

**UNCLASSIFIED**

**MSG DTG 021440Z FEB 09**

**FROM COMMANDER, AMCOM, REDSTONE ARSENAL, AL //AMSAM-SF-A//**

**SUBJECT - AVIATION SAFETY ACTION MESSAGE (ASAM), MAINTENANCE  
MANDATORY, ALL OH-58D SERIES AIRCRAFT, ENGINE #2 BEARING,  
H-58-09-ASAM-03**

**NOTE**

This message is effective until rescinded or superseded.

**NOTE**

This message is issued IAW AR 750-6 and has not been officially transmitted to units subordinate to addressees. Commanders of Army Commands (AC), Army National Guard (ARNG), United States Army Reserve (USAR), Army Service Component Commands (ASCC), and Direct Reporting Units (DRU) will immediately retransmit this message to all subordinate units, activities or elements affected or concerned, and immediately confirm this retransmittal by notification to the AMCOM SOF Compliance Officer at "safeadm@conus.army.mil".

**NOTE**

Commanders or Directors (not lower than the grade of Major General or civilian equivalent) of ACs, ARNG, USAR, ASCCs, and DRUs may authorize temporary exception from message requirements IAW AR 750-6, para 2-9. Exception may only occur when combat operations, matter of life or death in civil disasters, or other emergencies, are so urgent that they override the consequences of continued aircraft operation.

**NOTE**

A listing of published safety messages, to include TAMMS Reports, Inspection Reports, and any Supplements/Addendums required by this message can be viewed/downloaded at: "https://asmprd.redstone.army.mil". This is a secure website which requires an Army Knowledge Online (AKO), "www.us.army.mil", user ID and password.

**1. SUMMARY -**

1.1. Background - Two recent Class A mishaps resulted from catastrophic failure of the #2 Bearing on Rolls-Royce Model 250C30R3 engines. The T703-AD-700A engine also uses the same bearing. These bearing failures may give little prior warning before the engine loses ability to sustain power.

However, in one of the cases, the Engine Accessory Gearbox Lower Chip Detector identified a chip 20 hours prior to the mishap.

1.2. Message Purpose -

1.2.1. Notify the fleet of this potential hazard.

1.2.2. Reiterate the Technical Manual (TM) prescribed maintenance actions for engine chip indications.

**2. END ITEMS AFFECTED - All OH-58D series aircraft**

**3. ASSEMBLIES/COMPONENTS/PARTS AFFECTED - Suspect**

Assemblies/Components/Parts -

Nomenclature	PN	NSN
Engine, Aircraft Turbo-Shaft	23065550	2840-01-444-3770
Engine, Aircraft Turbo-Shaft	23055439	2840-01-333-2064

**4. INITIAL AIRCRAFT TAMMS (THE ARMY MAINTENANCE MANAGEMENT SYSTEM) ENTRY - N/A.**

**5. COMPLIANCE REPORTING REQUIREMENTS - N/A.**

**6. SPECIAL PROVISIONS TO MESSAGE REQUIREMENTS (AIRCRAFT) - N/A.**

**7. TECHNICAL PROCEDURES/INSTRUCTIONS -**

7.1. Upon receipt of this message, Unit Commanders will brief all appropriate maintenance and aircrew personnel on the message and the importance of following the published TM procedures.

7.2. In both mishaps, engine teardown analysis identified that the catastrophic bearing failure was preceded by a cracked Bearing Separator with spalling damage present on the Bearing Outer Race. The Outer Race spalling can produce metal chips that may collect on the Engine Sump Magnetic Plug/Chip Detector several hours before a complete bearing failure.

**NOTE**

Units with Rolls-Royce Model 250C30R3 engines will coordinate any chips and engine replacement actions with the local Rolls-Royce CFSR in order to ensure proper CLS documentation, replacement and retrograde coordination.

7.3. Maintenance personnel will follow published procedures IAW TM 1-2840-263-23, Chapter 72-60-00, Paragraph 4.B, and TM 55-2840-256-23, Task 6-3-3, for Magnetic Plug/Chip Detector inspection and corrective action. Any metal chips or flakes exceeding 0.03125 (1/32) inch diameter, or more than 4 slivers per event, are not acceptable.

7.4. Reiterate to Aircrew members to follow the emergency procedure IAW TM 1-1520-248-10 of "LAND AS SOON AS POSSIBLE" for any CHIPS ENG LOWER or CHIPS ENG UPPER caution messages.

7.4.1. Neither Engine Chip Detector is wired for fuzz burning capability, so the crew should treat intermittent chip indications with the same diligence.

7.4.2. In both mishap events, the engines only demonstrated power degradations a few minutes before the Gas Producer (NG) drooped severely and the Turbine Gas Temperature (TGT) rose abruptly actuating the ENGINE OUT and TGT OVER TEMP warning messages.

7.4.3. Once the engine degrades to this level, the aircraft is not capable of sustaining flight. The crew should immediately react with the Engine Failure Emergency Procedure IAW TM 1-1520-248-10, AUTOROTATE, followed by an EMERGENCY SHUTDOWN.

7.5. A copy of this message will be placed in the Aircrew Reading File and retained until the TM change is published.

**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 - N/A.**

**10. SUPPLY/PARTS (REQUISITION/DISPOSITION) - N/A.**

**11. MAINTENANCE APPLICATION - N/A.**

**12. PUBLICATION REQUIREMENTS -**

12.1. References -

12.1.1. AR 750-6.

12.1.2. TM 1-2840-263-23.

12.1.3. TM 55-2840-256-23.

12.2. Publication Changes - TM 55-2840-256-23 shall be changed to reflect this message. Task 6-3-3, change para 5.a.(2) to read: "If chips or flakes greater than 1/32 inch diameter or four or more slivers are encountered, replace engine." A copy of this message will be used as authority to implement the change until the official TM change is received.

**13. POINTS OF CONTACT -**

13.1. Technical POCs -

13.1.1. Primary - Mr. Scott Harris (Avion), DSN 897-2405 or (256) 313-2405. Fax: DSN 788-6758 or (256) 842-6758. Email: "michael.harris@amrdec.army.mil".

13.1.2. Alternate - Mr. Gerald Johnson, DSN 897-2233 or (256) 313-2233. Fax: DSN 788-6758 or (256) 842-6758. Email: "gerald.f.johnson@us.army.mil".

13.2. Project/Product Manager's (PM) Office POCs -

13.2.1. Primary - Mr. Fernando Figueroa, DSN 645-8111 or (256) 955-8111. Fax: DSN 788-6758 or (256) 842-6758. Email: "fernando.figueroa@us.army.mil".

13.2.2. Alternate - Mr. Charles Wright, DSN 645-7077 or (256) 955-7077. Fax: DSN 788-6758 or (256) 842-6758. Email: "charles.d.wright@us.army.mil".

13.3. Forms and Records POCs -

13.3.1. Primary - Ms. Ann Waldeck, DSN 746-5564 or (256) 876-5564. Email: "ann.waldeck@conus.army.mil".

13.3.2. Alternate - Mr. David Derbort, DSN 746-5151 or (256) 876-5151. Email: "david.derbort@conus.army.mil".

13.4. AMCOM Safety POCs -

13.4.1. Primary - Mr. Frank Rosebery (SAIC), DSN 788-8631 or (256) 842-8631. Fax: DSN 897-2111 or (256) 313-2111. Email: "james.rosebery@conus.army.mil".

13.4.2. Alternate - Mr. Don Swallom, DSN 788-8641 or (256) 842-8641. Fax: DSN 897-2111 or (256) 313-2111. Email: "donald.swallom@conus.army.mil".

13.5. Foreign Military Sales POCs -

13.5.1. Primary - Mr. George Ashmore (CAS), DSN 788-1094 or (256) 842-1094. Email: "george.ashmore1@us.army.mil".

13.5.2. Alternate - Mr. Tom Gibson, DSN 788-1077 or (256) 842-1077. Email: "thomas.b.gibson@us.army.mil".

13.6. After hours, contact the AMCOM Operations Center (AOC), DSN 897-2066/7 or (256) 313-2066/7.