

URGENT

* TB 1-1520-248-20-55

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INITIAL AND RECURRING INSPECTION OF T703-AD-700B ENGINE FOR SPECIFICATION POWER, COMPRESSOR STALL, AND INSTABILITY DURING POWER TRANSIENTS

Headquarters, Department of the Army, Washington, D. C.
1 August 2000

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NOTE

THIS PUBLICATION IS EFFECTIVE
UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification. **Urgent.**

a. Aircraft in Use. Upon receipt of this Technical Bulletin (TB) make the following entry on DA Form 2408-13-1. Enter a red dash — symbol with the following statement: "Inspect all OH-58D aircraft for installation of a T703-AD-700B (Rolls Royce Allison Model 250-C30R/1) engine prior to the next flight, in accordance with TB 1-1520-248-20-55. Clear the red dash entry when procedures in paragraph 8 are completed. The affected aircraft shall be inspected prior to the next flight, but no later than 17 July 2000. Commanders who are unable to comply with requirements of this TB within the time frame specified will upgrade affected aircraft status symbol to a red X.

b. Aircraft in Depot Maintenance. Same as paragraph 1. a.

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

d. Aircraft in Transit. Same as paragraph 1. a.

e. Maintenance Trainers. Not applicable.

f. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others). Not applicable.

2. Task/Inspection Suspense Date. Complete inspection in accordance with paragraph 8 prior to next flight, but no later than 17 July 2000 and report in accordance with paragraph 14. b.

3. Reporting Compliance Suspense Date. Report compliance in accordance with paragraph 14. a. no later than 27 July 2000.

4. Summary of Problem

a. There have been two recent Class C incidents resulting from compressor stall which occurred while operating OH-58D aircraft configured with T703-AD-700B (Rolls Royce Allison model 250-C30R/1) engines. The Army initiated an accident investigation on one of the engines and a quality deficiency report investigation on three of the engines. Engine testing conducted at Rolls Royce Allison demonstrated that subject engines experienced rapid and undetectable stall margin deterioration when engine compressors and turbines ingested sand or erosive particles. The observed Class C events combined with deterioration levels observed in testing and typical OH-58D mission environment indicate that a critical failure could occur due to reduced stall margin.

*This TB Supersedes OH-58-00-ASAM-01 062225Z Jul. 00