Statement Of Work
For
Rebuild of Modulator Subassembly
P/O AN/GRC-171A(V)2
NSN 5895-01-136-4574

SOW-02-847-2-89407B-1/1

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STATEMENT OF WORK FOR THE
MODULATOR SUBASSEMBLY
[P/O AN/GRC-171A(V)2]
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1.0 Scope. This Statement of Work (SOW) establishes and sets forth tasks and identifies the work efforts that shall be performed by the Contractor (for purposes of this SOW, Contractor is defined as the commercial or government entity performing the rebuild) in the rebuild effort of the Modulator Subassembly. This document contains requirements to restore the Modulator Subassembly to Condition Code "A." Condition Code A is defined as "serviceable/issuable without qualification, new, used, repaired or reconditioned materiel which is serviceable and issuable to all customers without limitation or restriction, including materiel with more than six months shelf-life remaining."

1.1 Background. Rebuild is defined as "That maintenance technique to restore an item to a standard as near as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished through a maintenance technique or complete disassembly of the item, inspection of all parts or components, repairs or replacement of worn or unserviceable elements using original manufacturing tolerances and/or specifications and subsequent reassembly of the 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 supplement thereto which is in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of the SOW, the contents of this SOW shall be the superseding requirement.

2.1 Military Standards

MIL-STD-129	DoD Standard Practice for Military Marking
MIL-STD-2073-1D	DoD Standard Practice for Military Packaging

2.2 Other Government Documents and Publications. The issues of those documents cited below shall be used.

Short Title	Long Title	PCN
TM-08446A-50/2 M/S	Radio Set, AN/GRC-171A(V)2	18407981200
TM-08446A-50/2 M/S	ERRATA	18407981290
DOD 4000.25-1-M	MILSTRIP Manual	
TI-5820-25/22	Electromagnetic Environmental Effects (E^3) Procedures For	16804780100

	Installation of Communication Equipment on U.S. Marine Corps Platforms

Military Handbook (For Guidance)

MIL-HDBK-61	Configuration Management Guidance

2.3 Industry Standards

JESD625-A	Requirements for Handling Electrostatic-Discharge Sensitive (ESDS) Devices
ANSI/ISO/ASQC Q9003-1994	Quality Systems-Model for Quality Assurance in Final Inspection and Test

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, Telephone (215) 697- 2179 or DSN 442-2179, or http://www.dodssp.daps.mil. Copies of other government documents and publications required by contractors in connection with specific SOW requirements shall be obtained through the contracting officer: Commander, Marine Corps Logistics Bases, Attn: Contracts Department (Code 891) P.O. Drawer 43019, 814 Radford Blvd., Albany, Georgia 31704-3019, commercial telephone number (229) 639-6773 or DSN 567-6773. Copies of engineering drawings, if applicable, shall be obtained from Supply Chain Management Center, Attn: Code 583-1, 814 Radford Blvd. STE 20320, Albany, Georgia 31704-0320, commercial telephone number (229) 639-6410 or DSN 567-6410.

3.0 Requirements.

3.1 General Tasks. In fulfilling the specified requirements, the Contractor shall:

a. Provide materials, labor, equipment, facilities and missing/repair parts, necessary to inspect, diagnose, restore, test and calibrate the Modulator Subassembly. Upon completion of rebuild, the subject item shall be Condition Code "A."

b. Conduct in-process and final on-site testing for witness by a Marine Corps Systems Command (MCSC), (Code C4IHF), Albany, Georgia authorized representative.

3.2 Detail Tasks. The following tasks describe the different phases for rebuild of the Modulator Subassembly.

3.2.1 Phase I Pre-induction. A pre-induction inspection analysis shall be performed for each Modulator Subassembly using the Contractor Facility's diagnosis, inspection and testing techniques to determine extent of work and parts required. These findings shall be annotated on the Pre-Induction Checklist (Appendix A).

3.2.2 Phase II Rebuild. After pre-induction tests and inspections have been completed, repair of the Modulator Subassembly shall be accomplished in accordance with this SOW. Deficiencies noted on the Pre-Induction Checklist (Appendix A) during Phase I shall be repaired/replaced. Components or assemblies shall not be disassembled for replacement of parts unless that part has failed, or the component assembly wherein the part is located is disassembled for repair. Any approved Modification Instructions (MIs) or Engineering Change Proposals (ECPs) not previously applied shall be incorporated.

a. Hardware.

(1) Replace broken, unserviceable and/or missing hardware including nuts, bolts, screws, washers, turn lock fasteners, mandatory replacement items, safety and one-time use items, etc., in accordance with the rebuild standard. Unserviceable would include any of the above that failed to function properly.

(2) Ensure proper hardware locking devices are present on all moving mechanical assemblies.

(3) Hardware normally supplied with commercial parts shall be used unless specifically prohibited.

3.2.3 Phase III - Inspection, Testing and Acceptance.

a. Inspection, Testing and Acceptance of the Modulator Subassembly shall be conducted in accordance with this Statement of Work, TM-08446A-50/2 and ERRATA.

b. The Contractor shall be responsible for conducting required tests and shall ensure all necessary personnel are notified prior to completion of the final acceptance. Acceptance tests shall be held at the Contractor's facility. MCSC, (Code C4IHF), Albany, Georgia representatives shall be given a minimum of two weeks notice prior to commencement of acceptance testing.

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCSC, (Code C4IHF), Albany, Georgia representatives may require the Contractor to repeat tests or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

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

a. The Contractor shall be responsible for preservation and packaging of items being repaired under the terms of this statement of work. Items scheduled for long-term storage or shipment to overseas destinations shall be preserved and packaged in accordance with level "A"

requirements of MIL-STD-2073-1D, Table A.VI., Electronic Equipment. Items scheduled for domestic shipment for immediate or short-term shall be to Level "B" requirements.

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

c. 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 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.

3.3 Configuration Control. 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. 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 this configuration control document.

3.4 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).

3.5 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.

3.6 Electrostatic Discharge (ESD) Control Program. 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 Electromagnetic Environmental Effects (E^3) Procedures. The Contractor shall plan for and use proper (E^3) control procedures in the rebuild process and shall utilize TI-5820-25/22 in conjunction with the detailed requirements specified in this document.

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 Q9003-1994, Quality Systems-Model for Quality Assurance in Final Inspection and Test. The program shall ensure quality throughout all areas to include processing, assembly, inspection, testing, maintenance, and

preparation for delivery and shipping. Unless otherwise specified in the contract, the contractor shall be responsible for performance of all inspection requirements. MCSC, (Code C4IHF), Albany reserves the right to perform any of the inspections set forth in the contract where such inspections are deemed necessary to assure products and services conform to the prescribed requirements. The Contractor shall provide an Inspection and Test Plan that will ensure the Modulator Subassembly will meet or exceed its original performance characteristics of the Modulator Subassembly. Inspection Test Plan shall be sent to: Marine Corps Systems Command, Attn: Logistics Management Specialist (Code C4IHF), 814 Radford Blvd., Suite 20320, Albany, Georgia 31704-0320.

3.9 Acceptance. The performance of the Contractor and the quality of work delivered, including all equipment furnished and documentation written or compiled, shall be subject to in-process review and inspection during performance. Inspection may be accomplished in-plant or at any work site or location, and MCSC, (Code C4IHF), Albany representatives shall be permitted to observe the work or to conduct an inspection. Final inspection and acceptance testing shall be conducted at the Contractor's Facility. Final acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements.

3.10 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by MCSC, (Code C4IHF), Albany, representative. The Contractor shall, at no additional cost to MCSC, (Code C4IHF), Albany, correct the deficiencies and repeat the verification until an acceptable compliance with acceptance test procedures is demonstrated.

Pre-Induction Checklist
Modulator Subassembly
P/O AN/GRC-171A(V)2

1. Inspect for dirt, dust, sand, etc.
2. Inspect for rust and/or corrosion damage.
3. Inspect for any physical damage to unit, cuts, dents, cracks, or broken pins.
4. Ensure that all screws, washers, nuts, bolts, etc. are attached.
5 Inspect for dry rot.

S - Serviceable **U** - Unserviceable **M** - Missing

Modulator Assembly (Inside PA) Inventory/Serviceability check:	Condition	Remarks
1. Connector, P1, 25 pin, w/RF insert	_____	_____
2. Connector, P2, Xmit RF Out	_____	_____
3. Chassis	_____	_____
4. Finned Heat-sinks, p/o chassis	_____	_____

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 0704-0188

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 Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP ____ TM ____ OTHER X
D. SYSTEM/ITEM: Modulator Subassembly	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
B001	Request For Deviation	Configuration Management

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-80640C	SOW 3.3	MCLBA (583)

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

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

16. REMARKS

Blk 4 - Contractor format submitted in .pdf or .doc format is authorized.

Blks 10 & 12 - RFDs shall be submitted to obtain authorization to deliver nonconforming material which does not meet prescribed configuration documentation.

RFDs will be reviewed and disposition determined within 20 working days upon receipt by the Government.

Block 14: RFDs shall be transmitted via E-Mail to the following address: mbmatcomconfigmngmnt@matcom.usmc.mil

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

14. DISTRIBUTION

a. ADDRESSEE	b. COPIES: Draft	Final: Reg	Final: Repro
MCLBA (583-1)	0	1	0
15. TOTAL →	0	1	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Diane L. Bradley	2 NOV 01	William H. Ponder	2 NOV 01

Designed using Perform Pro, WHS/DIOR, Aug 96

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

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A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP ____ TM ____ OTHER X
D. SYSTEM/ITEM: Modulator Subassembly	E. CONTRACT/PR NO.	F. CONTRACTOR

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A001	Inspection and Test Plan	Quality Control/Assurance and Inspection	18. ESTIMATED TOTAL PRICE

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-QCIC-81110	SOW 3.8	MCSC (C4IHF), Albany, GA

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

16. REMARKS

Blk 12: Submit 30 days after contract award by LT. Government requires 60 days to review and comment.

Blk 13: Final due 30 days after receipt of Government comments. Submit final plan by DD 250.

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MCSC (C4IHF) Albany, GA	0	1	0
15. TOTAL →	0	1	0

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
[signature]	2 NOV 01	[signature]	2 NOV 01

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