

TECHNICAL MANUAL

**OH-58A/C AIRCRAFT
PHASED MAINTENANCE CHECKLIST**

This manual supersedes those portions of TM 55-1520-228-PMS, 24 September 1976, that pertain to Periodic Inspections.

This copy is a reprint which includes current
pages from Changes 1 through 16, 17, 18, 19, 20, 21, 22

HEADQUARTERS, DEPARTMENT OF THE ARMY

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TM 55-1520-228-PM

**HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 1 September 1978**

OH-58A/C AIRCRAFT

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WARNING

CERTAIN INSPECTIONS ARE MANDATORY SAFETY-OF-FLIGHT REQUIREMENTS, AND THE INSPECTION INTERVALS CANNOT BE EXCEEDED. IN THE EVENT THESE INSPECTIONS CANNOT BE ACCOMPLISHED AT THE SPECIFIED INTERVAL, THE AIRCRAFT CONDITION STATUS SYMBOL WILL BE IMMEDIATELY CHANGED TO A RED X. MANDATORY SAFETY-OF-FLIGHT INSPECTION ITEMS ARE PRINTED IN BOLD FACE TYPE.

NOTE

INSPECTION ITEMS CONTAINED IN THIS MANUAL ARE CONSIDERED THE MINIMUM REQUIREMENTS FOR PERFORMING PHASED MAINTENANCE AND MUST BE PERFORMED. THE CUMULATIVE EFFECTS OF INSPECTION DEFERRALS ARE UNKNOWN AND COULD RESULT IN CATASTROPHIC FAILURE OR INCREASED MAINTENANCE AT A LATER DATE. THEREFORE, THE USE OF SPECIAL LETTERING TO EMPHASIZE MANDATORY SAFETY-OF-FLIGHT INSPECTION ITEMS IS NOT TO BE CONSTRUED AS AUTHORITY FOR DEFERRAL OF OTHER INSPECTIONS.

SECTION I - GENERAL INFORMATION

1-1. PHASED SCHEDULE.

This phased maintenance inspection checklist contains requirements for inspection of the OH-58 shaft on a phased schedule having a 1200 hour (flight hours) cycle with 300 hour phases. Each requirement included herein is designated for accomplishment at least once, but not more than four times during the 1200 hour cycle.

1-2. EXCEEDING THE PHASED SCHEDULE.

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 aircraft 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 by a letter "C" in the Inspected Phase No's column along with the DA Form 2408-18 (Equipment Inspection Record) items that are due constitute the MINIMUM mandatory inspections required on helicopters scheduled for imminent deployment to, or stationed in a combat environment. Under no circumstances will two combat phase inspections be performed sequentially. When aircraft are operated beyond the normal inspection duetime because of such emergency situations, a circled red X status symbol and an appropriate statement (to include authority) must be entered in Block 10 of DA Form 2408-13 (Aircraft Inspection and Maintenance Record) until such time as the inspection is complete. When inspections are delayed to meet emergency requirements, Commanders will assure that the aircraft status symbol reverts to a red X and that delayed inspections are accomplished immediately upon termination of the actual emergency. When unusual local conditions (utilization, type of mission personnel, periods of inactivity, environmental conditions, etc.) dictate, it is the prerogative and responsibility of the Maintenance Officer to increase the scope and/or frequency of maintenance or inspection as necessary to insure safe operation (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.

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 for malfunctions. Such data will be obtained from the latest issue of the aircraft's TM 55-1520-228-23 series maintenance manuals.

1-5. CHANGEOVER TO THE PHASED MAINTENANCE SYSTEM.

Changeover shall be accomplished in accordance with instructions provided in TB 55-1500-337-24 entitled, "Phased Maintenance System for Army Aircraft". The requirements of this TB must be accomplished prior to implementation of Phase 1 inspection requirements specified in this checklist.

1-6. PRE-INSPECTION MAINTENANCE TEST FLIGHT (MTF).

A pre-inspection MTF to duplicate non-hazardous equipment problems, determine unsatisfactory conditions, determine 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.

1-7. SPECIAL INSPECTION, CALENDAR INSPECTIONS AND LUBRICATION REQUIREMENTS.

Special inspections, calendar inspections and lubrication requirements contained in TM 55-1520-228-23 and those listed on the aircraft's DA Form 2408-18 shall be reviewed and accomplished in accordance with the "inspection due" requirements specified in those documents.

1-8. 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. The latest issue TM 55-1520-228-23 and DA Form 2408-16 shall be referred to for a complete listing of components and their TBO and retirement life.

1-9. USING THE PHASED INSPECTION CHECKLIST.

a. A new checklist shall be used each time phased maintenance is due on the aircraft. This checklist is arranged such that it can be separated by area and distributed to the maintenance crew.

b. This checklist pertains to all OH-58A/C aircraft and may, therefore, contain inspection requirements applicable to specific equipment not installed on individual aircraft. When this situation is encountered, those requirements that are not applicable need not be performed.

1-10. PHASE NUMBERS.

In the column headed "Inspection Phase No's" and adjacent to the sequence number on each inspection requirement, there will appear the word "ALL" or a series of numbers. The word "ALL" indicates that inspection requirement shall be accomplished at each phase (or at every 300 hour interval) of the 1200 hour cycle. The numbers represent the phase number at which the inspection requirement is to be accomplished. For example, if the numbers 2 and 4 are shown, this indicates that inspection requirement is to be accomplished at phases 2 and 4 only (or at every 600 hour interval). If only one number is indicated, then that inspection requirement is accomplished at that phase (or at every 1200 hour interval). At the completion of phase 4 the cycle starts over with phase 1.

1-11. FINAL RECORDS CHECK.

After all corrective actions have been completed and following completion of the phased inspection, the Technical Inspector or designated supervisor shall verify that all applicable forms and records have been properly updated. A Final Records Checklist (table 1-2) is provided to ensure forms and records have been inspected for completeness and accuracy prior to release of the aircraft from the phased maintenance inspection. The inspector verifying the final records check shall enter his initials adjacent to the indicated form or record on the Final Records Checklist. The initials entered shall be registered on the Signature Sheet (table 1-1) adjacent to that person's signature.

1-12. SIGNATURE SHEET.

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

1-13. MAINTENANCE OPERATIONAL CHECKS.

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

1-14. MAINTENANCE TEST FLIGHT.

When all required inspections in Section II have been accomplished and initialed in accordance with above procedure, a daily inspection in accordance with the TM specified in Section II will be performed on the aircraft to permit performance of a maintenance test flight (MTF). The MTF shall be performed in accordance with the requirements of TM 55-1520-228-MTF and TM 55-1500-328-23 using the MTF form in the MTF technical manual. A suggested maintenance test flight checksheet (figure 1-4) and a rotor smoothing record (figure 1-5) are provided at the end of Section I.

1-15. CHECKLIST DISPOSITION.

The completion of each phase maintenance inspection shall be recorded on DA Form 2408-13 and DA Form 2408-15 as prescribed by DA PAM 738-751. The signed checklist, together with all continuation sheets, shall be attached to DA Form 2408-13, and filed for the six month period, these records will be destroyed as prescribed by DA PAM 738-751.

1-16. INSPECTION AREAS.

Figure 1-2 reflects the inspection areas of the OH-58 aircraft. Those areas are titled as shown. Figure 1-3 shows the location of access doors and panels which require removal at various phased maintenance inspections.

NOTE

During any inspection of the aircraft or components, the person making the inspection should pay particular attention to areas prone to corrosion. When corrosion is found, a prime consideration is to evaluate what corrective action will be required to correct the discrepancy. Corrosion repair and treatment can be time consuming, and for this reason, early evaluation is essential for good aircraft maintenance planning. This evaluation will assist in determining if sheet metal or aircraft mechanics will be necessary to make the needed repair. In cases where corrosion has exceeded the acceptor reject criteria, material replacement will be necessary. For material replacement refer to TM 1-1500-204-23, General Aircraft Maintenance Manual. For corrosion treatment refer to TM 55-1500-344-23, Corrosion Control for Army Aircraft and for painting, refer to TM 55-1500-345-23, Painting and Marking of Army Aircraft. If corrosion is found and not covered by applicable TM's submit a DA Form 2028, Recommended Changes to Equipment Technical Publications, or an Equipment Improvement Recommendation (EIR) where a design change is necessary.

1-17. REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS.

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 this manual direct to Commander, US Army Aviation and Troop Command, ATTN: AMSAV-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. You may also submit your recommended changes by E-mail directly to <mpmt%avma28@st-louis-emh7.army.mil>. A reply will be furnished to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

PAGES 1-5 THROUGH 1-8 AND FIGURE 1-1 (SHEETS 1 THROUGH 3) DELETED.