

**\*TM 55-1520-240-PM**

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## **PHASED MAINTENANCE CHECKLIST**

# **CH-47D HELICOPTER**

\* This manual supersedes TM 55-1520-240-PM, dated 18 October 1990, including all changes.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**  
**25 MAY 2003**

PHASED MAINTENANCE CHECKLIST  
CH-47D HELICOPTER

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

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**PARA**

**SECTION II. INSPECTION CHECKLIST**

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Area 8 – Ramp
Area 9 – Cabin
Area 10 – Cockpit
Power On Checks
Final Inspection

\* This manual supersedes TM 55-1520-240-PM, dated 18 October 1990, including all changes.

## SECTION I. GENERAL INFORMATION

### 1-1. PHASED SCHEDULE.

This phased maintenance inspection checklist contains requirements for inspection of the CH-47D helicopter on a phase schedule having **800-hour** (flight hour) cycle with **200-hour** phases. Each requirement included herein is designated for accomplishment at least once, but not more than **four times** during the **800-hour** cycle.

### 1-2. EXCEEDING THE PHASED SCHEDULE.

**a.** The phased maintenance inspection intervals designated are the maximum and shall not be exceeded except in actual operational emergencies as explained herein. It is the Commander's responsibility to determine, on an individual helicopter basis, when inspection intervals may be exceeded. For this purpose, operational emergencies are conditions of combat or conditions of disaster which necessitate flight to evacuate aircraft or personnel. Those inspections annotated with a "C" in the Inspect Phase No's column, along with all applicable aircraft forms as addressed in DA PAM 738-751 items that are due, are considered the MINIMUM mandatory combat maintenance inspection requirements for helicopters scheduled for imminent deployment to, or stationed in, a combat environment. Under no circumstances will two combat maintenance inspections be performed sequentially.

**b.** When the aircraft is operated beyond the normal inspection due time because of such emergency situations, a circled red X status symbol and an appropriate statement, to include authority, must be entered on applicable aircraft forms as addressed in DA PAM 738-751, until such time as the

inspection is complete. When inspections are delayed to meet emergency requirements, Commander will assure that the helicopter status symbol is changed to a red X and that the delayed inspections are accomplished immediately upon termination of the actual emergency.

**c.** When unusual local conditions of environment, utilization, mission, experience of flight crew and maintenance personnel, periods of inactivity, etc. are encountered, the Maintenance Officer will, at his discretion, increase the scope and/or frequency of maintenance or inspection as necessary to insure safe flight. Refer to TM 1-1500-328-23.

### 1-3. MAINTENANCE ACTIVITIES.

The inspections prescribed by this checklist will be accomplished at specified phases by Aviation Unit Maintenance (AVUM) activities with assistance of Aviation Intermediate Maintenance (AVIM) and Depot Maintenance activities when required. Space is provided for inspecting personnel to record faults and/or remarks and corrective action taken.

### 1-4. LIMITATIONS.

The checklist does not contain instructions for repair, adjustment, or other means of rectifying conditions. Neither does it contain special tolerances, limits, or instructions for special troubleshooting to find causes of malfunctions. Such data will be obtained from the TM 55-1520-240-23, Maintenance Manual, and TM 55-1520-240-T, Troubleshooting Manual.

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### **1-5. PRE-INSPECTION MAINTENANCE TEST FLIGHT (MTF).**

A pre-inspection MTF to duplicate non-hazardous equipment problems, to determine unsatisfactory conditions and equipment operation problems, etc., is recommended prior to start of aircraft disassembly for Phased Maintenance inspection; the decision to perform the pre-inspection MTF, however, shall be the responsibility of the unit Maintenance Officer.

### **1-6. SPECIAL INSPECTIONS, CALENDAR INSPECTIONS, AND LUBRICATION REQUIREMENTS.**

Special inspections, calendar inspections, and lubrication requirements contained in TM 55-1520-240-23-1 and those listed on the applicable aircraft forms as addressed in DA PAM 738-751 shall be reviewed and accomplished in accordance with the "inspection due" requirements specified in those documents.

### **1-7. TIME BETWEEN OVERHAUL (TBO) AND RETIREMENT LIFE ITEMS CHECK.**

Prior to start of the applicable phased maintenance inspection, a check will be made of components and their remaining operating hours prior to removal. Refer to the latest issue of TM 55-1520-240-23-1 and all applicable aircraft forms as addressed in DA PAM 738-751 for a complete listing of components and their TBO and retirement life.

### **1-8. USING THE PHASED MAINTENANCE INSPECTIONS CHECKLIST.**

For use of the checklist, refer to DA PAM 738-751 and Figure 1-1.

### **1-9. FINAL RECORD CHECK.**

After all corrective actions have been completed and following completion of the phased inspection, the Technical Inspector shall verify that all applicable forms and records have been properly updated. All uncorrected faults shall be entered on applicable aircraft forms as addressed in DA PAM 738-751. A Final Records Checklist (Figure 1-2) is provided to ensure that forms and records have been inspected for completeness and accuracy prior to release of the aircraft from the phased maintenance inspection. Upon completion, the inspector verifying the final record check, shall enter his initials adjacent to the indicated form or record on the Final Record Checklist.

### **1-10. SIGNATURE SHEET.**

All personnel performing inspection and/or maintenance tasks shall place their signatures and initials on the Signature Sheet (Figure 1-3). The purpose of the signature sheet is to provide a correlation between the initials entered on the individual checklist sheets and the actual names of the personnel accomplishing these tasks.

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### 1-11. MAINTENANCE OPERATIONAL CHECKS (MOCS).

After the completion of any required corrective action to any of the components of a functional system of the aircraft, MOCs shall be performed on that system to determine the effectiveness of the maintenance actions performed and to verify the proper operation of that system (refer to TM 55-1520-240-T). These MOCs shall be performed in accordance with TM 1-1500-328-23.

### 1-12. MAINTENANCE TEST FLIGHT (MTF).

When all required inspections in Section II have been accomplished and initialed in accordance with the above procedures, the MTF shall be performed in accordance with the requirements of TM 1-1520-240-MTF and TM 1-1500-328-23 using the MTF form in the TM 1-1520-240-MTF manual.

### 1-13. CHECKLIST DISPOSITION.

The completion of each phased maintenance inspection shall be recorded on applicable aircraft forms as addressed in DA PAM 738-751. The signed

checklist, together with all forms prescribed by DA PAM 738-751 will be filed for a period of **six months**. At the end of the six-month period, disposition of forms will be in accordance with DA PAM 738-751.

### 1-14. INSPECTION AREAS.

Figure 1-4 shows the inspection area of the CH-47D aircraft. Figure 1-5 shows the location of access doors and panels which require removal at various phased maintenance inspections.

### 1-15. SERIAL NUMBER CHECKLIST (FIGURE 1-6) AND EQUIPMENT INVENTORY CHECK.

After all corrective actions have been completed and following completion of the Phased Inspection, the Technical Inspector shall make a serial number verification check, aircraft component historical record and an aircraft equipment inventory check in accordance with DA PAM 738-751.

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PHASE NO. _____		Area Name and No. RIGHT FUSELAGE AREA #3		Aircraft Serial No.	Date
Inspect Phase No's	Inspection Requirements	Status	Faults and/or Remarks	Action Taken	Initial
1, 3	RIGHT FUSELAGE AREA #3 3.1 Service forward and aft landing gear struts. Check ground contact proximity switch and target for proper rigging and gap, IAW TM 55-1520-240-23.		SEE DA 2408-13-2 Pg 3-1A	INSP COMP	RV
ALL	3.2 Heater fuel solenoid valve for leaks, electrical connector, mounting bracket, and attaching hardware for security. Access 21			INSP OK	RV
ALL	3.3 Hydraulic ground power service panel connections for leaks. Dust cap secure. Access 12			INSP OK	RV
ALL	3.4 Fluid drain lines for damage and obstructions.			INSP OK	RV
ALL/C	3.5 Aft landing gear brake (disc and linings).		SEE DA 2408-13-1 PAGE 13	INSP COMP	RV
ALL	3.6 Aft landing gear brake hoses for leaks, chafing, and damage.			INSP OK	RV
ALL	3.7 Swivel lock, swivel housing, and power steering, actuator assembly for leaks.			INSP OK	RV
ALL/C	3.8 Remove, clean, inspect, and repack aft landing gear wheel bearings.		SEE DA 2408-13-2 PAGE 3-1A	INSP COMP	RV

"FOD REMINDER"

Check work area for tools and parts after completion of maintenance and inspection.

Figure 1-1. Example of Using the Phased Maintenance Checklist

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This checklist is provided to insure the indicated forms and records have been inspected for presence, completeness, legibility, and accuracy prior to releasing the aircraft from a phase inspection. Verification of inspection will be indicated by placing the initials of the inspector in the appropriate block.

AIRCRAFT LOG BOOK	INITIALS
DA FORM 2408	
DA FORM 2408-12	
DA FORM 2408-13	
DA FORM 2408-14	
DA FORM 2408-18	
DA FORM 2408-20	
TM 55-1520-240-PMD	
TM 1-1520-240-MTF	
LOCALLY REQUIRED FORMS	

HISTORICAL RECORDS	INITIALS
DA FORM 2408-5	
DA FORM 2408-15	
DA FORM 2408-16	
DA FORM 2408-17	
DA FORM 2408-19	
LOCALLY REQUIRED FORMS	

PRODUCTION CONTROL RECORDS	INITIALS
FLOW CHART	
STATUS BOARD	
WORK ORDER FILE	
MWO FILE	
2405 LOG	
1352 REPORTS	
LOCAL REPORTS	

QUALITY CONTROL	INITIALS
TBO FILE	
QA FILE	
SERIAL NUMBER FILE	
AOAP FILE	
INVENTORY RECORD	
WEIGHT AND BALANCE	
MSG FILE	
DA FORM 2410 SUBMITTED	
LOCAL RECORDS	

**Figure 1-2. Final Record Checklist**