

DATE: 06 Apr 00

STATEMENT OF WORK
for the
Rebuild
of the
Guided Missile Battery Control
Central, Vehicle Mounted:
AN/TWQ-1
Avenger Air Defense Weapon System
1430-01-378-6963

SOW-01-844-2-09871A-1/1

1. This SOW identifies the work effort that shall be performed by the contractor to rebuild the Avenger Guided Missile Battery Control Central, NSN 1430-01-378-6963.
2. The attached manuscript has been reviewed and is concurred upon by the following signers:



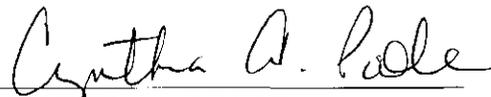
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1.0 Scope: This Statement of Work (SOW) establishes, sets forth tasks and identifies the work effort that shall be performed by the Contractor in the rebuild effort of the AN/TWQ-1, Avenger Weapon System. These documents contain requirements to restore the AN/TWQ-1 to Condition Code "A". Condition Code "A" is defined as "serviceable/issuable without qualification, new, used, repaired or reconditioned material which is serviceable and issuable to all customers without limitation or restriction, including material with more than 6 months shelf-life remaining."

1.1 Background: Rebuild is defined as "That maintenance technique which is necessary 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 of the issue specified herein 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 referred herein and the contents of the SOW, the content of this SOW shall be the superseding requirement.

2.1 Military Standards

MIL-STD-129	DoD Standard Practice for Military Marking
MIL-STD-130	DoD Standard Practice for Identification Marking of U.S. Military Property

Military Standards (For Reference Only)

MIL-STD-973	Configuration Management
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2.2 Other Government Documents and Publications. The following Government Documents and Publications form a part of this SOW to the extent specified herein. Unless otherwise specified, the issues are those cited in the SOW.

MI-09871A-50/1	AN/TWQ-1 Battery Control Central
MI-08940A-35/1	Install SINGARS in AVLB M60A1
MI-09059A-34/1	INST KIT MK-2484/GYK-29 HMMWV
MI-2320-24/67	TRK, UTIL, CARGO/TRP CARRIER M998
MI-2320-24/69	SOFT TOP BRACE ON THE (HMMWV)
MI-2320-34-70	HMMWV M998/M1038
TI-09871A-25/1	AN/TWQ-1 AVENGER
TI-2320-34/60	M998 SERIES TRUCK
TI-2320-25/65	TRP SEAT SAFTY STPS FOR HMMWV
TI-11240-24/33	TRBLSHT/INSTL ALTERNATOR HMMWV
TI-11240-35/28	FABRICATION/USE OF POWER TRAIN
TI-11240-15/35	AVENGER AN/TWQ-1
TM 09871A-12/1	AVENGER AN/TWQ-1
TM 09871A-24P/6	AVENGER GM SYSTEM
LO 9-1425-433-12	AVENGER GM SYSTEM
TM 9-1425-433-10	AVENGER GM SYSTEM
TM 9-4935-433-14P	AVENGER LRU TPS TS-4223/USN
TM 9-1440-433-24P	AVENGER GM SYSTEM
TM 9-1440-433-24-1	AVENGER, AN/TWQ-1
TM 9-1440-433-24-2	AVENGER, AN/TWQ-1
TM 9-1440-434-24&P	AVNEGER, GM SYSTEM
TM 4750-15/2	Painting and Registration Marking for Marine Corps Combat and Tactical Equipment
DOD 4000.25-1-M	MILSTRIP Manual
NAVICPINST 4491.2A	Requisitioning of Contractor Furnished Materiel From the Federal Supply System
SPI AL13786963	Special Packaging Instruction (SPI)

2.3 Industry Standards

ANSI/EIA-625	Requirements for Handling-Electrostatic-Discharge-Sensitive (ESDS) Devices
ANSI/ISO/ASQC Q9003-1994	Quality Systems - Model for Quality Assurance in Final Inspection and Test

Copies of military standards and specifications are available from the DOD Single Stock Point, Defense Automation Production Service Philadelphia, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697- 2179 or DSN 442-2179, or <http://dodssp.daps.mil>. Copies of other government publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracting Officer: Commander, Attn: Contracting Officer (Code 891), Marine Corps Logistics Base, 814 Radford

Blvd., Albany, GA 31704-1128, commercial telephone number (912) 439-6761 or DSN 567-6761. Copies of engineering drawings shall be obtained from: Life Cycle Management Center, Attn (Code 825-3), 814 Radford Blvd Suite 20320, Albany GA 31704-0320, commercial telephone number (912) 439-6410 or DSN 567-6410.

3.0 Requirements:

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

- a. Provide materials, labor, facilities, and services necessary to troubleshoot, test diagnose, engineer, integrate, install, repair, and calibrate as required to restore the AVENGER. Upon completion of rebuild, the AN/TWQ-1, Avenger Weapon System shall be Condition Code "A".
- b. Conduct in process and final testing for witness by the user.

3.2 Detail Tasks. The following tasks describe the different phases for rebuild of the AN/TWQ-1, Avenger Weapon System

Phase I	Pre-Introduction
Phase II	Rebuild
Phase III	Inspection, Testing and Acceptance
Phase IV	Packaging, Handling Storage and Transportation (PHS&T)

3.2.1 Phase I - Pre-Induction

a. A pre-induction inspection analysis shall be performed for each AVENGER within five (5) working days of induction into the Contractor's facility. Using the Contractor Facility's diagnosis, inspection and testing techniques to determine the extent of work and parts required. Standard Form 364 (Appendix B), Report DA-2404 (Appendix A) and LTI should be utilized to report all anomalies and shall be provided to the government in accordance with Section 4.0 of this SOW.

b. The Contractor will identify and request disposition instructions from MCLB Albany for all residue Secondary Repairable (SDRs) removed during rebuild. Residue stores account code (SAC) 1 assets/parts will be disposed of in the best interest of the government.

3.2.2 Phase II – Rebuild. Rebuild shall be accomplished in accordance with this SOW. Deficiencies noted in the pre-inspection shall be repaired or 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.

a. Data Plate. Each repaired AN/TWQ-1, Avenger Weapon System shall have a rebuild data plate affixed in the location given in TM 9-1440-433-24P, figure 1, item 7 and 8. The data plate shall meet the requirements of MIL-STD-130 and TM 4750-15/2.

b. Hardware

(1) Replace broken, unserviceable and/or missing hardware including nuts, bolts, screws, washers, turnlock fasteners, mandatory replacement items, safety, and one-time use items, etc., in accordance with this SOW. 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.

c. Publications and Documentation: The Contractor shall utilize the following technical documentation, i.e., TMs, MIs, etc., to restore the AVENGER to Condition Code "A".

TI-09871A-25/1	AN/TWQ-1 AVENGER
TI-2320-34/60	M998 SERIES TRUCK
TI-2320-25/65	TRP SEAT SAFETY STPS FOR HMMWV
TI-11240-24/33	TRBLSHT/INSTL ALTERNATOR HMMWV
TI-11240-35/28	FABRICATION/USE OF POWER TRAIN
TI-11240-15/35	AVENGER AN/TWQ-1
TM 09871A-12/1	AVENGER AN/TWQ-1
TM 09871A-24P/6	AVENGER GM SYSTEM
LO 9-1425-433-12	AVENGER GM SYSTEM
TM 9-1425-433-10	AVENGER GM SYSTEM
TM 9-4935-433-14P	AVENGER LRU TPS TS-4223/USN
TM 9-1440-433-24-1	AVENGER, AN/TWQ-1
TM 9-1440-433-24-2	AVENGER, AN/TWQ-1
TM 9-1440-434-24&P	AVNEGER, GM SYSTEM

3.2.3 Phase III - Inspection, Testing and Acceptance

a. Inspection, testing, and acceptance of the AN/TWQ-1, Avenger Weapon System shall be conducted in accordance with TM 9-1425-433-10. Records of tests shall be maintained and be available to the Marine Corps representative.

b. The Contractor shall be responsible for conducting all required tests and shall ensure all necessary personnel are notified prior to completing the final acceptance. Acceptance tests shall be held at the Contractor's facility. MCLB Code (844-2), 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. A Marine Corps representative may require the Contractor to repeat tests, or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

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

a. The Contractor shall be responsible for packaging and preservation of the items being repaired under the terms of this statement of work. Items scheduled for long-term storage or shipment to overseas destinations shall be in accordance with the level "A" requirements of Special Packaging Instruction AL13786963. Copies of the SPI may be obtained from Materiel Management Division, Attn: Logistics Support Section (822-1), Suite 20320, 814 Radford Boulevard, Albany, GA 31704-0320, Commercial telephone (912) 439-6786 or DSN 567-6786. Items scheduled for domestic shipment, immediate use or short-term storage shall be to level B requirements.

b. Marking for all items 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 to established configuration items. Deviations from this established baseline configuration shall not be allowed without the express written approval of the Weapon System Manager (WSM) (Code 844-2). All permanent changes to the form, fit or function of the baseline shall be by Engineering Change Proposal. MIL-STD-973 (paragraph 5.4.2 and Appendix D) may be used as a guide. If necessary to temporarily depart from the authorized configuration baseline, the contractor shall prepare and submit a Request for Deviation or Request for Waiver. MIL-STD-973 (paragraph 5.4.3 or 5.4.4 and Appendix E) may be used as a guide.

3.3.1 Configuration Status Accounting (CSA)

a. The Contractor shall record and submit data on retrofit accomplished during Phase II. MIL-STD-973, paragraph 5.5.8 may be used as a guide. The following approved Modification Instructions (MIs) shall be applied during Phase II of the rebuild process:

MI-09871A-50/1	AN/TWQ-1 Battery Control Central
MI-08940A-35/1	Install SINGARS in AVLB M60A1
MI-09059A-34/1	INST KIT MK-2484/GYK-29 HMMWV
MI-2320-24/67	TRK, UTIL, CARGO/TRP CARRIER M998
MI-2320-24/69	SOFT TOP BRACE ON THE (HMMWV)
MI-2320-34-70	HMMWV M998/M1038

3.4 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM): GFE The Management Control Activity (MCA/Code 827-2) 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/GFM Accountability Agreement to the Contractor for signature to establish a chain of custody and identify property responsibilities for Marine Corps Assets. The Contractor shall report receipt of all GFE/GFM, and report consumption of GFM to the MCA. The MCA, in conjunction with the WSM, reserve the right to deny any requests for GFE/GFM. Under no circumstances shall such denial form a basis for either work stoppages or delays in delivery.

3.5 Contractor Furnished Materiel (CFM): The Marine Corps has adopted the Navy's procedures regarding Contractor Furnished Materiel (NAVICPINST 4491.2A). In the event that Contractor Furnished Materiel (CFM) is required for repair parts, the contractor shall requisition repair parts through the DoD Supply System. DoD 4000.25-1-M (MILSTRIP), Chapter 11 authorizes contractors to requisition through the DoD Supply System.

3.6 Electrostatic Discharge (ESD) Control Program: The Contractor shall establish, implement and document an ESD control program following the guidelines provided in ANSI/EIA-625. ESD protective measures shall be used during manufacturing, handling, inspection, test, marking, packaging, storing and transporting ESD sensitive components.

3.7 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, test, maintenance, and preparation for delivery and shipping. Unless otherwise specified in the contract, the Contractor shall be responsible for performance of all inspection requirements. The Government 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.

3.8 Acceptance: The performance of the Contractor and the quality of work delivered, including all equipment furnished and documentation material 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 the user shall be permitted to observe the work or to conduct inspections at all reasonable hours. Final inspection and acceptance testing shall be conducted at the Contractor's Facility. Final acceptance shall be conducted on 100% of items to verify that the units meet all requirements.

3.9 Rejection: Failure to comply with any of the specified requirements listed herein shall be reason for rejection by the Marine Corps representative. The Contractor shall, at no additional cost to MCLB, Albany, Georgia, correct the deficiencies and repeat the verification until an acceptable compliance with acceptance test procedures is demonstrated.

4.0 Reports: The Contractor shall provide Monthly Progress Reports (MPR) summarizing the progress and status of the rebuild program. Report will include name and phone number for the Contractor point of contact. This report will be submitted no later than the tenth of the following month.

- a. MPR will reflect, by serial number (S/N), the phase of repair and condition code (CC) of all Marine Corps AN/TWQ-1, Avenger Weapon Systems held by the Contractor.
- b. Assets inducted into maintenance, will be identified as CC "M".
- c. Assets that have completed final inspection will be identified as CC "A".
- d. Assets that have completed final testing but require additional parts or components prior to issue, will be identified as CC "G".
- e. Assets awaiting induction into maintenance will be identified as CC "F".
- f. The reports will be submitted via E-Mail to Weapon System Management (WSM) team at this address: mbmatcom844-2@matcom.usmc.mil.

5.0 Cost and Financial Administration.

a. Upon completion of negotiations, the agreed upon price will be cost reimbursable. The price for any work to be performed for the next fiscal year will be developed by the repairer, and will be submitted to MCLB Albany (Code 844-2), in sufficient time to allow for processing of agreed upon financial documentation, prior to the beginning of the fiscal year.

b. The financial management representatives of the two activities shall determine the specific procedures that will be used to transfer funds under this SOW. A Project Order, Form 1175 will be used for transfer of funds between the parties to this SOW. The Contractor will accept Marine Corps funding as cost reimbursable. Final obligation must be received no later than one (1) week before the end of the fiscal year. This agreement will go into effect as soon as funds are transferred to the Contractor.

INSTRUCTIONS

DEPARTMENT OF DEFENSE: DLAR 4140.55/AR 735-11.2/NAVSUPINST 4440.127E/AFR 400-54/MCO 4430.3E, Reporting of Item and Packaging Discrepancies, and/or DLAR 4140.60/AR 12-12/NAVSUPINST 4920.9B/AFR 67-7/MCO 4140.1B, Processing Discrepancy Reports Against Foreign Military Sales Shipments. CIVILIAN AGENCIES: See FPMR handbook cited in 19(2)(a).

REPORT OF DISCREPANCY (ROD) <input type="checkbox"/> SHIPPING <input type="checkbox"/> PACKAGING			1. DATE OF PREPARATION		2. REPORT NUMBER			
			3. TO (Name and address, include ZIP Code)			4. FROM (Name and address, include ZIP Code)		
5a. SHIPPER'S NAME			5b. NUMBER AND DATE OF INVOICE		6. TRANSPORTATION DOCUMENT NUMBER (GBL., Waybill, TCN, etc.)			
7a. SHIPPER'S NUMBER (Purchase Order/Shipment, Contract, etc.)		7b. OFFICE ADMINISTERING CONTRACT			8. REQUISITIONER'S NUMBER (Requisition, Purchase Request, etc.)			
9. SHIPMENT, BILLING, AND RECEIPT DATA					10. DISCREPANCY DATA			11. AC-2 TION CODE
NSN/PART NUMBER AND NOMENCLATURE (a)	UNIT OF ISSUE (b)	QUANTITY SHIPPED/BILLED (c)	QUANTITY RECEIVED (d)	QUAN- TITY (a)	UNIT PRICE (b)	TOTAL COST (c)	CODE ¹ (d)	

12. REMARKS (Continue on separate sheet of paper if necessary)

1 DISCREPANCY CODES		2 ACTION CODES
CONDITION OF MATERIAL C1 - In condition other than that indicated on release/receipt document C2 - Expired shelf life C3 - Damaged parcel post shipment SUPPLY DOCUMENTATION D1 - Not received D2 - Illegible or mutilated D3 - Incomplete, improper or without authority (Only when receipt cannot be properly processed) MISDIRECTED MATERIAL M1 - Addressed to wrong activity OVERAGE/DUPLICATE SHIPMENTS O1 - Quantity in excess of that on receipt document O2 - Quantity in excess of that requested (Other than unit of issue pack) O3 - Quantity duplicates shipment PACKING DISCREPANCY P1 - Improper preservation P2 - Improper packing P3 - Improper marking P4 - Improper unitization	PRODUCT QUALITY DEFICIENCIES Q1 - Deficient material (Applicable to Grant Aid and FMS shipments) SHORTAGE OF MATERIAL S1 - Quantity less than that on receipt document S2 - Quantity less than that requested (Other than unit of issue pack) S3 - Non-receipt of parcel post shipments ITEM TECHNICAL DATA MARKINGS (i.e., Name Plates, Log Books, Operating Handbooks, Special instructions, etc.) T1 - Missing T2 - Illegible or mutilated T3 - Precautionary operational markings missing T4 - Inspection data missing or incomplete T5 - Serviceability operating data missing or incomplete T6 - Warranty data missing WRONG ITEM (Identify requested item as a separate copy in Item 9 above) W1 - Incorrect item received W2 - Unacceptable substitute OTHER DISCREPANCIES Z1 - See remarks	1A - Disposition instructions requested (Reply on reverse) 1B - Material being retained (See remarks) 1C - Supporting supply documentation requested 1D - Material still required expedite shipment (Not applicable to FMS) 1E - Local purchase material to be returned at supplier's expense unless disposition instructions to the contrary are received within 15 days (Reply on reverse) (Not applicable to FMS) 1F - Replacement shipment requested (Not applicable to FMS) 1G - Reshipment not required. Item to be re-requisitioned 1H - No action required. Information only. 1Z - Other action requested (See remarks)

13. FUNDING AND ACCOUNTING DATA	
14a. TYPED OR PRINTED NAME, TITLE, AND PHONE NUMBER OF PREPARING OFFICIAL	14b. SIGNATURE
15. DISTRIBUTION ADDRESSEES FOR COPIES	

16. FROM:

17. DISTRIBUTION ADDRESSEES FOR COPIES

18. TO:

Use window envelope to mail this document. Insert name and address, including ZIP Code, starting one typing space below the left dot. Each address line must NOT extend beyond right dot. Address must not exceed four single space typing lines.

19. IN ACCORDANCE WITH NOTICE OF DISCREPANCY ON FACE OF THIS FORM:

a. MATERIAL HAS BEEN WILL BE SHIPPED DOCUMENT NUMBER b. NO RECORD OF SHIPMENT. RESUBMIT REPORT TO PROPER OFFICE UNDER APPROPRIATE REGULATION.

c. AN ADJUSTMENT IN BILLING HAS BEEN/WILL BE PROCESSED AS A: CREDIT DEBIT d. INVOICE/BILL ATTACHED e. PROOF OF DELIVERY (Parcel Post Shipments) OR EVIDENCE OF SHIPMENT ENCLOSED.

f. AN ADJUSTMENT IN BILLING FOR THE REPORTED DISCREPANCY WILL NOT BE PROCESSED FOR THE FOLLOWING REASON WHICH IS CITED IN THE INDICATED REGULATION.

(1) REASON FOR NOT PROCESSING	(2) PRESCRIBING REGULATION
(a) DISCREPANCY WAS NOT REPORTED WITHIN THE TIME FRAMES ALLOWED AND/OR	(a) CHAPTER 5 OF THE GSA HANDBOOK, DISCREPANCIES OR DEFICIENCIES IN GSA OR DOD SHIPMENTS, MATERIAL, OR BILLINGS (FPMR 101-26.8)
(b) DOLLAR VALUE DOES NOT MEET THE CRITERIA PRESCRIBED IN THE REGULATION OR AGREEMENT INDICATED IN 19f(2)	(b) CHAP. 2 AND/OR 7 OF DOD 4000.25-7-M, MILITARY STANDARD BILLING SYSTEM (MILSBILLS) AND/OR DD 1513, U.S. DOD OFFER AND ACCEPTANCE, AS APPLICABLE.

20. THE FOLLOWING DISPOSITION IS TO BE MADE OF THE REFERENCED MATERIAL:

a. PROCESS FOR DISPOSAL IN ACCORDANCE WITH SERVICE/AGENCY DIRECTIVES b. REPRESENTATIVE WILL CALL FOR DISCUSSION CONCERNING DISPOSITION IN: DAYS
c. RETAIN MATERIAL AT NO CHARGE. d. MATERIAL WILL BE PICKED UP IN: DAYS

e. SHIP MATERIAL (Specify location):
(1) GBL APPROPRIATION CHARGEABLE:
(2) CHARGES COLLECT - VIA: FREIGHT EXPRESS PARCEL POST (\$ _____ postage advanced herewith. NOTE: Please enclose postage. Material cannot be returned Parcel Post collect.)
(3) PARCEL POST LABEL ATTACHED (4) FREIGHT PREPAID

f. OTHER (Specify)

21. IF MATERIAL IS STILL REQUIRED, SUBMIT NEW REQUISITION 22. REPLACEMENT WITH SATISFACTORY MATERIAL WILL BE MADE ON OR BEFORE: DATE

23. REMARKS (Continue on separate sheet of paper if necessary)

24a. TYPED OR PRINTED NAME AND PHONE NUMBER OF PREPARING OFFICIAL 24b. SIGNATURE 24c. DATE

