

TECHNICAL MANUAL

PREPARATION FOR SHIPMENT
OF OH-58 HELICOPTER

This copy is a reprint which includes current
pages from Changes 1 through 3.

This manual supersedes TM 1-OH58-S, 28 April 1970, including all changes.

HEADQUARTERS, DEPARTMENT OF THE ARMY
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 DEPARTMENT OF THE ARMY
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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 Systems Command, ATTN: AMSAV-MC, 4300 Goodfellow Blvd., St. Louis, Missouri 63120-1798. A reply will be furnished to you.

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SECTION I

INTRODUCTION

1-1. Purpose. This manual prescribes methods and procedures to follow in preparing the OH-58 for logistical (non-tactical) shipments. Only the methods listed are recognized as acceptable modes of transport.

1-2. Scope. Methods and procedures outlined herein provide for cleaning, disassembly, preservation, packaging, packing, loading, blocking, and bracing of serviceable and reparable OH-58 helicopters prior to shipment.

1-3. General.

a. Flight delivery, when feasible, provides the most expeditious method of transporting aircraft. When circumstances dictate other methods of delivery, preparation of the OH-58 is required for protection against damage and corrosion. Shipping hazards vary with distance, means of transportation, handling facilities, weather, and many other factors. These instructions provide various degrees of protection, relating them to specific means and conditions of transportation. Judgment and foreknowledge of the planned transportation media will permit selection of a safe and economical procedure for any CONUS or oversea shipment.

b. It is the task of the packer and shipper to prevent damage from vibration, impact, and other shipping hazards by careful preparation and handling. This requires skillful utilization of airframe strong points, provisions for dampening shock and vibration, and exclusion of supports which would transmit damaging stresses. Mounts and tie-downs described are designed accordingly.

c. Configuration of individual aircraft will vary due to modifications or mission requirements. Minor dimensional changes to containers may be necessary. Presence of additional equipment may require preservation not covered by this manual. No special authorization is required to make minor deviation from the manual to cope with these situations.

d. Overall dimensions, which can be used to plan space requirements for any mode of shipment, can be found in TM 55-1520-228-10 and figure 1-1.

e. Cushioning consists of shock-absorbing materials or devices that will protect components from physical damage. Examples of such materials are PPP-C-1797 and PPP-C-1120. When items are protected by contact preservative compound, wrap preserved item with a barrier material before covering with cushioning material. On large items not entirely coated, it may be suitable to use barrier materials. A special situation occurs with shipment of entire aircraft where cushioning must be insulated from painted system of exterior surface of aircraft skin. Because of exposure to weather and other factors, L-P-378, polyethylene is recommended for this application.

1-4. Designation of Materials. Packaging materials are called out in this manual by name and specification. The nomenclature is usually abbreviated to one or two words because longer titles have no particular value,

1-5. Preservation Checksheets. The organization actually preserving the helicopter for shipment is responsible for writing the preservation check-sheet. Two copies each of the preservation and depreservation checksheets (para. 1-6) will accompany the helicopter, except to depot overhaul when the depreservation sheets may be omitted. Place one of each in a waterproof bag (use MIL-B-117 or a similar type) heat seal, and stencil the following on the outside of the bag: PRESERVATION AND DEPRESERVATION INSTRUCTIONS. Tape this bag to cyclic stick with tape (item 26, appendix C). Place the other copy of each check-sheet in log book. An example of a preservation checksheet based on the provisions of this manual is shown in appendix A.

1-6. Depreservation Checksheet. The organization preserving the helicopter for shipment is responsible for writing the depreservation checksheet. Refer to paragraph 1-5. Base depreservation check sheet on actual preservation applied, and indicate clearly and simply each operation to be performed in depreservation. Attach tags in conspicuous locations on items to draw attention to any depreservation operations otherwise liable to be overlooked. An example of a depreservation checksheet is shown in appendix B.

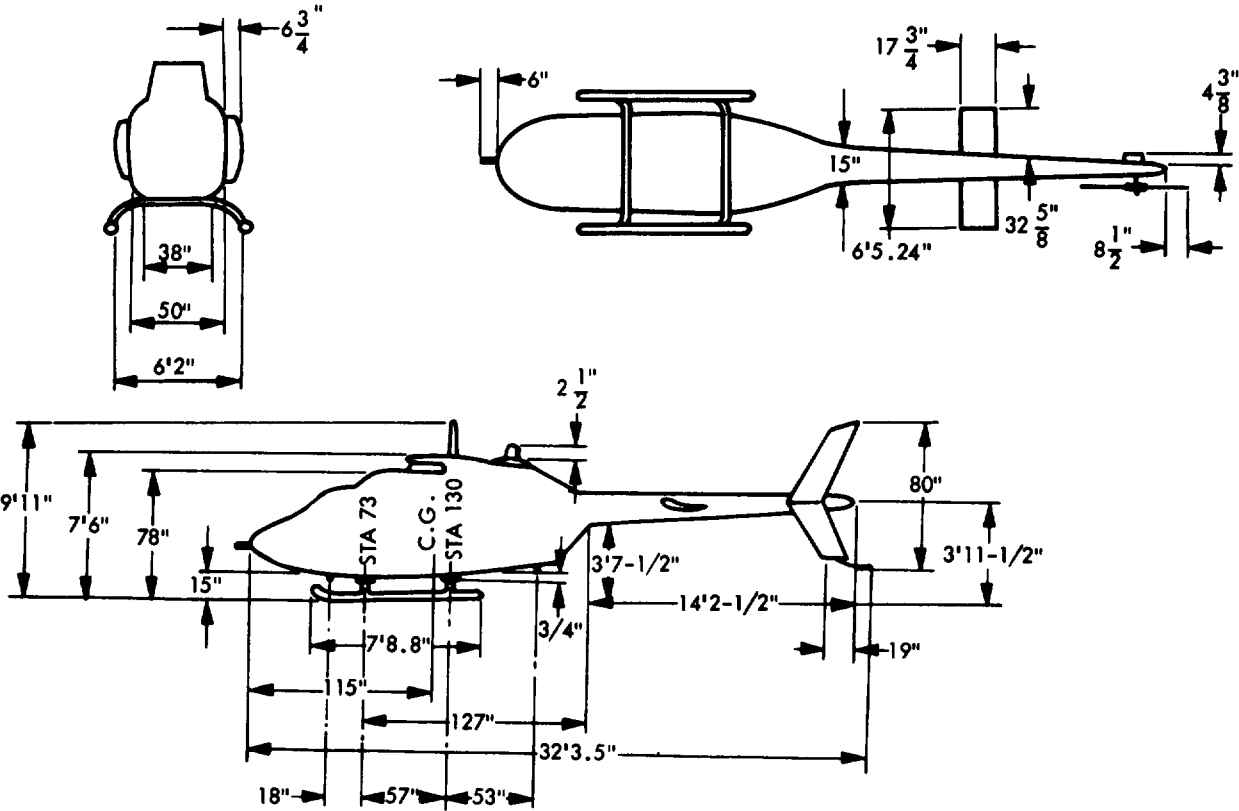


Figure 1-1. OH-58 Dimensional View

SECTION II

SHIPMENT BY CARGO AIRCRAFT

2-1. General. This section presents technical information for planning, disassembly, loading, tie-down, off loading and reassembly necessary to accomplish air transport of the OH-58 by cargo aircraft. The preparation for shipment procedures are the same regardless of the purpose for movement; however, if space is more valuable than time it may be advantageous to do more disassembly in order to get more helicopters into the cargo aircraft. This section is flexible enough to provide for this arrangement.

2-2 Capacities of Cargo Aircraft. OH-58 helicopters, disassembled to the extent shown in table 2-1 can be transported in cargo aircraft, See figures 2-1 and 2-2.

NOTE

When ordering a cargo aircraft to carry a maximum load, add to the order a statement that this load requires the full length, width, and height of the cargo compartment, and that all removable items must be excluded.

2-3. Functions of Cargo Aircraft Crew.

a. *Responsibility.* Responsibility for deciding when a United States Air Force aircraft is safe to fly vested in the cargo aircraft commander; thus, determining aircraft balance and tiedown restraint requirements are functions of the aircraft loadmaster.

b. *Movement of Helicopters.* Helicopters are loaded, tied down, and unloaded by unit or depot personnel with technical advice and assistance provided by the cargo aircraft loadmaster.

c. *Air Force Personnel Can Be Expected To:*

- (1) Advise and assist Army loading teams.
- (2) Prepare cargo aircraft for loading and unloading.
- (3) Rig and operate loading aids organic to aircraft.
- (4) Designate location of helicopter.
- (5) Determine restraint requirements.
- (6) Provide tiedown devices.
- (7) Inspect for adequacy of tiedown.

2-4. Functions of Army Loading Unit.

a. *Army Loading Unit Is Expected To:*

- (1) Prepare helicopter for shipment.
- (2) Load, tiedown, and unload helicopter.

CAUTION

Center of gravity and exact weight must be computed for each helicopter, so that loadmaster can accurately determine center of gravity for loaded cargo aircraft.

(3) Mark the center of gravity and furnish loadmaster exact weight of each helicopter.

(4) Furnish necessary lumber and construct extensions to aircraft loading ramps. See figure 2-3.

(5) Furnish, rig, and operate loading devices not organic to aircraft.

(6) Furnish and operate auxiliary lights necessary for night loading.

(7) Be prepared to demonstrate for cargo aircraft commander that disassembled components stowed within helicopter are packaged correctly and secured in accordance with Air Force restraint requirements specified in the applicable Air Force technical order for loading instructions.

(8) Prepare manifest, itemizing in such a manner that disassembled components stowed within helicopter for shipment as part of fuselage package.

(9) Furnish cargo aircraft commander a list of all dangerous materials, as defined by TM 38-250 (AFM 71-4), to be shipped with or within helicopter.

b. *Coordination.* The Army installation responsible for preparing and loading helicopter must coordinate with the Military Airlift Command (MAC) in order to have helicopter ready to load as soon as the MAC cargo aircraft arrives. All concerned must know how many helicopters are to be shipped and what model cargo aircraft will be used, to plan disassembly, obtain proper handling equipment, have necessary shoring available, obtain cushioning material, and provide for many other things that circumstances dictate.