

ATTACHMENT "C"

**Statement of Work
For Repair of
P-3 Propeller Assembly
Part Number 54H60-77**

**Prepared by
and
Technical Reviewed By**

NAVICP PHILADELPHIA CODE 07
NAVAIRDEPOT CHERRY POINT NC AIR-4.4.6.1
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1.0 **SCOPE.**

- 1.1 This Statement of Work addresses requirements for inspection, repair, assembly, balance and flow test of P-3 Propeller Assemblies part number 54H60-77 that meet criteria specified in this SOW. This work is required to be performed in direct support of Intermediate Level Maintenance Departments (AIMD) at locations specified in Clause L-18 Consignment Instructions. The support to be provided is required as the work exceeds the current capability of the AIMD. Performance of repairs and /or development and implementation of repairs beyond the scope of this SOW is not permitted.
- 1.2 Place of Performance: All work shall be performed at the contractor's approved facility or approved sub-contractor facility. The contractor will be responsible for providing adequate indoor storage of all Navy propeller assemblies and components while in the contractor's or sub-contractor's custody.

2.0 **APPLICABLE DOCUMENTS.**

2.1 Naval Aviation Maintenance Manuals

1. NAVAIR 03-20CBBK-1 Intermediate Level Propeller Maintenance Manual dated 1 June 1998
2. NAVAIR 03-20CBBK-2 Depot Level Propeller Maintenance Manual dated 15 February 1988
3. NAVAIR 03-20C-4 Depot Level Propeller Blade Manual dated 30 March 1990
4. LES CP25-1-CC-9016, REV B Of 10 Jan 96
5. PRB 93REVA,A, Amendment 1 (TDC) 65/P-3 and C-130 Propeller Assembly
6. PRB 93REVA,(TDC) 65/P-3 AND C130 Propeller Assembly Inspection and Disposition Instructions/ of 23 Jan 96/Msg OR 152019Z Nov 95

2.2 Document Availability and Support

1. The contractor shall obtain a copy of the NAVAIR Manuals listed in paragraph 2.1 from the NATEC using Web: WWW.Natecqualifiedcontractor@Navair.navy.mil. When requesting manuals the contractor will receive all Manual Change Releases (MCRs) applicable to the specific manual together with the changes to the basic manual. The contractor shall be responsible for the incorporation of all MCRs released during contract performance into the applicable manuals and for compliance with changes as they apply to the work requirements of this contract. The contractor shall determine if new MCRs have been released. This shall be accomplished through bi-weekly review of Cherry Point Web Site (www. **(To be provided)**). Applicable Local Engineering Specifications (LESs) will be provided to the contractor by the Propeller IPT Lead Cherry Point electronically.

2.3 Document Review for Contract Affectivity

2.3.1 Contractor's Technical Library shall supply the supporting technical documents to the Operations Engineering Group and to the Defense Contract Management Agency (DCMA) for technical review and determination of contract affectivity (if any). When applicable, DCMA will initiate the contract modification process based on the review.

2.3.2 DCMA shall supply the contract modification to the U. S. Navy Points of Contact for review and approval/disapproval.

2.3.3DCMA shall release approved contract modification to the contractor's Operations Engineering Group.

2.3.4The contractor's Operation Engineering Group shall update the repair program's documentation and release supporting technical documentation to the repair program.

3.0 **WORK REQUIREMENTS**

3.1 **General Requirements for Repair** – Units to be repaired under this contract are Propeller Assemblies part number 54H60-77 which have been received by the AIMD and determined to require repairs which exceed AIMD capabilities. To be eligible to be repaired under this contract the propellers **May Not** (1) have more than 6000 hours Time Since New or 6000 hours since Overhaul, or (2) have been subjected to overspeed or (3) have damage resulting from crash damage. Units that meet this criteria shall be subjected to a Induction Inspection.

3.1.1 **Induction Inspection-** Propellers that meet the general requirements of paragraph 3.1 shall be subjected to an initial induction screening inspection to determine if the propeller is eligible for repair under this contract. This induction screening and inspection shall determine if the reported deficiencies can be corrected using repairs authorized by NAVAIR 03-20CBBK-1 together with the depot level repairs identified in this SOW. Depot repairs identified in this SOW shall be performed in accordance with applicable Depot Level Maintenance manuals, Local Engineering Instructions, and Manual Change Releases.

3.1.1.1 Upon receipt the contractor shall review the data supplied by the AIMD indicating reason for rejection/ description of malfunction. The contractor shall perform a visual inspection of the propeller to identify any damage such as blade damage, corrosion, nicks or dents, which would require disassembly of the propeller. If data supplied by the AIMD and visual inspection fails to reveal a deficiency the contractor shall perform functional testing and troubleshooting in accordance with work package 005 of NAVAIR 03-20CBBK-1.

(Note: if there are discrepancies noted which clearly indicate reason for rejection this step need not be performed upon initial receipt).

Should results of this initial inspection, to include both visual and functional test reveal "no defect", the results of the test and inspection shall be provided to the AIMD and the propeller returned as RFI. Note: The contractor shall be responsible for transportation to and from the AIMD in accordance with requirements of paragraph 7.0 of this SOW.

Should results of this induction inspection reveal that the propeller assembly does not qualify for repair under this SOW, the applicable AIMD POC shall be contacted and the propeller returned to AIMD.

3.1.1.2 **Disassembly, Inspection and I Level Repair (Category 1)**: Should results of this initial inspection result in a need to disassemble the propeller, disassembly and cleaning shall be performed in accordance with work package 006 of NAVAIR 03-20CBBK-1. Disassembly shall be followed by an inspection to be performed in accordance with NAVAIR 03-20CBBK-1 work package 007. Required I Level repairs are to be performed in accordance with NAVAIR 03-20CBBK-1. Should a complete inspection reveal damage to one or more blades part number A7121B-2 exceeding the repair requirements specified in NAVAIR 03-20CBBK-1 work package 008, a determination shall be made regarding repairability of the blade(s) in accordance with requirements of 3.1.1.2.1 of this SOW. Should inspection of the Hub part number 577834 reveal damage in excess of repair limits provided in NAVAIR 03-20CBBK-1 an evaluation shall be made to determine if the repairs specified in 3.1.1.2.2 will result in the hub being returned to a ready for issue condition. Should inspection of the Dome assembly part number 737199-1 reveal damage in

excess of repair limits of NAVAIR 03-20CBBK-1 work package 010 an evaluation shall be made to determine if repairs specified in paragraph 3.1.1.2.3 will result in the Dome Assembly being returned to a ready for issue condition.

A quantity of Pitch Lock Regulators part number 558279, Low Pitch Stop Assemblies part number 774473-1 and De-Icer Rings part number 557045 will be pre-positioned at the contractor facility as GFM as identified in section K08 of the contract. Should replacement of these items be required the GFM shall be used in lieu of procurement of new material. Replacement of the pre-positioned GFM shall be coordinated with the specific AIMD whose propeller required the replacement.

Should results of this inspection reveal that the propeller can not be repaired in accordance with this SOW, the AIMD shall be advised of conditions that render the unit non-repairable under this SOW, and the propeller assembly shall be returned to the AIMD together with applicable reports.

3.1.1.2.1 **Blade Repair (Category 2):** A determination shall be made regarding repairability of the blades by completion of inspection in accordance with the requirements of NAVAIR 03-20C-4. Blades which can be repaired by performing the repairs in accordance with the requirements of NAVAIR 03-20C-4, MCRs, LESs, and PRBs specified in paragraph 2 of this SOW. Blades which can not be recovered in accordance with the requirements of the NAVAIR 03-20C-4 and associated MCRs, LESs, PRBs shall be replaced. Blade replacement costs will be considered over and above repair cost.

3.1.1.2.1.1 **Blade Match/Balance requirements:** The contractor will be provided a pool of five (5) blades identified as GFM in attachment to the contract. These blades are provided to facilitate compliance with matching of blades to meet propeller build requirements. It will be the contractor's responsibility to maintain this pool through repair or, when blades are found to beyond repairable limits, replacement.

3.1.1.2.2 **Hub/Barrel Repair (Category 3):** A determination shall be made regarding repairability of the Hub by completion of inspection in accordance with the requirements of NAVAIR 03-20CBBK-1 work package 010. Hubs that can be repaired by performing Barrel tail shaft re-plating and/or barrel bolt hole repair of the non-press fit area are to be repaired in accordance with NAVAIR 03-20CBBK-2. Barrels exhibiting evidence of wear on the front half barrel splines shall be repaired in accordance with the requirements of work package 010. Propellers exhibiting damage to the hub/barrel not repairable using the above repairs shall be returned to the AIMD as Non RFI for returned for complete depot level inspection and repair.

3.1.1.2.3 **Dome Assembly Repair (Category 4):** Dome assemblies inspected and found to require, in addition to those repairs authorized by NAVAIR 02CBBK-1, replacement of feather lock part number 514809 shall be repaired by the contractor. Should dome inspection reveal damage to the feather lock requiring replacement, replacement shall be accomplished in accordance with NAVAIR 03-20CBBK-2 work package 006. Propeller Assemblies exhibiting damage to the Dome assemblies exceeding this level of repair shall be returned to the AIMD as NON-RFI identified as requiring complete depot level inspection and repair.

- 3.1.1.3 **Documentation of Induction Inspection:** Prior to initiation of repair on the propeller the contractor shall document the results of each induction inspection. This documentation shall identify required repairs necessary to return the propeller assembly to a ready for issue condition using CDRL 0001. This document shall be forwarded to Depot Cherry Point, N.C Engineering POC and the applicable AIMD POC identified in paragraph 4- - of this SOW. The AIMD POC will provide the contractor with disposition authorizing the contractor to proceed with repair or other applicable disposition instructions within 24 hours of receipt of the report.
- 3.1.1.4 Upon completion of inspection and repair, propeller assemblies which are determined acceptable shall be assembled, balanced in accordance with NAVAIR 03-20CBBK-1 WP 009 00 and flow tested. Flow test shall be in accordance with NAVAIR 03-20CBBK-1 WP 005 00. Units found to be acceptable shall be returned to the applicable AIMD using shipment procedures approved by the government together with documentation of repairs completed and test results in accordance with documentation section 4.0 of this SOW.

NOTE: No additional repair actions are authorized to be performed without written authorization from the contracting officer.

4.0 DOCUMENTATION

4.1 Results of repair, assembly, balance and flow testing of the propeller assemblies shall be documented by the contractor per CDRL 0002. Use of contractor format is acceptable providing documentation includes at a minimum, the following information for each item processed:

- A. Contractor Name and address
- B. Contract Number
- C. Propeller part number
- D. Propeller serial number
- E. Propeller Time Since New
- F. Propeller Time Since Overhaul
- G. Date balanced
- H. Date flow tested
- I. Repairs Performed and Test results
 - (1) Repair documentation providing detailed description of repairs completed.
 - (2) Tests performed and results. Note: Acceptable units may be annotated as acceptable per NA03-20CBBK-1
- K. Each Blade shall be documented as follows:
 - (1) Part number
 - (2) Serial number
 - (3) Repairs performed: A detailed description of the repairs performed for each blade serial number shall be provided.

5.0 Deviations from Standards, Specifications and Technical Documentation

5.1 When a deviation/defect has/will occur(ed), a Request for Deviation/Waiver (RFD/RFW) DD Form 1694, APR 92, shall be submitted to the U. S. Navy for evaluation per CDRL 0003 and 0004. The waiver request shall indicate the need for, or the events leading to, a deviation; the details of the proposed solution; and any impact the deviation will have on the U. S. Navy.

6.0 Points of Contact:

6.1 NAVAIR 4.4.6.1 Cherry Point Propeller Engineering

Mr. Jordan Walker
P-3 Propeller Lead Engineer, AIR-4.4.6.1 Cherry Point
PSC Box 8021
Cherry Point, North Carolina 28533-0021
walkerjr@navair.navy.mil
(252) 464-9969

6.2 Naval Inventory Control Point (NAVICP)

Contracting Officer
Joy Capka, Code: 0224.03
700 Robbins Avenue
Philadelphia, PA 19111
(215) 697-6528

6.3 AIMD POCs TBD

7.0 Quality Assurance

7.1 The contractor will maintain their government accepted ISO 9002 quality system or equivalent to ensure that the Navy propeller blades conform to the specified technical requirements and repair procedures provided in this SOW.

7.2 Certification stamps are the preferred method for attesting to the inspection and test status of the Navy propeller blades under this contact. These stamps will be controlled to provide continuity and traceability to the individual qualified/certified to perform a specific work operation.

7.3 First article testing will be required to be completed prior to entering into production for selected repairs identified in this SOW. Detailed first article test requirements are contained in section --- of the contract.

8.0 Packaging and Shipment

8.1 As the Propeller Assemblies repaired assembled, balanced and tested under this contract are for immediate use shipment of the assemblies using government approved commercial practice is authorized for use. Assemblies shall be adequately protected to insure parts are delivered to the applicable AIMD free of damage and contamination.

8.2 Contractor shall be responsible for safe transportation of material from the contractor's facility to the applicable AIMD using shipment procedures approved by the government. Use of commercial transportation is authorized.