

**STATEMENT OF WORK**

**FOR THE**

**MINE CLEARANCE LAUNCHER**

**MK 155**

**NSN 1055-01-203-5883**

**Inspect Repair Only As Necessary**

**(IROAN)**

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**STATEMENT OF WORK FOR THE  
MINE CLEARANCE LAUNCHER MK 155  
Inspect Repair Only As Necessary (IROAN)  
NSN 1055-01-203-5883**

**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 in the IROAN effort of the Mine Clearance Launcher MK 155, which is comprised of the Mod 0 Launcher and the M353 Trailer, hereafter referred to as the MK 155. This document contains requirements to restore the MK 155 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." National Stock Number (NSN) 1055-01-203-5883 shall be known as the MK 155.

**1.1 Background.** IROAN is defined as "That maintenance technique which determines the minimum repairs necessary to restore equipment components or assemblies to prescribed maintenance serviceability standards by utilizing all available diagnostic equipment and test procedures in order to minimize disassembly and parts replacement."

**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 this SOW, the contents of this SOW shall be the superseding requirement.

**2.1 Military Specifications**

MIL-C-46168	Coating, Aliphatic Polyurethane, Chemical Agent Resistant
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MIL-C-53039	Coating, Aliphatic Polyurethane, Single Component, Chemical Agent Resistant
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**2.2 Military Standards**

MIL-STD-129	DoD Standard Practice for Military Marking
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MIL-STD-130	DoD Identification Marking of US. Military Property
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MIL-STD-461	Electromagnetic Emission and Susceptibility Requirements for the Control of Electromagnetic Interference
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MIL-STD 3003	Vehicles, Wheeled, Preparation for Shipment and Storage of
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### 2.3 Other Government Documents And Publications

DOD 4000.25-1-M	Military Standard Requisitioning and Issue Procedures (MILSTRIP) Manual
DOD 4160.21-M-1	Defense Demilitarization Manual
TM 08982A-14&P/2B	MK 2 MOD O Mine Clearance System
TM 3080-12	Corrosion Prevention and Control for Marine Corps Equipment
TM 3080-50	Corrosion Control Procedures Depot Maintenance Activities for Marine Corps Equipment.
TM 4700-15/1H	Ground Equipment Record Procedures
TM 4750-15/1	Painting and Registration Marking for Marine Corps Combat and Tactical Equipment
Engineering Drawing 82A5052A0000 CAGE 01365	Launcher, Mine Clearance, MK 155 Mod 0.

#### Military Handbooks (For Guidance)

MIL-HDBK-61	Configuration Management Guidance
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### 2.4 Industry Standards

ANSI/ISO/ASQC Q9001-2000	Quality Management Systems – Requirements
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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 documents and publications required by contractors in connection with specific SOW requirements shall be obtained through

the Contracts Department (Code 891) P. O. Drawer 43019, 814 Radford Blvd., Marine Corps Logistics Bases, Albany GA 31704-3019, commercial telephone number (229) 639-6476 or DSN 567-6476. Copies of engineering drawings, if applicable, may be obtained by contacting Supply Chain Management Center, Attn: Code 583-1, 814 Radford Blvd., Suite 20320, Albany, Georgia, 31704-0320, commercial telephone number (229) 639-6476 or DSN 567-6476.

### 3.0 REQUIREMENTS.

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

- a. Provide materials, labor, facilities, missing parts and repair parts necessary to inspect, diagnose, restore and test the MK 155. Upon completion of IROAN, repaired equipment shall be Condition Code "A".
- b. Provide all tools and test equipment required to test, inspect, repair, and calibrate the MK 155.
- c. Conduct in-process and final on-site testing for witness by a Marine Corps Systems Command (MCSC) (Code PMM152), Albany, Georgia representative.
- d. Be responsible for all structural, electrical and mechanical requirements associated with the restoration of the MK 155.

#### 3.2 Detail Tasks. The following tasks describe the different phases for IROAN of the MK 155.

3.2.1 Phase I - Pre-Induction. The contractor shall perform a Pre-Induction Inspection Analysis for each MK 155 using the Contractor's diagnosis, inspection and testing techniques to determine extent of work and parts required. This inspection shall include all items associated with the MK 155 as found in TM 08982A-14&P/2B. These findings shall be annotated on a Pre-Induction Check list and shall be provided to the government in accordance with Section 4.0 of this SOW.

3.2.2 Phase II - IROAN. After Pre-Induction Tests and Inspections have been completed, repair of the MK 155 shall be accomplished by the contractor in accordance with this SOW. Deficiencies noted on the Pre-Induction Checklist during Phase I shall be repaired/replaced. Components or assemblies shall not be disassembled for replacement of mandatory parts unless that part has failed, or the component assembly wherein the part is located is disassembled for repair.

- a. Pre-Induction Check List. Information recorded on the Pre-Induction Check List shall be used as a guide to repair the MK 155 system in accordance with this SOW.
- b. Technical Instruction (TI) - All TIs not previously applied to the MK 155 shall be applied during the IROAN and shall be annotated on Equipment Record Jacket in accordance with TM 4700-15/1H.
- c. Corrosion - For corrosion prevention and treatment use TM 3080-12 and TM 3080-50.

d. Fluid Leaks - The following shall be used as a guide in determining degree of fluid loss:

(1) Class I - Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.

(2) Class II - Leakage of fluid great enough to form drops, but not enough to cause drops to fall from the item being checked/inspected.

(3) Class III - Leakage of fluid great enough to form drops that fall from the item being checked/inspected.

**NOTE:** A Class I Leak, except in fuel or brake systems, is an acceptable condition at any time and does not require corrective action.

e. Electrical Control Box Assemblies. The Safety Switch Assembly shall be tested for continuity and operation in the raised and lowered position in accordance with the instructions in TM 08982A-14&P/2B.

f. Data Plates. All required data plates and decals shall be in place and shall be legible. Each repaired MK 155 shall have an IROAN data plate affixed to the main unit in close proximity to the existing data plate. The data plate shall meet the requirements of MIL-STD-130 and TM 4750-15/1 and shall contain the Equipment Serial Number, date of IROAN, Date of SOW, SOW number, and Company name of contractor completing work.

g. Painting/Coating (Exterior/Interior). If painting/coating is required, the MK 155 shall be cleaned in accordance with TM 3080-50, Chapter 4, and coated with Aliphatic Polyurethane Coating, in accordance with MIL-C-46168 or MIL-C-53039.

h. Demilitarization. All end items that are identified as non-repairable and require demilitarization codes, shall be reported to the Marine Corps Systems Command, Code PMM152, Albany, Georgia representatives, who will provide disposition instructions in accordance with DOD 4160.21-M-1.

i. Electromagnetic Emission. All requirements pertaining to control of electromagnetic interference, emission and susceptibility shall be in accordance with MIL-STD-461.

j. Hardware

(1) Replace broken, unserviceable and/or missing hardware including nuts, bolts, screws, washers, turnlock fasteners, mandatory, safety and one-time use items, etc., in accordance with TM 08982A-14&P/2B. Unserviceable would include any of the above that failed to function properly.

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

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

k. Hoses. All hoses and fittings shall be visually inspected for damage or deterioration. Any hose showing signs of leakage, kinking or separation of outer coating shall be replaced. This inspection shall be performed during the Operational Test Inspection of the MK155.

l. Hydraulic Reservoir. Hydraulic reservoir shall be inspected for corrosion and repaired or replaced if required. Hydraulic reservoir shall be drained and flushed to remove contamination and then refilled with the hydraulic fluid identified in TM 08982A-14&P/2B.

m. Cable Assemblies. All cables and cable connections shall be tested and visually inspected for damage or corrosion. Any cable or cable connector showing signs of damage, corrosion or separation of outer coating shall be repaired/replaced and tested with its respective component box/assembly to assure satisfactory compliance with all operational test.

### 3.2.3 Phase III - Inspection, Testing and Acceptance.

a. The contractor shall conduct Inspection, Testing and Acceptance of the MK 155 in accordance with TM 08982A-14&P/2B.

b. The Contractor shall be responsible for conducting required tests and shall ensure all necessary personnel are available to complete the final acceptance. Acceptance tests shall be held at the Contractor's Facility. Marine Corps Systems Command, Code PMM152, Albany, Georgia, representatives shall be given a minimum of two weeks notice prior to beginning acceptance testing. The test area shall be cleared of all equipment parts, components, etc., not required for the test.

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. Marine Corps Systems Command, Code PMM152, Albany, Georgia, representatives may require the Contractor to repeat tests or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

d. Acceptance testing on all MK 155 repaired under the provisions of this SOW shall be accomplished in accordance with TM 08982A-14&P/2B. Operational Tests are to be conducted on each MK 155 upon completion of repairs and prior to the equipment being returned to stock, to insure the unit will perform as required. Operational Tests shall not require any ammunition to complete the test. Tests shall be conducted with the MK 155 secured on the M353 trailer.

### 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 in accordance with the level "A" requirements of MIL-STD 3003. Items scheduled for domestic shipment for immediate use or short-term storage 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 of the equipment 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 Management.

#### 3.3.1 Configuration Status Accounting (CSA).

a. The Contractor shall determine the application status of approved configuration changes by visual inspections to the extent possible. The government will identify the configuration changes to be inspected by furnishing a Configuration Inspection Checklist to the Contractor. The Contractor shall use one checklist per MK 155 to record their inspection findings along with other required data.

b. The Contractor shall record serial numbers of the assemblies listed on the Configuration Inspection Checklist. The Contractor shall record the information on the same form that was used to record the application status of configuration changes.

3.3.2 Configuration Control. The contractor shall apply configuration control procedures to established configuration items. The baseline configuration for the MK 155 has been established by Marine Corps Drawing 82A5052A0000, CAGE 01365, for the MK 155 and approved MIs and ECPs. 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 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. The program shall ensure quality throughout all areas to include fabrication, 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. The Government, Marine Corps Systems Command, Code PMM152, Albany, Georgia 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.

3.5 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 Marine Corps Systems Command, Code PMM152, Albany, Georgia representatives shall be permitted to observe the work or to conduct inspection at all reasonable hours. 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.

3.6 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by Marine Corps Systems Command, Code PMM152, Albany, Georgia representative. The Contractor shall, at no additional cost to Marine Corps Systems Command, Code PMM152, Albany, Georgia, provide the following:

a. Develop an approach for modification or correction of all deficiencies.

b. Upon approval of a documented approach, the Contractor shall correct the deficiencies and repeat the verification until an acceptable compliance with acceptance test procedures is demonstrated.

3.7 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM). The Management Control Activity (MCA/Code 573-2) 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 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 a copy of the DD1348 to Material Management Department, Management Control Activity (Code 573-2), 814 Radford Blvd., STE 20320, Albany, GA 31704-0320, or faxing a copy to commercial telephone number (229) 639-5498 or DSN 567-5498.

3.8 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.

4.0 REPORTS. The following reports shall be provided to, Marine Corps Systems Command (Code PMM152), 814 Radford Blvd., STE 20343, Albany, Georgia 31704-0343.

4.1 Repairable Item Inspection Report. The Contractor shall provide a Repairable Item Inspection Report for each MK 155. The report shall be identified by United States Marine Corps Serial Number and be sent to Marine Corps Systems Command, Code PMM152, Albany, Georgia.

4.2 Pre-Induction Checklist. The Contractor shall complete the Pre-Induction Inspection Checklist for each MK 155 repaired. These documents shall be available during final acceptance testing. One copy of each document shall be provided to Marine Corps Systems Command, Code PMM152, Albany, Georgia, after final acceptance of the MK 155.

Contractor format is acceptable. The Pre-Inspection Checklist shall, at a minimum, contain the following elements:

- (1) MK 155 serial number.
- (2) Condition Code of MK 155 at receipt.
- (3) Results of hydraulic/electrical operational test.
- (4) List of defective parts and assemblies.
- (5) List of repair parts and assemblies required for repairs.
- (6) Corrosion prevention methods that shall be used.







