Draft
Maintenance Concept Remains Consistent with Prior Fiscal Year

# Statement of Work (SOW)

for the

Inspect and Repair Only As Necessary (IROAN)

of the

Mine Clearance Launcher MK 154

NSN 1055-01-226-6338

B1315

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Statement of Work (SOW)
for the Inspect and Repair Only As Necessary (IROAN) of the
Mine Clearance Launcher MK 154
NSN 1055-01-226-6338

1.0 SCOPE. This Statement of Work (SOW) establishes, 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 154, hereafter referred to as the MK 154. This document contains requirements to restore the MK 154 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) 1055-01-226-6338 shall be known as the MK 154.

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 |
| MIL-C-53039 | Coating, Aliphatic Polyurethane, Single Component, Chemical Agent Resistant |

2.2 Military Standards

| | |
|---|---|
| MIL-STD-129 | DoD Standard Practice: Military Marking for Shipment and Storage |
| MIL-STD-130 | Identification Marking of US Military Property |
| MIL-STD-461 | Requirements for the Control of Electromagnetic Interference Emission and Susceptibility |

| | |
|---|---|
| MIL-STD-3003 | Vehicles, Wheeled: Preparation for Shipment and Storage of |

2.3 Other Government Documents And Publications

| | |
|---|---|
| DoD 4000.25-1-M | Military Standard Requisitioning and Issue Procedures (MILSTRIP) |
| DoD 4160.21-M-1 | Defense Demilitarization Manual |
| DoD 4160.21-M | Defense Materiel Disposition Manual |
| SL-3-09962A | Launcher, Mine Clearance MK 154 Mod 0 |
| TM 09962A-13&P/2 | Mark 1 Mod 0 Mine Clearance System |
| MI-09962A-20/1 | Elevation Cylinder Sleeve Stabilization |
| TI-09962A-35/1 | Fabrication and Installation of Electrical Connector Guard for the Launcher, Mine Clearance MK 154 |
| 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 |
| TM 4750-15/2 | Camouflage Paint Patterns |
| Engineering Drawing 835028A0000 CAGE 01365 | Mine Clearance Launcher, MK154, Marine Corps |
| Engineering Drawing 835028B0000 CAGE 01365 | Container Assembly for MK 154 Marine Corps |
| Reversed Engineering Drawing 835028C0000 CAGE 01365 | Mine Clearance Launcher, MK154, Marine Corps |

Military Handbooks (For Guidance)

| | |
|---|---|
| MIL-HDBK-61 | Configuration Management Guidance |

2.4 Industry Standards

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

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. Copies of other government documents and 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 Command, Albany, Georgia 31704-3019, commercial telephone number (229) 639-6753 or DSN 567-6753. Copies of engineering drawings, if applicable, may be obtained by contacting Supply Chain Management Center, Attn: Code 566-1A, 814 Radford Blvd., STE 20320, Albany, Georgia 31704-0320, commercial telephone number (229) 639-6761 or DSN 567-6761.

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 154. 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 154.

c. Conduct in process and final on-site testing for witness by Marine Corps Systems Command (MCSC), Code PMM152, Albany, Georgia representatives.

d. Be responsible for all structural, electrical and mechanical requirements associated with the restoration of the MK 154.

3.2 Detail Tasks. The following tasks describe the different phases for IROAN of the MK 154.

3.2.1 Phase I - Pre-Induction. The Contractor shall perform a Pre-Induction Inspection Analysis for each MK 154 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 154 as found in SL-3-09962A, TM 09962A-13&P/2, and TI-09962A-35/1. These findings shall be annotated on a Pre-Induction Check List (Appendix A) and shall be provided to the government in accordance with Paragraph 4.0 of this SOW.

3.2.2 Phase II - IROAN. After Pre-Induction Tests and Inspections have been completed, repair of the MK 154 shall be accomplished by the Contractor in accordance with this SOW. Deficiencies noted on the Pre-Induction Checklist (Appendix A) during Phase I shall be repaired/replaced. The Contractor shall use the List of Defective Parts and Assemblies (Appendix B) to list all defective parts and assemblies. The Contractor shall also use the List of Repair Parts and Assemblies Required for Repairs (Appendix C) to report the parts used on the repaired MK 154. 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 Inspection Checklist - Information recorded on the Pre-Induction Inspection Checklist (Appendix A) shall be used as a guide to repair the MK 154 system in accordance with this SOW.

b. Technical Instruction (TI) - All TI's not previously applied to the MK 154 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. Belts - Replace all.

f. Data Plates - All required data plates and decals shall be in place and shall be legible. Each repaired MK 154 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 154 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 using TM 4750-15/2 as pattern guidance if required.

h. Demilitarization - All end items that are identified as non-repairable and require demilitarization codes shall be reported to the MCSC, Code PMM152, Albany, Georgia representatives, who will provide disposition instructions in accordance with DoD 4160.21-M. and 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, in accordance with TM 09962A-13&P/2. 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 (OTI) of the MK 154.

l. 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/assembly to assure satisfactory compliance with all operational tests.

m. Filters - Replace all.

3.2.3 Phase III - Inspection, Testing and Acceptance

a. The Contractor shall conduct Inspection, Testing and Acceptance of the MK 154 in accordance with TM 09962A-13&P/2.

b. The Contractor shall be responsible for conducting required tests and shall ensure representatives from MCSC, Code PMM152, Albany, Georgia and Contractor maintenance personnel are available to complete the final acceptance. Acceptance tests shall be held at the Contractor facility. MCSC, 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, not required for the test.

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCSC, 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/Operational Tests on all MK 154 repaired under the provisions of this SOW shall be accomplished, by the Contractor, in accordance with TM 09962A-13&P/2. Operational Tests are to be conducted on each MK 154 upon completion of repairs and prior to the equipment being returned to stock to insure the unit will perform as required.

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

a. The Contractor shall be responsible for preservation and packaging of item(s) being repaired under the terms of this SOW. Items scheduled for long-term storage or shipment to overseas destinations shall be in accordance with Level "A" requirements of MIL-STD-3003. Items scheduled for domestic shipment for immediate use or short-term storage shall be to Level "B" requirement.

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 Management

3.3.1 Configuration Status Accounting (CSA)

a. The Contractor shall record and submit data on retrofit accomplished during Phase II. Any approved Modifications Instructions (MIs) or Engineering Change Proposals (ECPs) not previously applied shall be incorporated during Phase II of the IROAN process.

b. 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 154 to record the inspection findings along with other required data.

c. The Contractor shall record serial numbers of the assemblies listed on the Configuration Inspection Checklist. The Contractor shall also record the information on the Equipment Record Jacket in accordance with TM 4700-15/1H.

3.3.2 Configuration Control. The Contractor shall apply configuration control procedures to established configuration items. The baseline configuration for the MK 154 has been established by Engineer Drawing numbers 835028A0000, CAGE 01365, for the Mine Clearance Launcher, and 835028B0000, CAGE 01365, for the container and applicable 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. 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 minimum, adheres to the requirements of ANSI/ISO/ASQC Q9001-2000 Quality Management Systems - Requirements.

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 MCSC, Code PMM152, Albany, Georgia representatives shall be permitted to observe the work or to conduct inspection during normal Contractor's working hours. Final Inspection and Acceptance Testing shall be conducted at the Contractor 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 MCSC, PMM152, Albany, Georgia. The Contractor shall, at no additional cost to MCSC, 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 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 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 DD 1348 to 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. If Depot Source of Repair (DSOR) mandated, assets at repair facility will not be considered GFE/GFM.

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.

3.9 Pre-Induction Checklist. The Contractor shall complete the Pre-Induction Inspection Checklist (Appendix A), List of Defective Parts and Assemblies (Appendix B), and List of Repair Parts and Assemblies Required for Repairs (Appendix C), for each MK 154 repaired. These documents shall be available during final acceptance testing. One copy of each document shall be provided to Commanding General, Marine Corps Systems Command, Code PMM152, 814 Radford Blvd., STE 20343, Albany, Georgia 31704-0343, 30 days after final acceptance of each MK 154 in PDF Format Media.

The inspection checklist shall contain, but not be limited to the following:

(1) MK 154 serial number. Appendix A, B, and C.
(2) Condition Code of MK 154 at receipt. Appendix A.
(3) Results of operational test. Appendix A.
(4) List of defective parts and assemblies. Appendix B.
(5) List of repair parts and assemblies required for repairs. Appendix C.
(6) Corrosion prevention methods that shall be used will be documented on the first page of Appendix A.

# Pre-Induction Inspection Checklist
# APPENDIX A

MK154 Serial number:_____ Condition Code at receipt: _____

Results of operational test:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Corrosion prevention methods that shall be used.

_____
_____
_____
_____
_____
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_____
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_____
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_____

Inspect all components for operating/malfunction/defective parts per TM 09962A-13&P/2. Visually check components for leaks, damage, loose parts & hardware. No disassembly of components is allowed unless the component is determined to be defective.

# Pre-Induction Inspection Checklist

25 August 2004

## APPENDIX A

| COMPONENT | PASS | FAIL | REMARKS: |
|---|---|---|---|
| Mast Assy | ___ | ___ | _____ |
| External-Actuator Cover | ___ | ___ | _____ |
| Actuator Arm Lever | ___ | ___ | _____ |
| Housing to Actuator Assy | ___ | ___ | _____ |
| Hose Assy,Starboard | ___ | ___ | _____ |
| Starboard Actuator Manifold | ___ | ___ | _____ |
| Starboard Actuator Assy | ___ | ___ | _____ |
| Housing-Actuator Hydraulic | ___ | ___ | _____ |
| Hose Assy, Port | ___ | ___ | _____ |
| Housing - Actuator Hydraulic | ___ | ___ | _____ |
| System, Port | ___ | ___ | _____ |
| Port Actuator Manifold | ___ | ___ | _____ |
| Port Actuator Assy | ___ | ___ | _____ |
| Starboard/Port Hinge Arm | ___ | ___ | _____ |
| Starboard Door Assy | ___ | ___ | _____ |
| Door Seals | ___ | ___ | _____ |
| Door Latch Rod, Starboard Door | ___ | ___ | _____ |
| Port Door Assy | ___ | ___ | _____ |
| Wiring Harness W16 | ___ | ___ | _____ |
| Platform, Equipped for Access | ___ | ___ | _____ |
| Launcher Cylinder Hydraulic Hose Assy | ___ | ___ | _____ |
| Launch Cylinder Hose Assys | ___ | ___ | _____ |
| Launcher Cylinder | ___ | ___ | _____ |
| Launcher Cylinder Swivel Joint | ___ | ___ | _____ |
| Elevation Cylinder Hose Assys | ___ | ___ | _____ |
| Elevation Cylinder Swivel Joint & Elbows | ___ | ___ | _____ |
| Elevation Cylinder Assy | ___ | ___ | _____ |
| Elevation Cylinder Manifold | ___ | ___ | _____ |
| Elevation Cylinder | ___ | ___ | _____ |
| Turnbuckle Connecting Rod | ___ | ___ | _____ |
| Elevation Cylinder Linkage Adjustment | ___ | ___ | _____ |
| Connecting Rod | ___ | ___ | _____ |
| Pivot Pin | ___ | ___ | _____ |
| Pivot Bearings | ___ | ___ | _____ |
| Center Sheath | ___ | ___ | _____ |
| Shield | ___ | ___ | _____ |
| Launcher Platform Rail | ___ | ___ | _____ |
| Travel Lock Assy | ___ | ___ | _____ |
| Pivot Assy | ___ | ___ | _____ |
| Bumper | ___ | ___ | _____ |
| Stop | ___ | ___ | _____ |
| Bracket, Connecting Rod | ___ | ___ | _____ |
| Mercury Switch Box | ___ | ___ | _____ |
| Pendulum Box Assy | ___ | ___ | _____ |
| Rockets Power Distribution Box | ___ | ___ | _____ |
| Rocker Arm | ___ | ___ | _____ |
| Support Arm | ___ | ___ | _____ |
| Arm Sheath | ___ | ___ | _____ |

# Pre-Induction Inspection Checklist

## APPENDIX A

| COMPONENT | PASS | FAIL | REMARKS: |
|---|---|---|---|
| Port/Starboard Intermediate Sheath | ___ | ___ | _____ |
| Sequence Lock Manifold | ___ | ___ | _____ |
| Sequence Lock Manifold Hydraulic Assys | ___ | ___ | _____ |
| Support Arm Tube Assys | ___ | ___ | _____ |
| Elbow | ___ | ___ | _____ |
| Elbow Bracket | ___ | ___ | _____ |
| Three-Hole Bulkhead | ___ | ___ | _____ |
| Tube Angle Mounting | ___ | ___ | _____ |
| Launcher Housing Tube Assy | ___ | ___ | _____ |
| Junction Box A | ___ | ___ | _____ |
| Junction Box B | ___ | ___ | _____ |
| Limit Switch | ___ | ___ | _____ |
| Limit Switch Arm Bracket | ___ | ___ | _____ |
| Wiring Harness W15 | ___ | ___ | _____ |
| Latch Pivot Bracket | ___ | ___ | _____ |
| Latch Spring | ___ | ___ | _____ |
| Test Plugs | ___ | ___ | _____ |
| Nipple | ___ | ___ | _____ |
| Coupler | ___ | ___ | _____ |
| Lower Seal | ___ | ___ | _____ |
| Sheath | ___ | ___ | _____ |
| Intermediate Housing Sheath | ___ | ___ | _____ |
| Port Housing Guard | ___ | ___ | _____ |
| Starboard Housing Guard | ___ | ___ | _____ |
| Forward Port Housing Guard | ___ | ___ | _____ |
| Aft Port Housing Guard | ___ | ___ | _____ |
| Forward Starboard Housing Guard | ___ | ___ | _____ |
| Aft Starboard Housing Guard | ___ | ___ | _____ |
| Port/Starboard Bar | ___ | ___ | _____ |
| Swivel Elbow (Port H2) | ___ | ___ | _____ |
| Tie-Down and Adapter Assy | ___ | ___ | _____ |
| Tie-Down Adapter | ___ | ___ | _____ |
| Tie-Down Assy | ___ | ___ | _____ |
| Aft Wall Guard | ___ | ___ | _____ |
| Aft Guard Assy | ___ | ___ | _____ |
| Aft Port Guard | ___ | ___ | _____ |
| Aft Starboard Guard | ___ | ___ | _____ |
| Forward Guard Assy | ___ | ___ | _____ |
| Cable Guide | ___ | ___ | _____ |
| Starboard Cable Guide | ___ | ___ | _____ |
| Aft Port Cable Guide | ___ | ___ | _____ |
| Lower Engine Access Cover Latch | ___ | ___ | _____ |
| Upper Engine Access Cover Striker | ___ | ___ | _____ |
| Rail | ___ | ___ | _____ |
| Center Channel Assy | ___ | ___ | _____ |
| Aft Pallet Rail Tie-Down Bracket | ___ | ___ | _____ |
| Port/Starboard Ramp | ___ | ___ | _____ |
| Rear Pallet Assy | ___ | ___ | _____ |

# Pre-Induction Inspection Checklist

25 August 2004

## APPENDIX A

| COMPONENT | PASS | FAIL | REMARKS: |
|---|---|---|---|
| Wear Plate | ___ | ___ | _____ |
| Quick Release Pins | ___ | ___ | _____ |
| Starboard Ramp Crossmember | ___ | ___ | _____ |
| Ramp Wear Plates | ___ | ___ | _____ |
| Aft Pallet | ___ | ___ | _____ |
| Forward Pallet Assy | ___ | ___ | _____ |
| Housing to Forward Pallet Hose Assys | ___ | ___ | _____ |
| Capstan Hydraulic Hose Assy | ___ | ___ | _____ |
| Forward Pallet Rail Tie-Down Bracket | ___ | ___ | _____ |
| Quick Disconnect Coupler Fitting | ___ | ___ | _____ |
| Power Distribution Box Assy | ___ | ___ | _____ |
| Quick Disconnect Nipple Fitting | ___ | ___ | _____ |
| 200A Circuit Breaker | ___ | ___ | _____ |
| 2A Circuit Breaker | ___ | ___ | _____ |
| 10A Circuit Breaker | ___ | ___ | _____ |
| 200A Relay | ___ | ___ | _____ |
| 10A Relay | ___ | ___ | _____ |
| Terminal Block | ___ | ___ | _____ |
| Indicator Light Assy | ___ | ___ | _____ |
| Toggle Switch | ___ | ___ | _____ |
| Slave Plug | ___ | ___ | _____ |
| Capstan with Hydraulic Motor Assy | ___ | ___ | _____ |
| Capstan Drum | ___ | ___ | _____ |
| Reduction Gearbox | ___ | ___ | _____ |
| Reduction Gearbox Lubricating Oils | ___ | ___ | _____ |
| Reduction Gearbox Oil Change | ___ | ___ | _____ |
| Hydraulic Filter Change | ___ | ___ | _____ |
| Capstan Hydraulic Motor | ___ | ___ | _____ |
| Hydraulic Power Unit | ___ | ___ | _____ |
| Manual Hydraulic Pump | ___ | ___ | _____ |
| Manual Hydraulic Pump Handle | ___ | ___ | _____ |
| Electric Motor/Hydraulic Pump | ___ | ___ | _____ |
| Electric Motor/Hydraulic Pump | ___ | ___ | _____ |
| Control Manifold | ___ | ___ | _____ |
| Reservoir Assy | ___ | ___ | _____ |
| Sight Glass | ___ | ___ | _____ |
| Relief Valve | ___ | ___ | _____ |
| Pressure Gauge | ___ | ___ | _____ |
| Manual Pump Outlet Tube | ___ | ___ | _____ |
| Manual Pump Inlet Tube | ___ | ___ | _____ |
| Clip Spring | ___ | ___ | _____ |
| Hydraulic Pump Inlet Tube | ___ | ___ | _____ |
| Hydraulic Pump Outlet Tube | ___ | ___ | _____ |
| Wiring Harness W12 | ___ | ___ | _____ |
| Wiring Harness W13 | ___ | ___ | _____ |
| Wiring Harness W14 | ___ | ___ | _____ |
| Arm Switch | ___ | ___ | _____ |
| Control Box | ___ | ___ | _____ |

# Pre-Induction Inspection Checklist



## APPENDIX A

| COMPONENT | PASS | FAIL | REMARKS: |
|---|---|---|---|
| Control Box & Mounting | ___ | ___ | _____ |
| Brackets Assy | ___ | ___ | _____ |
| Brackets | ___ | ___ | _____ |
| Lamps | ___ | ___ | _____ |
| Selector Knob | ___ | ___ | _____ |
| Toggle Switch Guard | ___ | ___ | _____ |
| Receptacles | ___ | ___ | _____ |
| Receptacle Connections | ___ | ___ | _____ |
| 10A Relay | ___ | ___ | _____ |
| Relay Connections | ___ | ___ | _____ |
| Filters | ___ | ___ | _____ |
| Filter Connections | ___ | ___ | _____ |
| System Power Switch | ___ | ___ | _____ |
| System Power Switch Connections | ___ | ___ | _____ |
| Panel Light | ___ | ___ | _____ |
| Panel Light Connections | ___ | ___ | _____ |
| Push Switches | ___ | ___ | _____ |
| Push Switch Connections | ___ | ___ | _____ |
| Rotary Switch | ___ | ___ | _____ |
| Rotary Switch Connections | ___ | ___ | _____ |
| Launch Angle Indicator | ___ | ___ | _____ |
| Circuit Board Assy | ___ | ___ | _____ |
| Circuit Board Assembly Connections | ___ | ___ | _____ |
| Indicator Light | ___ | ___ | _____ |
| Indicator Light Connections | ___ | ___ | _____ |
| Raise/Lower Switch | ___ | ___ | _____ |
| Raise/Lower Switch Connections | ___ | ___ | _____ |
| Electric Wire | ___ | ___ | _____ |
| Wire Connections | ___ | ___ | _____ |
| Container, Top | ___ | ___ | _____ |
| Container , Bottom | ___ | ___ | _____ |
| Gasket, Container Joint | ___ | ___ | _____ |

MK154 Serial number:_____

THIS BELOW SPACE IS FOR COMMENTS AND OBSERVATIONS AFTER THE INSPECTION HAS BEEN COMPLETED. Please annotate and initial.

# LIST OF DEFECTIVE PARTS AND ASSEMBLIES APPENDIX B

| COMPONENT | REMARKS: |
|---|---|
| Mast Assy | |
| External-Actuator Cover | |
| Actuator Arm Lever | |
| Housing to Actuator Assy | |
| Hose Assy, Starboard | |
| Starboard Actuator Manifold | |
| Starboard Actuator Assy | |
| Housing-Actuator Hydraulic Hse Assy, Port | |
| Housing - Actuator Hydraulic System, Port | |
| Port Actuator Manifold | |
| Port Actuator Assy | |
| Starboard/Port Hinge Arm | |
| Starboard Door Assy | |
| Door Seals | |
| Door Latch Rod, Starboard Door | |
| Port Door Assy | |
| Wiring Harness W16 | |
| Platform, Equipped for Access | |
| Launcher Cylinder Hydraulic Hose Assy | |
| Launch Cylinder Hose Assys | |
| Launcher Cylinder | |
| Launcher Cylinder Swivel Joint | |
| Elevation Cylinder Hose Assys | |
| Elevation Cylinder Swivel Joint & Elbows | |
| Elevation Cylinder Assy | |
| Elevation Cylinder Manifold | |
| Elevation Cylinder | |
| Turnbuckle Connecting Rod | |
| Elevation Cylinder Linkage Adjustment | |
| Connecting Rod | |
| Pivot Pin | |
| Pivot Bearings | |
| Center Sheath | |
| Shield | |
| Launcher Platform Rail | |
| Travel Lock Assy | |
| Pivot Assy | |
| Bumper | |
| Stop | |
| Bracket, Connecting Rod | |
| Mercury Switch Box | |
| Pendulum Box Assy | |
| Rockets Power Distribution Box | |
| Rocker Arm | |
| Support Arm | |
| Arm Sheath Port/Starboard | |
| Intermediate Sheath | |

# LIST OF DEFECTIVE PARTS AND ASSEMBLIES APPENDIX B

| COMPONENT | REMARKS: |
|---|---|
| Sequence Lock Manifold | |
| Sequence Lock Manifold Hydraulic Assy | |
| Support Arm Tube Assys | |
| Elbow | |
| Elbow Bracket | |
| Three-Hole Bulkhead Tube | |
| Angle Mounting | |
| Launcher Housing | |
| Tube Assys | |
| Junction Box A | |
| Junction Box B | |
| Limit Switch | |
| Limit Switch Arm Bracket | |
| Wiring Harness W15 | |
| Latch Pivot Bracket | |
| Latch Spring | |
| Test Plugs | |
| Nipple | |
| Coupler | |
| Lower Seal | |
| Sheath | |
| Intermediate Housing Sheath | |
| Port Housing Guard Starboard Housing | |
| Guard | |
| Forward Port Housing Guard | |
| Aft Port Housing Guard | |
| Forward Starboard Housing Guard | |
| Aft Starboard Housing Guard | |
| Port/Starboard Bar | |
| Swivel Elbow (Port H2) | |
| Tie-Down and Adapter Assy | |
| Tie-Down Adapter | |
| Tie-Down Assy Aft Wall | |
| Guard Aft Guard Assy Aft Port Guard Aft | |
| Starboard Guard Forward Guard Assy Cable | |
| Guide Starboard Cable Guide Aft Port Cable | |
| Guide Lower Engine Access Cover Latch | |
| Upper Engine Acc Cover Strike Rail | |
| Center Channel Assy | |
| Aft Pallet Rail Tie-Down Bracket | |
| Port/Starboard Ramp | |
| Rear Pallet Assy | |
| Wear Plate | |
| Quick Release Pins | |
| Starboard Ramp Crossmember | |
| Ramp Wear Plates | |
| Aft Pallet | |

# LIST OF DEFECTIVE PARTS AND ASSEMBLIES APPENDIX B

| COMPONENT | REMARKS: |
|---|---|
| Forward Pallet Assy | |
| Housing to Forward Pallet Hose Assys | |
| Capstan Hydraulic Hose Assys | |
| Forward Pallet Rail Tie-Down Bracket | |
| Quick Disconnect Coupler Fitting | |
| Power Distribution Box Assy | |
| Quick Disconnect Nipple Fitting 200A | |
| Circuit Breaker | |
| 2A Circuit Breaker | |
| 10A Circuit Breaker | |
| 200A Relay | |
| 10A Relay | |
| Terminal Block Indicator Light Assy | |
| Toggle Switch Slave Plug Capstan with | |
| Hydraulic Motor Assy Capstan Drum | |
| Reduction Gearbox | |
| Reduction Gearbox Lubricating Oils | |
| Reduction Gearbox Oil Change | |
| Hydraulic Filter Change | |
| Capstan Hydraulic Motor | |
| Hydraulic Power Unit | |
| Manual Hydraulic Pump | |
| Manual Hydraulic Pump Handle | |
| Electric Motor/Hydraulic Pump | |
| Electric Motor/Hydraulic Pump | |
| Control Manifold | |
| Reservoir Assy | |
| Sight Glass | |
| Relief Valve | |
| Pressure Gauge | |
| Manual Pump Outlet Tube | |
| Manual Pump Inlet Tube | |
| Clip Spring | |
| Hydraulic Pump Inlet Tube | |
| Hydraulic Pump Outlet Tube | |
| Wiring Harness W12 | |
| Wiring Harness W13 | |
| Wiring Harness W14 | |
| Arm Switch | |
| Control Box | |
| Control Bx & Mounting Brackets Assy | |
| Brackets | |
| Lamps | |
| Selector Knob | |
| Toggle Switch Guard | |
| Receptacles | |
| Receptacle Connections | |

# LIST OF DEFECTIVE PARTS AND ASSEMBLIES APPENDIX B

| COMPONENT | REMARKS: |
|---|---|
| 10A Relay | |
| Relay Connections | |
| Filters | |
| Filter Connections | |
| System Power Switch | |
| System Power Switch Connections | |
| Panel Light | |
| Panel Light Connections | |
| Push Switches | |
| Push Switch Connections | |
| Rotary Switch | |
| Rotary Switch Connections | |
| Launch Angle Indicator | |
| Circuit Board Assy | |
| Circuit Board Assy Connections | |
| Indicator Light | |
| Indicator Light Connections | |
| Raise/Lower Switch | |
| Raise/Lower Switch Connections | |
| Electric Wire | |
| Wire Connections | |
| Container, Top | |
| Container , Bottom | |
| Gasket, Container Joint | |

ADDITIONAL OBSERVATIONS:

MK154 Serial number:_____

ADDITIONAL COMMENTS AND OBSERVATIONS: Please annotate and initial.

| COMPONENT | REMARKS: |
|---|---|
| Mast Assy | |
| External-Actuator Cover | |
| Actuator Arm Lever | |
| Housing to Actuator Assy Hose | |
| Assy,Strbrd Starboard Starboard | |
| Actuator Manifold | |
| Starboard Actuator Assy | |
| Housing-Actuator Hydraulic Hse | |
| Assy, Port | |
| Housing – Actuator Hydraulic | |
| System, Port | |
| Port Actuator Manifold | |
| Port Actuator Assy | |
| Starboard/Port Hinge Arm | |
| Starboard Door Assy | |
| Door Seals | |
| Door Latch Rod, Starboard Door | |
| Port Door Assy | |
| Wiring Harness W16 | |
| Platform, Equipped for Access | |
| Launcher Cylinder Hydraulic Hose | |
| Assy | |
| Launch Cylinder Hose Assys | |
| Launcher Cylinder | |
| Launcher Cylinder Swivel Joint | |
| Elevation Cylinder Hose Assys | |
| Elevation Cylinder Swivel Joint & | |
| Elbows | |
| Elevation Cylinder Assy | |
| Elevation Cylinder Manifold | |
| Elevation Cylinder | |
| Turnbuckle Connecting Rod | |
| Elevation Cylinder Linkage | |
| Adjustment | |
| Connecting Rod | |
| Pivot Pin | |
| Pivot Bearings | |
| Center Sheath | |
| Shield | |
| Launcher Platform Rail | |
| Travel Lock Assy | |
| Pivot Assy | |
| Bumper | |
| Stop | |
| Bracket, Connecting Rod | |
| Mercury Switch Box Pendulum Box | |
| Assy | |
| Rockets Power Distribution Box | |

| COMPONENT | REMARKS: |
|---|---|
| Rocker Arm Support Arm Arm | |
| Sheath Port/Starboard Intermediate | |
| Sheath | |
| Sequence Lock Manifold | |
| Sequence Lck Manifold Hydraul Asy | |
| Support Arm Tube Assys | |
| Elbow | |
| Elbow Bracket Three-Hole Bulkhead | |
| Tube Angle Mounting | |
| Launcher Housing Tube Assys | |
| Junction Box A | |
| Junction Box B | |
| Limit Switch | |
| Limit Switch Arm Bracket Wiring | |
| Harness Wl5 | |
| Latch Pivot Bracket | |
| Latch Spring | |
| Test Plugs | |
| Nipple | |
| Coupler | |
| Lower Seal | |
| Sheath | |
| Intermediate Housing Sheath | |
| Port Housing Guard Starboard | |
| Housing Guard | |
| Forward Port Housing Guard | |
| Aft Port Housing Guard | |
| Forward Starboard Housing Guard | |
| Aft Starboard Housing Guard | |
| Port/Starboard Bar | |
| Swivel Elbow (Port H2) | |
| Tie-Down and Adapter Assy | |
| Tie-Down Adapter | |
| Tie-Down Assy Aft Wall Guard Aft | |
| Guard Assy Aft Port Guard Aft | |
| Starboard Guard Forward Guard Assy | |
| Cable Guide Starboard Cable Guide | |
| Aft Port Cable Guide Lower Engine | |
| Access Cover Latch Upper Eng | |
| Access Cover Striker Rail | |
| Center Channel Assy | |
| Aft Pallet Rail Tie-Down Bracket | |
| Port/Starboard Ramp | |
| Rear Pallet Assy | |
| Wear Plate | |
| Quick Release Pins | |
| Starboard Ramp Crossmember | |
| Ramp Wear Plates | |

| COMPONENT | REMARKS: |
|---|---|
| Aft Pallet | |
| Forward Pallet Assy | |
| Housing to Forward Pallet Hose Assy | |
| Capstan Hydraulic Hose Assys | |
| Forward Pallet Rail Tie-Down | |
| Bracket | |
| Quick Disconnect Coupler Fitting | |
| Power Distribution Box Assy | |
| Quick Disconnect Nipple Fitting | |
| 200A Circuit Breaker | |
| 2A Circuit Breaker | |
| 10A Circuit Breaker | |
| 200A Relay | |
| 10A Relay | |
| Terminal Block Indicator Light Assy | |
| Toggle Switch Slave Plug Capstan | |
| with Hydraulic Motor Assy Capstan | |
| Drum Reduction Gearbox | |
| Reduction Gearbox Lubricating Oils | |
| Reduction Gearbox Oil Change | |
| Hydraulic Filter Change | |
| Capstan Hydraulic Motor | |
| Hydraulic Power Unit | |
| Manual Hydraulic Pump | |
| Manual Hydraulic Pump Handle | |
| Electric Motor/Hydraulic Pump | |
| Electric Motor/Hydraulic Pump | |
| Control Manifold | |
| Reservoir Assy | |
| Sight Glass | |
| Relief Valve | |
| Pressure Gauge | |
| Manual Pump Outlet Tube | |
| Manual Pump Inlet Tube | |
| Clip Spring | |
| Hydraulic Pump Inlet Tube | |
| Hydraulic Pump Outlet Tube | |
| Wiring Harness W12 | |
| Wiring Harness W13 | |
| Wiring Harness W14 | |
| Arm Switch | |
| Control Box | |
| Contrl Bx & Mounting Brackets Assy | |
| Brackets | |
| Lamps | |
| Selector Knob | |
| Toggle Switch Guard | |
| Receptacles | |

| COMPONENT | REMARKS: |
|---|---|
| Receptacle Connections | |
| 10A Relay | |
| Relay Connections | |
| Filters | |
| Filter Connections | |
| System Power Switch | |
| System Power Switch Connections | |
| Panel Light | |
| Panel Light Connections | |
| Push Switches | |
| Push Switch Connections | |
| Rotary Switch | |
| Rotary Switch Connections | |
| Launch Angle Indicator | |
| Circuit Board Assy | |
| Circuit Board Assy Connections | |
| Indicator Light | |
| Indicator Light Connections | |
| Raise/Lower Switch | |
| Raise/Lower Switch Connections | |
| Electric Wire | |
| Wire Connections | |
| Container, Top | |
| Container , Bottom | |
| Gasket, Container Joint | |

ADDITIONAL NOTES: