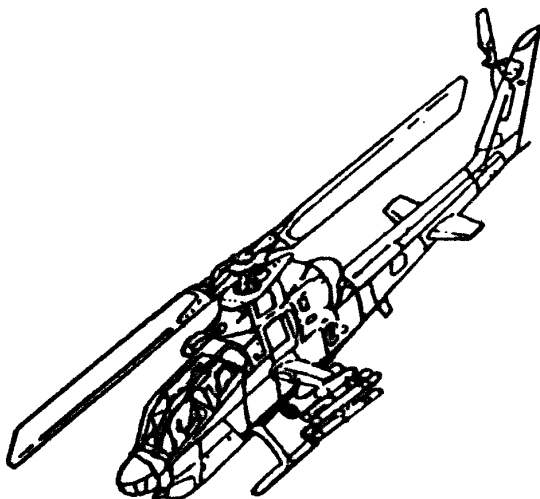


TM 1-1520-244-MTF

**MAINTENANCE TEST
FLIGHT MANUAL**

**ARMY MODEL
AH-1S HELICOPTER**



DISTRIBUTION STATEMENT A: Approved for public release;
distribution is unlimited.

This manual supersedes TM 55-1520-244-MTF, 4 November 1988,
including all changes

**HEADQUARTERS
DEPARTMENT OF THE ARMY
30 SEPTEMBER 1992**

WARNING

A maintenance test flight is an exceptionally demanding flight and requires a thorough flight readiness inspection (preflight). Procedures for the flight readiness inspection are prescribed in TM 55-1520-234-10 Operator's Manual and must be completed prior to the maintenance test flight. Emergency procedures are found in the-10 and/or-CL and are not duplicated in this publication. Prior to each maintenance test flight, the pilot will contact maintenance/quality control personnel to determine the maintenance that has been performed. This manual should be used only by qualified maintenance test flight pilots as required in AR 95-1.

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS
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You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of the applicable Aircraft Operator's manual, (when using the 2028-2 from the Operator's manual, ensure the publication number and title reflect this MTF) directly to Commander, US Army Aviation Systems Command, ATTN: AMSAV-MC, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished to you.

Section	Page
I Introduction	1-1
II Maintenance Test Flight	
Checklist..	2-1
Prior to Maintenance Test	2-1
Lighting Systems Checks	2-2
Interior Check (Gunner)	2-3
Interior Check (Pilot))	2-7
Starting Engine	2-14
Engine Runup	2-21
Before Takeoff Checks	2-38
Hover Checks.....	2-39
Before Takeoff Check	2-51
Flight Checks	2-52
Before Landing Check	2-59
After Landing Check.....	2-59
Engine Shutdown Check	2-60
Before Leaving Helicopter	2-62
III Troubleshooting Guide	3-1
A. Starting	3-1
B. Instruments	3-5
C. Electrical	3-12
D. Caution Panel.....	3-20
E. Power Plant.....	3-25
F. Transmission.....	3-35
G. Hydraulics	3-37
H. Flight Controls.....	3-38

Section		Page
	I. Not applicable	3-47
	J. Vibrations	3-47
	K. Communications/ Navigation Equipment	3-51
IV	Special Procedures	4-1
	A. Avionics/Navigations Checks.....	4-2
	B. TEAC	4-3
	C. Main Rotor Tracking	4-4
	D. Tail Rotor Tracking	4-5
V	Charts and Forms	5-1

SECTION I. INTRODUCTION

1. Purpose. The purpose of this manual is to provide complete instructions for performing a maintenance test flight of the AH-1S aircraft. For the specific conditions which require a general or limited maintenance test flight, refer to TM 55-1520-234-23 and TM 55-1500-328-23.

2. Definitions.

a. Maintenance Test Flight. A functional test flight for which the primary purpose is to determine whether the airframe, powerplant, accessories and other equipment are functioning in accordance with predetermined requirements while subjected to the intended environment.

b. Warnings, Cautions, and Notes. Warnings, Cautions, and Notes are used to emphasize important critical instructions and are used for the following conditions:

WARNING

An operating procedure, practice, etc., which if not correctly followed, could result in personnel injury or loss of life.

CAUTION

An operating procedure, practice, etc., which if not strictly observed could result in damage to or destruction of equipment.

NOTE

An operating procedure, condition, etc., which it is essential to highlight.

3. General Information.

a. This manual covers maintenance test flight of the AH-1 S aircraft. For the purpose of maintenance test flights only, this manual satisfies all the requirements of the -CL from Interior Check through Engine Shutdown.

b. Crew requirements will be as specified in TM 1-1500-328-23, TM 55-1520-234-10, and AR 95-1.

c. The duration of the general or limited test flight will be in accordance with the requirements of TM 1-1520-328-23.

4. Special Instructions.

a. **Cargo and Passengers.** Cargo and passengers are prohibited on maintenance test flight.

b. **Forms and Records.** Forms and records will be checked prior to the maintenance test flight to determine what maintenance has been performed and the type of maintenance test flight required (i.e., General or Limited).

c. **Configuration.** The configuration of the aircraft should be verified prior to each maintenance test flight in order to determine performance parameters.

d. **Post Test Flight Inspection.** A thorough visual inspection will be performed to the extent necessary to assure that deficiencies or shortcomings that may have developed as a result of the test flight are detected.

e. References. When a maintenance test flight is required to assure proper operation of a specific system(s), refer to TM 55-1520-234-23 for the limits of that system.

f. Asterisked Checks. An asterisk (*) prior to a check requires that the Test Flight Check Sheet be annotated with a specific reading. Also, a check mark (✓) for satisfactory performance or an (X) for problem detected, will be recorded and a short statement entered in the "remarks" block of the check sheet.

g. Maintenance Test Flight Check Sheet. The Check Sheet contained in Section V will be used for all test flights. When a test flight is performed to determine if specific equipment or systems are operating properly, completion of only that portion of the maintenance test flight Check Sheet applicable to the specific equipment or systems being tested is required. The aircraft test flight Check Sheet may be locally reproduced. Continuation sheets may be used when necessary. Items that prove to be unsatisfactory during the test flight and require corrective action, shall be listed in the remarks block during flight and transferred to DA Form 2408-13 immediately after termination of the flight. The sheet will be attached to the DA Form 2408-13 upon completion. After accumulation of two or more sheets, the data should be reviewed to determine if trends are developing.