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STATEMENT OF WORK (SOW)  
for the  
RESTORATION, OVERHAUL, AND REPAIR (ROR)  
of the  
AN/TPS-63B  
RADAR SET  
NSN 5840-01-355-0092  
  
SOW-04-C4I-07736C-1/1

1. This SOW identifies the work effort that shall be performed by the contractor to ROR the AN/TPS-63B Radar Set, NSN 5840-01-355-0092, part number 3D54669G01, CAGE 97942.
2. The attached manuscript has been reviewed and is concurred upon by the following signers:



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RADAR SET  
NSN 5840-01-355-0092

1.0 Scope. This SOW establishes general and specific requirements to be followed by the contractor to ROR the AN/TPS-63B Radar Set (hereafter referred to as "Radar Set"), NSN 5840-01-355-0092, part number 3D54669G01, CAGE 97942. This document contains requirements to restore the Radar Set to Condition Code "A." Condition Code "A" is defined as "serviceable/issuable without qualification; new, used, repaired or reconditioned material that is serviceable and issuable to all customers without limitation or restriction, including material with more than six months shelf-life remaining."

1.1 Background Information

1.1.1 Restoration. The process of upgrading an item to conform to the applicable technical specifications in order to assure compliance with specified operational capabilities, physical appearance and configuration. It includes the repair or replacement of parts/components that have failed or are of marginal quality/reliability due to wear, deterioration, or damage as well as cosmetic reconditioning. Restoration shall include all applicable alignments/calibrations and verification that approved Engineering Change Proposals/Modifications have been installed properly and are functional. In the event that non-approved configuration items are discovered, the equipment shall be returned to its current approved configuration.

1.1.2 Overhaul. The process of totally reconditioning an item to conform to all current technical specifications for that item, thereby providing a life expectancy equivalent to similarly configured new equipment, through the repair/replacement of components that have failed, are of marginal performance, or are reasonably expected to fail due to wear/damage/deterioration. Additionally, structural/cosmetic repairs shall be performed to the degree that the item is comparable to new equipment. For the purposes of this SOW, all approved Engineering Change Proposals (ECPs) and modifications shall be installed/verified as part of the overhaul work effort.

1.1.3 Repair. The process of returning an unserviceable item to full operational status by repair/replacement of its component parts and performing any alignments/calibrations as may be necessary. Cosmetic/structural repairs are not included in the repair process unless those repairs impede the operational functionality of the item.

1.1.4 Marginal Quality. Deteriorated or damaged parts that are reasonably anticipated to fail thereby significantly reducing the expected reliability of an assembly/equipment. An expanded definition and associated requirements for replacement of parts/components adjudged to be of marginal quality is contained in MIL-STD-2110 (EC). Specific requirements of this SOW

along with the general requirements as contained in MIL-STD-2110 (EC) shall be used to identify and necessitate the replacement of marginal quality items.

2.0 Applicable Documents. The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and Supplements thereto which are in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be the superseding requirement. Any remaining conflicts shall be resolved at the discretion of the Logistics Management Specialist (LMS). Contact information: E-mail address is [herndonle@matcom.usmc.mil](mailto:herndonle@matcom.usmc.mil). Mailing address: Commander, Marine Corps Systems Command, Attn: Logistics Management Specialist, Code BMADS, 814 Radford Blvd., Suite 20343, Albany, GA 31704-0343. Commercial telephone (229) 639-6545 or DSN 567-6545.

### 2.1 Military Specifications

MIL-A-8625	Anodic Coatings for Aluminum and Aluminum Alloys
MIL-C-5541	Chemical Conversion Coatings on Aluminum and Aluminum Alloys

### 2.2 Military Standards

MIL-STD-129	DoD Standard Practice for Military Marking
MIL-STD-2073-ID	DoD Standard Practice for Military Packaging
MIL-STD-2110 (EC)	Restoration, Overhaul and Repair of Electronic Equipment

### 2.3 Other Government Documents and Publications

SL3-07736C	Components List, Radar Set AN/TPS-63B
TI-4400-15/1A	Packaging, Handling, Storage and Transportation of Electrostatic Discharge Sensitive Items
TM-07736C-14/1-1	System, Radar Set AN/TPS-63B
TM-07736C-14/1-2	System Technical Description, Radar Set AN/TPS-63B
TM-07736C-14/3	Operation Instructions, Radar Set AN/TPS-63B
TM-07736C-14/14	Maintenance Standards, Radar Set AN/TPS-63B

TM-4750-15/1	Painting and Registration Marking of Marine Corps Combat and Tactical Equipment
TM-4750-15/2-8	Painting and Registration Marking of Marine Corps Combat and Tactical Equipment (contains patterns)
3D54669	Modification Drawing, Radar Set AN/TPS-63B
3D54669	Parts List, Modification Kit, Radar Set AN/TPS-63B
ELEX-R-104B	System Specifications for the AN/TPS-63B

Military Handbooks (For Guidance)

MIL-HDBK-61	Configuration Management Guidance
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2.4 Industry Standards

JESD625-A	Requirements for Handling Electrostatic-Discharge Sensitive (ESDS) Devices
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ANSI/ISO/ASQC Q9002-1994	Quality Systems - Model for Quality Assurance in Production, Installation and Servicing
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Industry Standards (For Guidance)

ANSI/EIA-649	National Consensus Standard for Configuration Management
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Copies of Military Standards and Specifications are available from the DOD Single Stock Point, Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, commercial telephone number (215) 697- 2179 or DSN 442-2179, or <http://www.dodssp.daps.mil>. Copies of other government publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracting Officer: Contracts Department (Code 891), P.O. Drawer 43019, 814 Radford Blvd., Marine Corps Logistics Bases, Albany, GA 31704-3019, commercial telephone number (229) 639-6761 or DSN 567-6761. Copies of engineering drawings, if applicable, shall be obtained from: Supply Chain Management Center, Attn: Code 583-1, 814 Radford Blvd., Suite 20320, Albany, GA 31704-0320, commercial telephone number (229) 639-6410 or DSN 567-6410.

3.0 Requirements

### 3.1 General Requirements

This SOW establishes uniform standards and procedures as applicable to the entire ROR process (to include an initial evaluation of the equipment's condition, maintenance procedures, selection and use of parts/materials, identification/marketing of the equipment and preservation/packing for shipment). Although this SOW, along with the referenced documents, provide extensive information relative to the ROR, the information and guidance is limited to establishing only the minimum requirements essential to perform the ROR process to restore the Radar Set to Condition Code "A".

The contractor shall be responsible for all parts, materials, labor, facilities, tools and test equipment necessary to restore, overhaul and repair the equipment in accordance with the references and this SOW.

Upon completion of work, the contractor shall be responsible for informing the Logistics Management Specialist (LMS) that the Radar Set ROR has been completed and also for coordinating shipment of the Radar Set to the receiving unit.

The contractor shall budget for the required temporary additional duty (TAD) funding as part of the ROR process and provide technical service personnel (actual number to be determined by the contractor) to the receiving unit to perform joint acceptance testing.

3.2 Detailed Tasks. The following detailed tasks are required in addition to the general work required to restore, overhaul and repair the Radar Set to condition code "A".

3.2.1 Pre-Induction Limited Technical Inspection (LTI). Upon receipt of the Radar Set, contractor technical personnel shall perform a Pre-Induction LTI on the Radar Set scheduled for ROR utilizing SL3-07736C, TM-07736C-14/1-1 and TM-07736C-14/3 for inventorying and determining operational status of the equipment. The LTI shall identify any shortages, long lead-time material requirements and the overall condition of the Radar Set to be inducted for ROR. The LMS shall be informed of any equipment shortages in order to coordinate resolution actions. Identification of required long lead-time materials and the overall condition are envisioned to assist ROR management personnel in the reduction of overall ROR processing time. Furthermore, the LTI shall include identification of any transportation related damages incurred in-transit. In the event of any transportation related damage(s), the cognizant Transportation Management Office shall be notified, in writing, within 5 working days.

3.2.2 Induction for ROR. Work shall commence within 5 days of receipt of the Radar Set at the contractor's repair facility. TM-07736C-14/1-1, TM-07736C-14/1-2, Modification Drawing 3D54669, Parts List 3D54669, and ELEX-R-104B (in particular) should be referenced for informational purposes and to ensure compliance with established mandatory requirements.

3.2.3 Aluminum and aluminum alloy hardware shall be treated, as required, in accordance with MIL-A-8625 or MIL-C-5441 (as applicable) to provide protection from corrosion/oxidation.

3.2.4 All seals/gaskets and bearings/bearing assemblies within the gearbox and pedestal assemblies shall be replaced.

3.2.5 The air and coolant systems shall be overhauled and upon completion, proper pressure seal shall be verified at all fittings within these systems.

3.2.6 The coolant reservoir shall be filled with a mixture of 50% distilled water and 50% ethylene glycol prior to shipping.

3.2.7 As part of the ROR process of the RF transmission line system, all o-rings shall be replaced.

3.2.8 Shelter skids shall be inspected for wear and damage and repaired/replaced as necessary.

3.2.9 The Radar Set shall be painted with Chemical Agent Resistant Coating (CARC) utilizing the applicable green camouflage patterns in accordance with TM-4750-15/1 and TM-4750-15/2-8.

3.2.10 Following the ROR of the Radar Set, the contractor shall conduct a full system operational test in accordance with TM-07736C-14/14. Also required are testing of the IFF system in conjunction with the AN/UPX-27 and AN/UPA-60 (with the exception of Mode 4) and verification/validation of output data utilizing the Portable Autonomous Reports Collection System (PARCS 2000R).

### 3.3 Packaging, Handling, Storage and Transportation (PHS&T)

3.3.1 Upon successful completion of final testing and certification of condition code "A" status, the contractor shall be responsible for preservation, packaging and coordinating for shipment of items to be repaired under the terms of this statement of work. All items shall be level "B" packed in accordance with the requirements of MIL-STD-2073-1D, Appendix A, Table A.VI., Electronic Equipment. Since any overseas shipments must be via priority Military Airlift Command (MAC) and all shipments will result in immediate use, no level "A" preservation, packing and packaging requirements exist.

3.3.2 Marking for shipment and storage shall be in accordance with MIL-STD-129.

3.3.3 The Marine Corps will provide the contractor with the shipping address(es) for delivery of the Radar Set(s). The contractor shall be responsible for arranging for shipment to the pre-designated site(s). The Marine Corps will be responsible for transportation costs associated with shipping the subject equipment to and from the contractor. (Note: The contractor shall ensure that domestic shipment is via air-ride truck and overseas shipment is by priority air shipment via Military Airlift Command.)

3.4 Joint Acceptance Testing. The contractor shall coordinate equipment receipt, emplacement, assembly and joint acceptance testing with the receiving unit. Joint acceptance

testing shall include a joint Limited Technical Inspection. Any portion(s) of the full system operational testing identified in paragraph 3.2.10 (preceding) shall be performed at the receiving unit as part of the joint limited technical inspection, including redundant testing previously performed prior to shipment.

**3.5 Configuration Management.** The contractor shall apply configuration control procedures to established configuration items. The contractor shall not implement configuration changes to an item's documented performance or design characteristics without prior written authorization. All permanent changes to the form, fit or function of the baseline shall be by Engineering Change Proposal. If it is necessary to temporarily depart from the authorized configuration, the contractor shall prepare and submit a Request for Deviation. MIL-HDBK-61 and ANSI/EIA-649 provide guidance for preparing these configuration control documents.

**3.6 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM).** The Management Control Activity (MCA/Code 573-2) will coordinate Government Furnished Equipment/Government Furnished Materiel (GFE)/(GFM) requests and maintain a central control system on all government owned assets in the contractor's possession. The MCA will forward a GFE Accountability Agreement to the contractor for signature on an annual basis to establish a chain of custody and identify property responsibilities for Marine Corps assets. The contractor is to acknowledge receipt of GFM to the MCA within 15 days of receipt. (This can be done by mailing (Materiel Management Department, Management Control Activity (Code 573-2), 814 Radford Blvd., STE 20320, Albany, GA 31704-0320) or faxing (commercial 229-639-5498 or DSN 567-5498) a copy of the DD1348).

**3.7 Electrostatic Discharge (ESD) Control Program**

**3.7.1** The contractor shall establish, implement and document an ESD control program following the guidelines provided in JESD625-A. ESD protective measures shall be used during manufacturing, handling, inspection, testing, marking, packaging, storing and transporting ESD sensitive components.

**3.7.2** The contractor shall plan for and use proper Electromagnetic Environmental Effects (E3) control procedures in the ROR process in conjunction with TI-4400-15/1A and JESD625-A.

**3.8 Quality Assurance Provisions**

The contractor shall provide and maintain a Quality System that, as a minimum, adheres to the requirements of ANSI/ISO/ASQC Q9002-1994, Quality Systems - Model for Quality Assurance in Production, Installation and Servicing.

**4.0 Reports.** The contractor shall provide the following reports as stated in the paragraphs below. Reports shall be submitted to the Logistics Management Specialist (LMS). Electronic address: [herndonle@matcom.usmc.mil](mailto:herndonle@matcom.usmc.mil). Mailing address: Commander, Marine Corps Systems Command, Attn: Logistics Management Specialist, Code BMADS, 814 Radford Blvd., Suite

20343, Albany, GA 31704-0343. Facsimiles may be sent to (229) 639-6545 or DSN 567-6545, Attn: Logistics Management Specialist, Code BMADS.

4.1 The contractor shall develop a Test Data Report (TDR), in contractor format, that portrays all test requirements/specifications (as collectively contained in the engineering drawings and technical manuals relative to the Radar Set, primarily TM-07736C-14/14), referencing acceptable parameters, specific results obtained during the final diagnostic/integration testing and general remarks. Additionally, the TDR shall reference this SOW, the NSN, part number and serial number of the Radar Set. Upon request, the contractor shall submit a copy of the TDR electronically (preferred), via regular mail, or facsimile to the Logistics Management Specialist (LMS).

4.2 The contractor shall provide a copy (either electronic or hard copy submittal is acceptable) of the Pre-Induction LTI to the LMS within 15 calendar days after completion of the inspection. The LTI (contractor format) shall consist of the TDR and extract of SL3-07736C (as applicable to Supply System Responsibility items of the Radar Set).

4.3 The contractor shall provide a hard copy (with the signature of the unit's Commanding Officer or his designated representative) of the Joint Acceptance LTI to the LMS within 15 calendar days after completion of the inspection. The Joint Acceptance LTI shall be similar to the Pre-Induction LTI, with additional provisions for the signature and identifying information of the unit's authorized acceptance representative. The unit will retain a copy of the Joint Acceptance LTI (with original signatures) in its files for the Radar Set. Electronic copies of this report are not acceptable.



