if possible) and the hours are XX (fill in if possible).

9. **Correction Procedures.** Provide data collected from paragraph 8 on all components IAW paragraph 14.b of this message/TB by fax or e-mail.

### 10. Supply/Parts and Disposition.

- a. **Parts Required** – N/A.
- b. **Requisitioning Instructions** – N/A.
- c. **Bulk and Consumable Materials** – N/A.
- d. **Disposition** – N/A.
- e. **Disposition of Hazardous Material** – N/A.

11. **Special Tools, Jigs and Fixtures Required.** N/A.

12. **Application.**

a. **Category of Maintenance.** AVUM. Aircraft downtime will be charged to AVUM maintenance.

b. **Estimated Time Required.**

(1) Total of 1.0 man-hours using 1 person for records check.

(2) Total of 0 hours downtime for one end item.

c. **Estimated Cost Impact to the Field.** N/A.

d. **TB/MWOs to be Applied prior to or concurrently with this Inspection.** N/A.

e. **Publications which Require Change as a Result of this SOF message/TB.** N/A.

13. **References.** N/A.

14. **Recording and Reporting Requirements.**

a. **Reporting Compliance Suspense Date (Aircraft).** Upon entering requirements of this message/TB on DA Form 2408-13-1 on all subject MDS aircraft, forward a priority message, datafax or e-mail to CDR, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, IAW AR 95-1. Datafax number is DSN 897-2111 or (256) 313-2111. E-mail address is <safeadm@redstone.army.mil>. The report will cite this message/TB number, date of entry in DA Form 2408-13-1, the aircraft MDS and serial numbers of aircraft in numerical order.

b. **Task/Inspection Reporting Suspense Date (Aircraft).** Upon completion of inspection, units will forward a priority message to CDR, AMCOM, ATTN: AMSAM-RD-AE-P-E, datafax is (256) 313-4952 DSN 897-4961, e-mail address is <mark.heitert@redstone.army.mil>. The report will cite this message/TB number, date of inspection, aircraft serial number, aircraft and component hours, and results of the inspection. Inspection and reports will be completed no later than 10 days after task/inspection suspense date.

c. **Reporting message/TB Receipt (Spares).** N/A.

d. **Task/Inspection reporting suspense date (Spares).**

(1) **Material in Wholesale Depot Storage.** N/A.

(2) **Material in Retail Storage.** Report compliance with this message/TB to the technical point of contact listed at paragraph 16.a by fax or e-mail. Report the quantity inspected by condition code. Report by e-mail or datafax and provide local point of contact.

e. **The Following Forms are Applicable and are to be Completed in Accordance with DA Pamphlet 738-751, dated 15 Mar 1999:**

#### NOTE

Unit Level Logistics System-Aviation (ULLS-A) users will use applicable electronic "E" forms.

(1) DA Form 2408-5-1, Equipment Modification Record (Engine).

(2) DA Form 2408-13, Aircraft Status Information Record.

(3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.

- (4) DA Form 2408-15, Historical Record for Aircraft.
- (5) DA Form 2408-16, Aircraft Component Historical Record.

**15. Weight and Balance.** N/A.

**16. Points of Contact.**

a. Technical point of contact for this message/TB is Mr. Mark Heitert, AMSAM-AR-AE-P-E, DSN 897-4964 or (256) 313-4964, datafax is 897-4961. E-mail is <heitertm@redstone.army.mil>..

b. Logistical point of contact for this message/TB is Mr. Charles Elkins, AMSAM-DSA-UH-U, DSN 645-0073 or (256) 955-0073; Datafax is DSN 645-6590 OR (256) 955-6590; E-mail is <charlie.elkins@uh.redstone.army.mil>.

c. Forms and records point of contact for this message/TB is Ms. Ann Waldeck, AMSAM-MMC-RE-FF, DSN 746-5564 or (256) 876-5564; Datafax is DSN 746-4904 or (256) 876-4904; E-mail is <waldeck-ab@redstone.army.mil>.

d. Safety point of contact for this message/TB is Mr. Robert D. Brock, AMSAM-SF-A, DSN 788-8632 or (256) 842-8632; Datafax is DSN 897-2111 or (256) 313-2111; E-mail is <bob.brock@redstone.army.mil>.

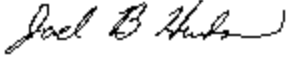
e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this message/TB should contact either CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0681 or commercial (256) 313-0681; E-mail is <wittstrom-jl@redstone.army.mil>. Alternate POC is Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or (256) 313-0869; Datafax is DSN 897-0411 or (256) 313-0411; E-mail is <sammons-rw@redstone.army.mil>. Huntsville, Alabama is GMT minus 6 hrs.

f. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/2067 or commercial (256) 313-2066/2067.

**17. Reporting of Errors and Recommending Improvements.** You can improve this TB. If you find any mistakes or if you know of a way to improve these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, Alabama 35898-5230. A reply will be furnished to you. You may also send in your comments electronically to our E-mail address at <ls-lp@redstone.army.mil>, or by datafax at DSN 788-6546 or commercial (256) 842-6546. Instructions for sending a DA Form 2028 by E-mail may be found at the back of most Technical Manuals.

**By Order of the Secretary of the  
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