Statement of Work (SOW)
for the Restoration, Overhaul, and Repair (ROR) of the
AN/TPS-59(V)3 Radar Set
NSN 5840-01-412-9653

1.0 SCOPE. This Statement of Work (SOW) establishes general and specific requirements to be followed by the Contractor in the Restoration, Overhaul, and Repair (ROR) of the AN/TPS-59(V)3 Radar Set, NSN 5840-01-412-9653, Part Number 77A109234G2, CAGE 03538, (hereafter referred to as the Radar Set) less the following major assemblies: Equipment Transport Shelter; S-675/TPS-59, Part Number 7345173; Data Processor Control Group, OL-576/TPS-59, Part Number 77E300609; and Power Distribution Box; SB-4171/TPS-59, Part Number 7344796. In order to ensure that there is a complete understanding of all requirements, this SOW and the individual SOWs referenced in Section 2 should be reviewed in their entirety. The individual SOWs referenced in Section 2 apply to each of the major assemblies, which comprise the Radar Set.

1.1 Definitions

Contractor: For the purposes of this SOW, Contractor is defined as a commercial or government entity.

Condition Code "A": For the purposes of this SOW, Condition Code "A" is defined as "serviceable and issuable without qualification, limitation or restriction".

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 (ECPs) or modifications have been installed properly and are functional. In the event that non-approved configuration items are discovered, the equipment shall be restored to its approved configuration.

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.

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.

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) of Marine Corps Systems Command (MCSC), Battlespace Management and Air Defense Systems (BMADS), who can be contacted at the following email address: SMBmatcombmads@matcom.usmc.mil. The mailing address is: Commanding General, Marine Corps Systems Command, Attn: Logistics Management Specialist (BMADS), 814 Radford Blvd., STE 20343, Albany, Georgia 31704-0343. The commercial telephone number is (229) 639-5036 or DSN 567-5036. Facsimiles may be sent to (229) 639-6545 or DSN 567-6545, Attn: Logistics Management Specialist (BMADS).

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
MIL-R-29466D	System Specifications for the Radar Set, AN/TPS-59(V)3

2.2 Military Standards

MIL-STD-129	DoD Standard Practice: Military Marking for Shipment and Storage
MIL-STD-2073-lD(1)	DoD Standard Practice for Military Packaging
MIL-STD-2110 (EC)	Restoration, Overhaul, and Repair of Electronic Equipment
MIL-STD-3003	Vehicles, Wheeled; Preparation for Shipment an Storage of

2.3 Other Government Documents and Publications

DoD 4000.25-1-M	Military Standard Requisitioning and Issue Procedures (MILSTRIP)
Engineering Drawing 77A109234G2, CAGE 03538	Engineering Drawing, Radar Set, AN/TPS-59(V)3
Engineering Drawing 77A109234G2, CAGE 03538	Parts List, Radar Set, AN/TPS-59(V)3
Engineering Drawing 7327847G3	Engineering Drawing, AN/TPS-59(V)3, Set 15 Antenna Transmitter Group
Engineering Drawing 7327351G3	Engineering Drawing, AN/TPS-59(V)3 Antenna Transmitter Group
SL-3-07751B (PCN 12307751100)	Components List, Radar Set, AN/TPS-59(V)3
SOW-05-PMM112-09088A-1/1	Statement of Work for ROR of the SET-15 Antenna-Transmitter Group, OE-442/TPS-59
SOW-05-PMM112-8C778B-1/1	Statement of Work for ROR of the Antenna-Transmitter Group, OE-340/TPS-59
TI-4400-15/1A (PCN 16738353000)	Packaging, Handling, Storage and Transportation of Electrostatic Discharge Sensitive Items
TM-07751B-14/1 (PCN 18407771100-1400)	Operation and Maintenance Instructions, Radar Set AN/TPS-59(V)3, Volume 1-4
TM-07751B-14/9 (PCN 18407772200)	Software Functional Description, Radar Set AN/TPS-59(V)3
TM-4750-15/1 (PCN 18204750000)	Painting and Registration Marking of Marine Corps Combat and Tactical Equipment
TM-4750-15/2-8 (PCN 18204750800)	Camouflage Paint Patterns

Military Handbooks (For Guidance)

MIL-HDBK-61	Configuration Management Guidance

2.4 Industry Standards

ANSI/ISO/ASQC Q9001-2000	Quality Management Systems-Requirements

JESD625-A	Requirements for Handling Electrostatic-Discharge-Sensitive (ESDS) Devices
Industry Standards (For Guidance)	
ANSI/EIA-649	National Consensus Standard for Configuration Management

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 on the Internet at http://www.dodssp.daps.mil. MIL-R-29466D, System Specifications for the Radar Set, may be obtained by contacting the LMS at the following email address SMBmatcombmads@matcom.usmc.mil. The mailing address is Commanding General, Marine Corps Systems Command, Attn: Logistics Management Specialist (BMADS), 814 Radford Blvd., STE 20343, Albany, Georgia 31704-0343. The commercial telephone number is (229) 639-6578 or DSN 567-6578. Copies of other government documents and publications required by contractors in connection with specific SOW requirements shall be obtained from Commanding General (Code 586), Whse 1121, STE 20321, 814 Radford Blvd., Marine Corps Logistics Command, Albany, Georgia 31704-0321, commercial telephone number (229) 639-5818/8988 or DSN 567-5818/8988. Copies of engineering drawings, if applicable, shall be obtained from: Supply Chain Management Center, Attn: Code 566-1A, 814 Radford Blvd., STE 20320, Albany, Georgia 31704-0320, commercial telephone number (229) 639-6476 or DSN 567-6476.

3.0 REQUIREMENTS

3.1 General Requirements

3.1.1 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/marking of the equipment, and preservation/ packing for shipment). Although this SOW, along with the referenced documents (particularly MIL-STD-2110 (EC)), provides extensive information relative to the ROR process, the information and guidance is limited to establishing only the minimum requirements essential to perform the ROR in order to restore the Radar Set to Condition Code "A". Additional guidance may be provided by the LMS as well as other approved commercial/industry practices and standards. Requests for additional guidance shall be referred to the LMS, MCSC, BMADS, at commercial telephone number (229) 639-5036, DSN 567-5036, FAX (229) 639-6545 or by email to SMBmatcombmads@matcom.usmc.mil.

3.1.2 The Contractor shall be responsible for all parts, materials, labor, facilities, tools, and test equipment (with the exception of the Radar Environmental Simulator (RES) referenced in paragraph 3.2.5) necessary to Restore, Overhaul, and/or Repair the equipment in accordance with the references and this SOW. Upon successful completion of the ROR, the Radar Set shall be Condition Code "A".

3.1.3 Upon completion of the ROR, the Contractor shall be responsible for informing the LMS that the ROR has been completed and also for coordinating shipment of the Radar Set (less those items previously excepted in the SOW Scope paragraph 1.0) to the receiving unit.

3.1.4 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

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 SL-3-07751B for inventory purposes and TM-07751B-14/1 for determination of operational status of the equipment. The Pre-Induction LTI (in Contractor format) shall identify any transportation related damages, any equipment shortages, long lead-time material requirements, initial Space Probe Antenna Characterization System (SPACS) testing results, and the overall condition of the Radar Set to be inducted for ROR. In the event of any transportation related damage(s), the cognizant Transportation Management Office (TMO) shall be notified in writing within five working days after receipt of the equipment. The LMS, MCSC, BMADS, 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.

3.2.2 Induction for ROR: Work shall commence within five days of receipt of the Radar Set at the Contractor's repair facility. The following documents and publications shall be referenced for informational purposes and to ensure compliance with established mandatory requirements: TM-07751B-14/1, TM-07751B-14/9, Engineering Drawing and Parts List 77A109234G2, CAGE 03538, JESD625-A, MIL-STD-2110 (EC) and MIL-R-29466D. Additionally, each of the SOWs for the Radar Set's major assemblies (SOW-05-PMM112-8C778B-1/1 and SOW-05-PMM112-09088A-1/1) shall be referenced to ensure compliance with mandatory requirements as applicable to those assemblies.

3.2.3 Aluminum and aluminum alloy hardware shall be treated, as required, in accordance with MIL-A-8625 or MIL-C-5541 (as applicable) to provide protection from corrosion/oxidation.

3.2.4 Unless otherwise specified by the LMS, MCSC, BMADS (prior to induction for ROR), 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.

3.2.5 Following ROR of the Radar Set, the Contractor shall conduct a full system operational test, to include testing of Tactical Ballistic Missile (TBM) tracking functionality utilizing the Radar Environmental Simulator (RES) and final SPACS test. Also required is testing of the Identification Friend/Foe (IFF) System in conjunction with the AN/UPX-37 (for modes 1, 2, 3/A and C). The Contractor shall perform verification/validation of output data utilizing the Portable Autonomous Reports Collection System (PARCS 2000R). The Acceptance Test/LTI form(s), in Contractor format, shall be used for documentation and quality assurance support.

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

3.3.1 The Contractor shall be responsible for preservation and packaging of the items being repaired under the terms of this SOW. Shipment of all items shall be in accordance with the Level "B" requirements of MIL-STD-2073-1D(1), Appendix A, Table A.VI., Electronic Equipment. Preservation and packaging of the wheeled equipment (trailers) shall be in accordance with MIL-STD-3003.

NOTE: Any overseas shipments must be made via priority Military Airlift Command (MAC) and will be for immediate use. Level "A" requirements do not exist for this system.

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 repaired equipment. The Contractor shall be responsible for arranging for shipment, via air-ride truck for CONUS, or priority air shipment via MAC for OCONUS to the pre-designated site(s). The Marine Corps will be responsible for transportation costs associated with movement of the equipment to and from the Contractor.

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 (inclusive of inventory for possible shortages) and complete operational testing (inclusive of full system integration testing utilizing the RES and unit's AN/TYQ-23(V), Tactical Air Operations Module).

3.5 Configuration Management. The Contractor shall apply configuration control procedures to established configuration baseline 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 (ECP). If it is necessary to temporarily depart from the authorized configuration, the Contractor shall prepare and submit a Request for Deviation (RFD). 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 581-1B) will coordinate GFE/GFM requests and maintain a central control system on all government owned assets in the Contractor's possession. The MCA will forward GFE Accountability Agreement to the Contractor for signature on an annual basis to establish a chain of custody and identify property responsibilities for the 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 a copy of the DD1348 to the Materiel and Distribution Management Department, Distribution Management Branch, Management Control Activity (Code 581-1B), 814 Radford Blvd., STE 20320, Albany, Georgia 31704-0320 or faxing a copy to commercial telephone number (229) 639-5498 or DSN 567-5498. Assets being repaired will not be considered GFE/GFM.

3.7 Contractor Furnished Materiel (CFM). The Contractor may requisition materiel as required in the performance of the SOW through the DoD Supply System. DoD 4000.25-1-M (MILSTRIP), Chapter 11, provides guidance to Contractors on the requisitioning process. The Contractor's decision to utilize CFM procured from the DoD Supply System shall be based upon cost effectiveness, availability of materiel and the required completion/delivery date.

3.8 Electrostatic Discharge (ESD) Control Program

3.8.1 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.

3.8.2 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.

3.9 Quality Assurance Provisions. The Contractor shall provide and maintain a Quality System that, as a minimum, adheres to the requirements of ANSI/ISO/ASQC Q9001-2000, Quality Management Systems-Requirements.

4.0 REPORTS. The Contractor shall provide the following reports as stated in the paragraphs below. Reports shall be submitted to the LMS. The LMS can be reached during normal business hours at commercial telephone number (229) 639-5036 or DSN 567-5036. The electronic address is SMBmatcombmads@matcom.usmc.mil. The mailing address is Commanding General, Marine Corps Systems Command, Attn: Logistics Management Specialist (BMADS), 814 Radford Blvd., STE 20343, Albany, Georgia 31704-0343. Facsimiles may be sent to commercial telephone number (229) 639-6545 or DSN 567-6545, Attn: Logistics Management Specialist (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), 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) (BMADS).

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, in contractor format, shall consist of the TDR and extract of SL-3-07751B (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/her designated representative) of the Joint Acceptance LTI to the LMS, MCSC, BMADS, 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.

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
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The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP ____ TM ____ OTHER X
D. SYSTEM/ITEM AN/TPS-59(V)3, Radar Set	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A001	Engineering Change Proposal (ECP)	Configuration Management	18. ESTIMATED TOTAL PRICE

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-80639C	SOW 3.5	MCLCA (566)

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ASREQ	See Blk 16
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**
A	A		N/A

14. DISTRIBUTION

a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
MCLCA (566-1)	0	1	0
15. TOTAL →	0	1	0

16. REMARKS

Block 4: ECPs shall be submitted electronically. Contractor format using MICROSOFT (.doc) or ADOBE (.pdf) software applications is authorized.

Blk 4: ECP accompanying figures or graphics shall be created using a MICROSOFT or ADOBE formatted with a minimum density of 600 dpi.

Blocks 10 & 12: ECPs shall be submitted to obtain authorization to deliver nonconforming material which does not meet the prescribed configuration documentation.

ECPs shall be transmitted via e-mail to the following address: mbmatcomconfigmngmnt@logcom.usmc.mil.

Distribution Statement A: Approved for Public Release; Distribution is Unlimited.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Pamela C Clark	8/04/04	Kim S Tawson	16 Aug 04

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D. SYSTEM/ITEM: AN/TPS-59(V)3, Radar Set	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A002	Request For Deviation (RFD)	Configuration Management	18. ESTIMATED TOTAL PRICE

4. AUTHORITY (Data Acquisition Document No.)	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-80640C	SOW 3.5	MCLCA (566)

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT		ASREQ	See Blk 16
8. APP CODE		**11. AS OF DATE**	**13. DATE OF SUBSEQUENT SUBMISSION**
A	A		N/A

14. DISTRIBUTION

a. ADDRESSEE	b. COPIES Draft	Final Reg	Final Repro
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15. TOTAL →	0	1	0

16. REMARKS

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RFDs shall be transmitted via e-mail to the following address: mbmatcomconfigmngmnt@logcom.usmc.mil.

Distribution Statement A: Approved for Public Release; Distribution is Unlimited.

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
James C Clark	9/04/01	Kim S Dawson	16 Aug 01

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