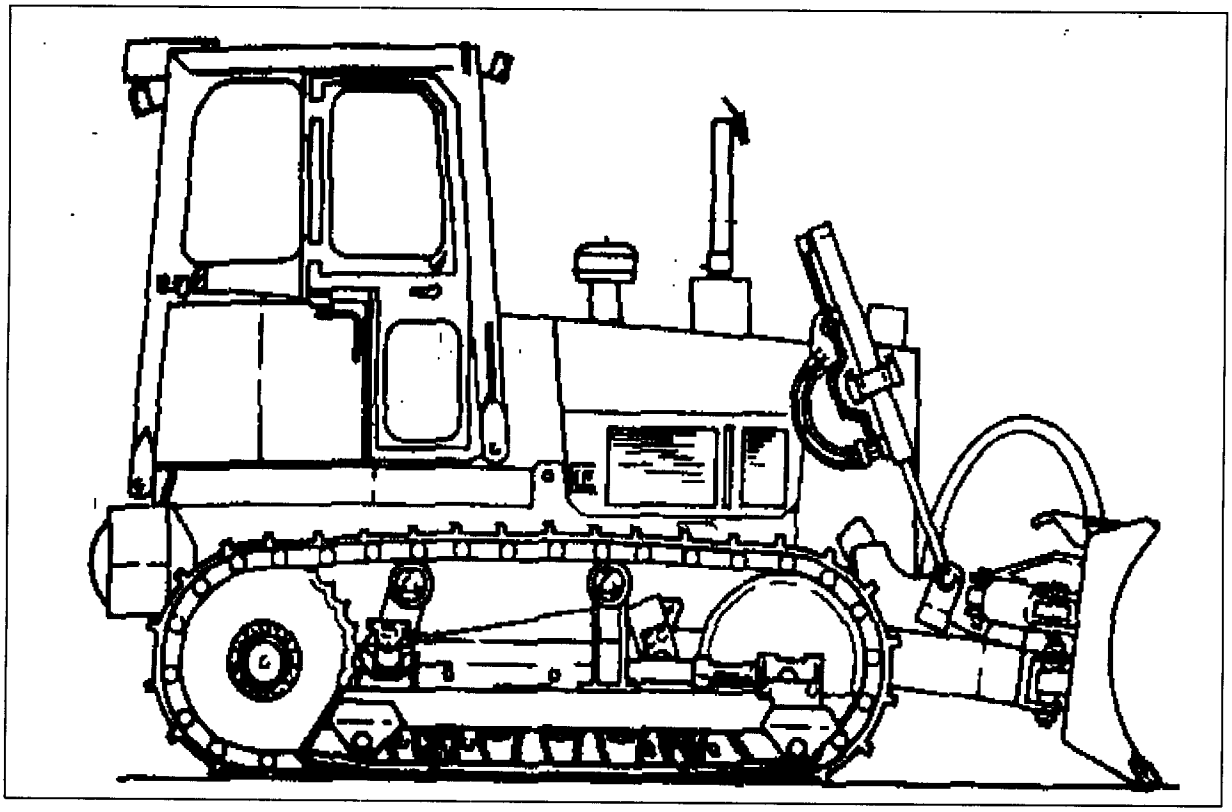
STATEMENT OF WORK
FOR THE
INSPECTION AND REPAIR ONLY AS NECESSARY (IROAN)

TRACTOR, FULL TRACKED
WITH ANGLE BLADE AND WINCH



NSN 2410-01-254-1667

TABLE OF CONTENTS

Section and Reading		Page
1.0	SCOPE	1
1.1	Background	1
1.2	Item Identification	1
2.0	APPLICABLE DOCUMENTS	1
2.1	Military Standards	2
2.2	Other Government Documents and Publications	2
2.3	Industry Documents	3
3.0	REQUIREMENTS	3
3.1	General Tasks	3
3.2	IROAN Objective and Functions	4
3.3	Specific Tasks	4
3.3.1	Phase I – Pre Induction	4
3.3.2	Phase II – IROAN	5
3.3.3	Phase III – Inspection, Testing and Acceptance	12
3.3.4	Phase IV – Packing Handling Storage and Transportation (PHS&T)	12
3.4	Configuration Management	13
3.4.1	Configuration Status Accounting (CSA)	13
3.4.2	Configuration Control	13
3.5	Government Furnished Equipment (GFE)/ Government Furnished Material (GFM)	13
3.6	Contractor Furnished Material (CFM)	13
3.7	Quality Assurance Provisions	14
3.8	Acceptance	14
3.9	Rejection	15
4.0	REPORTS	15
4.1	Pre-Induction Checklist	15
4.2	Final Inspection Checklist	15
4.3	Configuration Inspection Checklist	15

Appendix A	Configuration Checklist	A-1
Appendix B	Track Component Appraisal Form	B-1

Statement Of Work
For the
Tractor, Full Tracked With Angle Blade And Winch
NSN 2410-01-254-1667

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 purpose of this SOW, Contractor is defined as the commercial or government entity performing the IROAN) in the IROAN effort of the Tractor, Full Tracked with Angle Blade and Winch, NSN 2410-01-254-1667. This document contains minimum requirements to assemble, integrate, make fully operational, calibrate, install, test and inspect the Tractor, Full Tracked 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. This includes material with more than six months shelf life remaining. The National Stock Number (NSN) listed here shall be known as the Tractor, with Angle Blade. This SOW, along with the Tractor with Angle Blade Technical Manuals covers the minimum requirements applicable to the restoration of the Tractor with Angle Blade. The Tractor with Angle Blade Technical manuals set forth guidelines within which the Tractor with Angle Blade shall be refurbished, repaired and restored. The basic configuration of the Tractor with Angle Blade is established by the Tractor with Angle Blade Technical Manuals that are currently in the Marine Corps inventory. All materiel (including repair parts) shall be provided by the Contractor. The Contractor shall perform installation and testing. All special tools and test equipment required to perform any task on the Tractor with Angle Blade are listed in the Tractor with Angle Blade Technical Manuals, and shall be provided by the Contractor.

Questions related to this SOW should be addressed to Marine Corps Systems Command (MCSC), Code PMM152, Bld 3700 Rm 310W, 814 Radford Blvd, Suite 20343, Albany, GA 31704-0343, commercial telephone number (229) 639-6983, DSN 567-6983.

Reports required by this SOW may be duplicated and provided by the Contractor by electronic means. Microsoft Software is preferred but Contractor format may be accepted if agreed to prior to submission.

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

1.2 Item Identification. The Tractor with Angle Blade is a diesel engine driven, full tracked tractor equipped with a hydraulically operated dozer blade and rear mounted winch. Its main functions are dozing dirt, sand, or rock, with winching loads. The Tractor with Angle Blade can operate on various types of terrain.

2.0 APPLICABLE DOCUMENTS. The following documents form a part of this SOW to the extent specified. Unless otherwise specified, 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 Standards

MIL-STD-129	DoD Standard Practice: Military Marking for Shipment and Storage
MIL-STD-130	Identification Marking of U.S. Military Property
MIL-STD-642	Identification Marking of Combat and Tactical Transport Vehicles.
MIL-STD-3003	Vehicles, Wheeled: Preparation for Shipment and Storage of

2.2 Other Government Documents And Publications

DoD 4000.25-1-M	Military Standard Requisitioning and Issue Procedures (MILSTRIP)
TM-4750-15/1	Painting and Registration Marking for Marine Corps Combat and Tactical Equipment
SL-4-09062A w/chgs 1-3	Repair Parts List for Tractor, Full Tracked w/Angle Blade and Winch
MI-09062A-25/1	Procedures for Installing Retrofit Kits
MI-09062A-25/3	Installation of Fan Disconnect Switch Guard
LI-09062A-12	Lubrication Instructions Tractor, Full Tracked w/Angle Blade
TM 09062A-14/1 w/chgs 1-2	Operators, Organizational and Intermediate Maintenance Manual and Intermediate Maintenance Manual, Tractor, Multi-Purpose Bucket
TM 09426A-25/2	Service Manual, Tractor, Full Tracked, Model MC1155E
TM 3080-50	Corrosion Control Procedures
SL-3-09085A	Tool Kit, Special Purpose for T5 Tractor.
MCO P11262.2A	Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
TM 4700-15/1H	Ground Equipment Record Procedures

NOTE: TM 09426A-25/2 contains repair/replacement procedures for some components that are common between Models 1150E (Tractor, Full Tracked) and the 1155E (Tractor, Multi-Purpose Bucket. Repair/replace procedures for these common components are not found in both maintenance manuals, therefore the reference to the Tractor, Full Tracked, Model MC1155E service manual for some repair/replace procedures.

Military Handbooks (For Guidance)

MIL-HDBK-61	Configuration Management Guidance

2.3 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 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, GA 31704-3019, commercial telephone number (229) 639-6761 or DSN 567- 6761. Copies of engineering drawings, if applicable, shall be obtained from Supply Chain Management Center, Attn: Code 566-1A, 814 Radford Blvd., Suite 20320, Albany, GA 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 render, yet shall not be limited to the following tasks:

a. Provide materials, labor, facilities, repair parts and services necessary to troubleshoot, test, diagnose, engineer, integrate, install, repair, and calibrate as required to make fully the Tractor with Angle Blade.

b. Conduct final-on-site testing for witness by MCSC, Code PMM152, Albany, GA and/or their representative(s).

c. The contractor shall be responsible for all structural, electrical and mechanical requirements associated with the repair and restoration of the Tractor with Angle Blade.

3.2 IROAN Objective And Functions. After IROAN, the Tractor with Angle Blade, shall have the following minimum characteristics:

a. Maintainable

b. Serviceable (Condition Code "A").

c. Latest Marine Corps Configuration.

d. All Tractor with Angle Blade systems and components shall operate as designed intended.

e. All Tractor with Angle Blade shall have a like new appearance.

3.3 Specific Tasks. The following tasks describe the different phases for IROAN of the Tractor with Angle Blade.

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

3.3.1 Phase I-Pre-Induction.

a. The Contractor shall inspect in detail Tractor with Angle Blade transported to the Contractor for IROAN under provisions of this SOW. The Contractor shall ensure that the inspection is sufficient to determine the condition of the inspected Tractor with Angle Blade and the extent of work and repair parts required. The finding of this inspection shall be annotated on the Tractor with Angle Blade Pre-Induction Checklist and shall be maintained and made available upon request by MCSC, Code PMM152, Albany, GA and/or their representative(s). The Tractor with Angle Blade Pre-Induction Checklist may be duplicated in an electronic database and maintained in that database. If data is selected to be provided electronically to MCSC. Code PMM 152, Albany, GA, the Contractor and MCSC, Code PMM152, Albany, GA must agree to the data base program.

b. Test equipment shall be used to determine that assemblies and subassemblies meet prescribed reliability, performance, and work requirements. In those cases when conformance to the SOW cannot be certified through existing inspection and testing procedures and by use of diagnostic equipment, the assembly shall be removed, disassembled, inspected, tested or repaired to the degree necessary to assure full conformance with this SOW. Tractors with Angle Blade will be operational tested 100 percent in accordance with this SOW.

c. Oil seal and gasket leakage. Evidence of lubricating or hydraulic oils passing through or around a seal is in itself not a defect; however, consideration must be given to the fluid capacity in the item being checked/inspected. Inspection shall normally be performed during and immediately following an operational test, but not sufficient duration to allow the fluids to return to ambient temperature. The following shall be used as a guide in determining degree of oil loss:

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

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

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

NOTE: A Class I Leak, except Fuel System and Brake System, is an acceptable condition at any time and does not require corrective action.

3.3.2 Phase II - IROAN

NOTE: Since the Tractor with Angle Blade engine and transmission shall be totally overhauled, a Pre-Induction Analysis is not required for these assemblies.

After pre-induction tests and inspections have been completed, IROAN of the Tractor with Angle Blade shall be accomplished in accordance with this SOW and the Tractor with Angle Blade Technical Manuals (Service and Parts Manuals). Deficiencies noted on the Tractor with Angle Blade Pre-Induction Checklist during Phase I shall be repair/replaced.

The following efforts shall be performed as part of the IROAN:

Service and Parts Manual: The Service and Parts Manuals listed below contain repair procedures and repair parts for the complete Tractor with Angle Blade. The Trouble Shooting Guide contained in these manuals is to be used along with the Pre-Induction Checklist in helping identify deficiencies with the Tractor with Angle Blade. Repair procedures contained in these manuals are to be used to repair deficiencies identified on the Pre-Induction Checklist.

TM 09062A-14/1 w/chgs 1-2	Operators, Organizational and Intermediate Maintenance Manual
TM 09426A-25/2	Service Manual, Tractor, Full Tracked, Model MC1155E
SL-4-09062A	Repair Parts List for Tractor, Full Tracked

The Service and Parts Manuals listed may contain provision for corrosion control, painting, and packaging. Provisions for corrosion control, painting, and packaging is provided within this SOW and shall be the superseding requirement.

a. Detailed Mechanical Work: Tractor with Angle Blade received for IROAN shall be worked in accordance with the following paragraphs. All discrepancies noted on the IROAN Pre-Induction Checklist shall be repaired/replaced.

b. Hardware

(1) Replace broken, unserviceable and/or missing hardware, including nuts, bolts, screws, washers, turn lock fasteners, safety, and one-time use items, etc., in accordance with the IROAN. 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.

(4) Hardware used in this IROAN shall be in accordance with existing technical publications.

c. Engine Assembly

(1) The engine shall be rebuilt in compliance with TM-09062A-14/1 w/ch 1-2. Engine oil filters, fuel/water separators are to be replaced 100 percent.

d. Fuel System

(1) Replace fuel filters 100 percent. Inspect water separators for damage, leakage, and proper operation. Clean, repair, replace separators as needed. Inspect filter and water separator, fuel lines for damage that may restrict fuel flow or that may result in leakage after short use. Fuel line fittings shall not be rounded off or be in such a condition that will prevent them from being tightened to correct torque specifications. Repair/replace procedures are found in TM 09062A-14/1 w/ch 1-2.

(2) Inspect fuel tank for cracks or leakage. Repair as necessary. Inspect fuel tank screen for damage. Repair/replace as necessary. Inspect fuel sender unit for correct operation. Fuel level gauge must register equivalent to tank level. Repair/Replace as needed.

(3) Inspect metallic fuel supply lines for cracks or damage that may restrict fuel flow or may result in leakage after short use. Fuel line fittings shall not be rounded off or be in such a condition that will prevent them from being tightened to correct torque specifications. Repair/replace as necessary. Repair/replace procedures can be found in TM 09062A-14/1 w/ch 1-2.

(4) Inspect and test operation of the throttle control system. Repair/replace as necessary.

(5) Replace fuel lift pump and pump to fuel injector fuel lines 100 percent.

e. Engine Cooling System

(1) Inspect and test cooling system by pressurizing the system 5 PSI above the pressure marked on the radiator pressure cap. Check all connections and hoses for the cooling system for leakage. Cooling System shall retain a pressure reading of 5 PSI above pressure marked on radiator cap for at least five minutes. Loss of coolant is not permitted under the provisions of this SOW.

(2) Inspect radiator for cracks, leaks, bent fins, and clogging that will prevent airflow through radiator. Clean, repair or replace radiator as required. Reverse flush, clean, and inspect radiator core 100 percent. Radiator shall be cleaned internally 100 percent by "roding out" the radiator core or by ultrasonic cleaning. Straighten bent fins that can be straightened.

(3) Inspect fan assembly for breaks, bends, and missing rivets. Inspect fan assembly for missing bolts and washers. Repair/replace as required.

(4) Inspect fan shroud for breaks or cracks. Inspect fan shroud and guard for missing mounting hardware (nuts, bolts, washers, and brackets). Repair/replace as required.

(5) Replace hose clamps 100 percent. Replace coolant hoses 100 percent.

(6) Replace coolant. Antifreeze protection shall be to a temperature of -35 degrees Fahrenheit.

g. Engine Accessories

(1) Cold Start Assembly. Inspect and test the cold start assembly. Clean all components with suitable cleaning solvent. Inspect all tubes, electrical wires, and components for damage and wear. Cold Start Kit shall function as intended. Cold Start Kit shall be repaired of all deficiencies annotated on the Pre-Induction Checklist.

(2) Air Cleaner Assembly. Inspect air cleaner assembly for corrosion, damage and leakage. Replace the air cleaner indicator 100 per cent. Repair/replace air cleaner assembly/components as required. Replace air filters 100 percent.

(3) Alternator. Alternator shall be rebuilt 100 percent. Replace alternator drive belts 100 percent.

(4) Engine Starter. Engine Starter shall be rebuilt 100 percent.

(5) Muffler and Exhaust System. Inspect exhaust system pipes and muffler for corrosion, leaks, holes, and proper operation. Inspect exhaust mounting system for missing or broken clamps, U bolts and spacers.

(6) Vehicle Electrical System. Inspect all wiring harnesses, battery cables for corrosion, bent or missing pins, and ripped or torn insulation and tie wraps. The following electrical systems shall be inspected and tested for proper operation. Components of these systems that fail to function properly shall be repaired or replaced as required.

1. Electrical panel gauges.
2. Instrument Panel warning lights.
3. Instrument panel light mode select switch.
4. Slave receptacle.

5. All fuses, switches and circuit breakers.

6. All wiring harness

7. Front and rear wiper assemblies.

8. Inspect all vehicle lighting to include work lights, blackout lights, turn signals and reflectors. Replace light fixtures and/or lamps as required.

h. Track. The track system consists of the following assemblies. These assemblies are to be inspected and repaired/replaced under the provisions of this SOW. Inspection standards are identified in Appendix B. Repair/Replace procedures are found in TM 09062A-25/2, Sections 4-118 through 4-126.

(1) Track Shoes and Links. Replace track shoes or links only if excessively worm, cracked bolt holes or seals areas that are excessively or worn and elongated. A wet turn can be made when pins, bushings and seals are in condition to be used again to make a seal and lubricated joint. Dry turn is not permitted under the provisions of this Sow. Replace missing tracks shoes.

(2) Track Carrier. Inspect carrier for cracks, wear and bent conditions. Repair/replace as require.

(3) Track Adjuster. Inspect and test track adjuster for proper operation. Track adjuster shall operate as intended.

(4) Idler Assembly. Inspect idler for leakage, wear, and cracks. Inspect idler to assure idler is correctly centered and adjusted. Repair, replace, or adjust as required.

(5) Sprocket. Inspect sprocket wear using wear gauge CAS-1864. Inspect sprocket for cracks and bent conditions. Inspect sprocket alignment to assure sprocket is correctly centered. Center sprocket as required.

(6) Track Rollers. Inspect roller for worn bushings, rollers, and roller assemblies. Inspect rollers for leakage. Inspect roller end caps for damage and foreign material. Rollers shall operate as intended.

(7) Recoil Housing. Inspect cover and brackets for cracks. Inspect recoil for damage or cracks. Weld cracks found in the housing cover and brackets. If damage is found in the recoil spring, do not attempt repair. Replace recoil housing assembly.

(8) Guards. Repair roller guards that are bent, broken or cracked. Replace missing guards. All guards shall be securely installed in their mounting place and shall contain no damage that will prevent their proper operation.

(9) Equalizer Beam Assembly. Inspect beam bushings and seals. Replace bushings that are worn and seals that leak or contain damage that may cause leakage in the near future. Inspect all pivot pins and pin mounting hardware for wear, and damage. Replace as required. Inspect lubrication hose, fittings, and

mounting hardware. Replace items that do not function as intended. Inspect beam for cracks and bent condition. Use suitable welding equipment and repair or replaced as necessary.

i. Power Train. The power train system consists of the following assemblies. These assemblies are to be inspected, repaired or rebuilt under the provisions of this SOW. The power train shall be tested using the flow meter test contained in TM 09062A-14/1 Section 4-108. Test results will be annotated on the checklist provided in TM 09062A-14/1, Figure 4-201. A copy of this checklist will be provided for each Tractor with Angle Blade inducted for IROAN under this SOW.

(1) Charging Pump. Charging pump output should be greater than 19GPM at 275 PSI at 2000 RPM. If output is less than 19 GPM, repair/replace the charging pump. Inspect metallic and nonmetallic hydraulic lines and hoses for damage that may restrict flow or may result in rupture. Replace as required. Replace filters 100 percent. Repair/replace procedures are found in TM 09062A-14/1 Section 4-109

(2) Transmission Control Valve. Required flow rates are identified in TM 09062A-14/1, Figure 4-201. Replace control valves that do not function as intended or do not meet flow rate readings. Repair/replace procedures are found in TM 09062A-14/1, Section 4-110.

(3) Torque Converter. Remove and inspect torque converter housing and torque converter. Inspect, repair/replace in accordance with TM 09062A-14/1 Section 4-114. Replace filters 100 percent. Inspect metallic and nonmetallic hydraulic lines and hoses for damage that may restrict flow or may result in rupture.

(4) Transmission. Transmission shall be rebuilt 100 percent. Rebuild procedures are found in TM 09062A-14/1 Section 4-111.

(5) Final Drives. Final drives are to be removed from vehicle. Perform all inspections and measurements as identified in TM 09062A-14/1 Section 4-112. All gaskets and seals are to be replaced 100 percent. Replace any component that do not meet specifications list in TM 09062A-14/1 Section 4-112.

(6) Transmission Controls. Inspect control rods, handles and clevis for damage, missing components and proper operation of control components. Replace missing, cracked or broken knobs. Replace rods, rod handles and clevis as required. Check control levers for proper adjustment. Adjust control levers in accordance with procedures in TM 09062A-14/1, Section 4-66.

(7) Drive Shaft. Replace universal joints and slip yoke seals and retainers 100 percent. Inspect slip yoke and drive shaft for cracks and damage. Repair/replace as required. Repair/replace procedures are found in TM 09062A-14/1, Section 4-113.

j. Brakes. Inspect brakes in accordance with the inspection procedures identified in TM 09062A-14/1, Section 4.67. Repair/replace as required. Inspect brake pedal and modulator pedal assemblies for damage and proper operation and adjustment. Adjust linkage in accordance with procedures identified in TM 09062A-14/1, Section 4-68. Inspect parking brake assembly for proper operation and adjustment. Adjust parking brake assembly in accordance with procedures located in TM 09062A-14/1, Section 4-69.

Repair/replace assembly as required. Inspect hub, brake discs, and bearing in accordance with TM 09062A-14/1, Section 4-115. Replace seals 100 percent.

k. Hydraulic System. The hydraulic system consists of the following assemblies. These assemblies are to be inspected and repaired under the provisions of this SOW. The Trouble Shooting Charts contained in TM 09062A-14/1, Section 4-7 will assist in identifying corrective actions to repair/replace hydraulic system components. The Pump Flow Meter Test will be conducted on each Tractor, with Angle Blade inducted into the repair cycle under the provision of this SOW. Results of the flow meter test will be annotated on the Pump Test Sheet contained in TM 09062A-14/1, Figure 4-39. A copy of the Pump Flow Meter Test will be provided with each vehicle inducted for IROAN.

(1) Reservoir. Service reservoir in accordance with instructions provided in TM 09062A-14/1, Section 4-44. Replace filters 100 percent.

(2) Pump. Pump Specifications are found in TM 09062A-14/1, Section 4-116. Test pump using the flow meter test provided in TM 09062A-14/1, Figure 4-39. If test results require pump removal for repairs, repair/replace pump as required. Repair/replace procedures are found in TM 09062A-14/1, Section 4-116.

(3) Equipment Control Valve(s). Valve Specifications are found in Section 8007-2 of TM 09426A-25/2. Inspect valve assembly in accordance with procedures identified in Section 8007-2 of TM 09426A-25/2. Repair/replace as required. Repair/replace procedures are found in TM 09426A-25/2, Section 8007-7 through 8007-68. Test the circuit relief valve and main relief valve using procedures identified in Section 8002-21 and 8021-22 of TM 09426A-25/2. Repair/replace as required.

(4) Hydraulic Cylinders. Specifications are found in Section TM 09062A-14/1, Sections 4-129 through 4-131. Rebuild the tilt cylinders, lift cylinders and angle cylinders 100 percent.

(5) Hydraulic Hoses and Lines. Inspect metallic and nonmetallic hydraulic lines and hoses for damage that may restrict flow or may result in rupture. Check hose and line fittings to assure they are tight and do not leak. Replace lines, hoses and fittings that are rounded off and cannot be tightened.

l. Dozer Blade Assembly. Inspect the dozer blade assembly in accordance with Cleaning, Inspection, and Repair paragraph contained in TM 09062A-14/1, Section 4-127. Blade cutting edges are permitted to be turned if both cutting edges are not worn. If both cutting edges are worn, replace cutting edges 100 percent.

m. Roll Over Protection Structure (ROPS) Cab. If the vehicle shows signs of a roll over, or the ROPS cab has been in some type of accident (such as hitting an overhead object during operation or transport), inspect for damage to the ROPS cab, operators seat and seat belt, and all accessories, wiring, etc. in the ROPS cab. If damage is found to the ROPS cab, replacement of the ROPS cab is mandatory. Do not weld or try to make the ROPS cab straight. Repair or replace damaged sheet metal panels, doors, covers, and other metal items as needed. Replace sheet metal panels where corrosion has penetrated panel. Repair or replace all worn or unserviceable door hardware including hinges, door strikes, handles, and cab door window release. Replace all glass damaged from staining, cracks, breakage, and pitting. Replace missing glass panels. Replace all headliners that are damaged or not installed in its correct

position. Inspect and operational test windshield wiper and washer assembly for proper operation. System shall operate as intended. Adjust blade park to specifications. Replace wiper blades 100 percent. Inspect, clean, and operational test defroster fan assembly. Defroster fan assembly shall operate as intended. Replace air filter 100 percent.

n. Operator Seat. Replace cushion/seat pads if torn or contains holes larger than 3/8 inch diameter. Repair/replace seat/backs, frames and tracks that have damage, sagging, broken springs, deteriorated frames, and tracks that do not operate properly. Replace seat belts that are torn or will not latch as intended.

o. Body Panels and Assemblies. Clean and inspect the panel and assemblies for damage, corrosion, and missing parts. Repair or replace damage sheet metal panels, doors, cover, and other metal items as needed. Replace sheet metal panels where corrosion has penetrated panel. Repair or replace all worn or unserviceable maintenance door hardware including hinges, door strikes, springs, and handles. Replace/repair all broken brackets and braces. Repairs shall be in accordance with best commercial practices.

p. Winch. The winch shall be rebuilt 100 percent. The winch wire rope assembly shall be inspected in accordance with procedures identified in MCO P11262.2A, Section 2003. Replace wire rope assemblies that do not meet these requirements.

q. Rust Proofing And Painting (Exterior/Interior). All vehicles shall be rust proofed as required. Rust proofing shall be in accordance with procedures for corrosion prevention and control identified in TM 3080-50. All exterior surfaces of the Tractor with Angle Blade shall be painted with Chemical Agent Coating (CARC) paint. Paint color shall be Desert Sand or Green 383. Upon induction into the IROAN cycle, Marine Corps Systems Command, Code PMM152, Albany, GA and /or their representative will identify color of individual Tractor with Angle Blade. All Tractor with Angle Blade cabs interiors shall be painted in the existing color. This paint shall be a lead and chromate free-based paint.

r. Data Plates And Decals

Data Plate. Each repaired Tractor with Angle Blade shall have an IROAN data plate affixed next to the existing data plate. The data plate shall meet the requirements of MIL-STD-130. Replace all data plates and decals that are missing and illegible. IRON data plates shall be prepared by the Contractor and contain the following information:

VEHICLE SERIAL NO_____
REPAIRED IN ACCORDANCE WITH SOW-06-PMM152-09062A-2/1
CONTRACTOR_____
DATE_____
VEHICLE HOUR METER READING AT TIME OF IROAN_____

Record Jacket: All major equipment or components serial numbers that are replaced during IROAN are to be identified by the Contractor to be recorded in the record jacket of the Tractor with Angle Blade as required by TM 4700-15/1 (This includes engines, transmissions, etc.). Information will list the Tractor

with Angle Blade serial number, name of equipment/component(s) replaced, serial number of replacement equipment/component(s), and if the equipment/component(s) is new or rebuilt.

3.3.3 Phase III - Inspection, Testing And Acceptance.

a. Inspection, testing and acceptance of the Tractor with Angle Blade shall be conducted in accordance with, TM 09062A-14/1, MCO P11262.2A and this SOW.

b. The Contractor shall be responsible for conducting required tests and shall ensure all necessary personnel are available to complete the final acceptance. Acceptance test shall be held at the Contractor's facility. MCSC, Code PMM152, Albany, GA representative(s) 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. MCSC, Code PMM152, Albany, GA representative(s) may require the Contractor to repeat tests or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

d. Tractor with Angle Blades shall be lubricated and greased in accordance with the vehicle lubrication instruction contained within TM 09062A-14/1, Figure 3-1. All coolant and oil levels shall be full to proper levels.

e. Vehicle Markings. Registration numbers and other markings shall be applied in accordance with TM 4750-15/1 and MIL-STD-642. Lifting and tie down attachments shall be identified with one-inch letters indicating "SLING POINT" or "TIE DOWN."

3.3.4 Phase IV - Packaging Handling Storage And Transportation (PHS&T)

a. The Contactor shall be responsible for preservation and packaging of item(s) being repaired under the terms of this statement of work. Items scheduled for long-term storage shall be in accordance with the Level "A" requirements of MIL-STD 3003. Items being prepared for domestic shipment, immediate use, or shipment to overseas destinations with the exception of Maritime Prepositioned Forces (MPF), shall be Level "B", Drive-on/ Drive-off. Items being prepared for overseas shipment shall have a label affixed which reads, "NOT FOR WEATHER DECK STOWAGE." Tractor with Angle Blade scheduled for shipment to MPS shall be Level "B", MPS Modified Drive Away.

b. The Terms Drive-on/Drive-off and MPF Modified Drive Away are defined as follows:

(1) Drive-on/Drive-off: Batteries will be hot and disconnected from vehicle electrical system. Terminals and leads will be taped. Fuel tank shall be filled ¼ full of JP-5/8. The air intake system, exhaust and brake systems, drive train and gauges are to be depreserved.

(2) MPF Modified Drive Away: Batteries shall be hot and connected to vehicle electrical system. Fuel tank shall be filled ¾ full of JP-5/8. The air intake system, exhaust and brake systems, drive train and gauges are to be depreserved. Fire extinguisher bracket and seats (all) shall be installed.

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

d. The Marine Corps Logistic Command, Code 552, Albany, GA 31704-0320, commercial telephone number (229) 639-8169 or DSN 5678-8169 will provide the contractor with shipping addresses for delivery of repaired equipment. The Contractor shall be responsible for arranging for shipment of the equipment to the pre-designed site(s). The Marine Corps will be responsible for transportation costs associated with shipping the subject equipment to and from the contractor.

3.4 Configuration Management.

3.4.1 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 Checklist (Appendix A) to the Contractor. The Contractor shall use one checklist for each Tractor with Angle Blade to record the inspection findings along with other required data.

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

3.4.2 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. MIL-HDBK-61 and ANSI/EIA-649 provide guidance for preparing this configuration control document.

3.5 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 DD1348 to Materiel and Distribution Management Department, Management Control Activity (Code 581-1B) 814 Radford Blvd, STE 20320, Albany, GA 31704-0320, or faxing a copy to commercial telephone number (229) 639-5498 or DSN 567-5498.

3.6 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.

3.7 Quality Assurance Provisions. The performance of the Contractor and the quality of work delivered, material provided and documents written shall be subject to in-process review and inspection by MCSC,

Code PMM152, Albany, GA representative(s) during contract performance. Inspection may be accomplished at any work location. Authorized MCSC, Code PMM152, Albany, GA representative(s) shall be permitted to observe the work/task accomplishment or to conduct inspections at all reasonable hours within contractor normal working hours. Acceptance tests shall be held in-plant. Inspection by MCSC, Code PMM152, Albany, GA representative(s) of all acceptance tests plans, materials and associated lists furnished hereunder does not relieve the contractor from any responsibility regarding defects or other failures to meet contract requirements which may be disclosed prior to final acceptance. 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 contractor work shall be subject to in-process reviews and inspections for compliance with Quality Systems by MCSC, Code PMM152 Albany, GA representative(s). Noncompliance with procedures resulting in degraded quality of work may result in a stop-work order requiring action by the contractor to correct the work performed and to enforce compliance with quality assurance procedures or face contract termination. Notwithstanding such, MCSC, Code PMM 152, Albany, GA representative 's inspection, it shall be the contractor responsibility to ensure that the entire system meets the performance requirements delineated and addressed in the Tractor, Full Tracked w/Angel Blade TM 09062A-14/1 and this SOW.

Quality assurance operations performed by the contractor shall be subject to the MCSC, Code PMM152 representative (s) verification at any time. MCSC, Code PMM152, Albany, GA representative(s) verifications can include, but shall not be limited in any matter, to the following:

a. Inspection of materials, products, assemblies, and documentation to assess compliance with quality standards.

b. Surveillance of operations to determine that quality assurance, practices, methods, and procedures are being properly applied.

c. Inspections of deliverable products to assure compliance with all requirements of the Tractor with Angle Blade TM 09062A-14/1, this SOW, and applicable documents used herein.

3.8 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, GA representative(s) 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 facility. Final acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements. Contractor provided reports shall be used to record the results of the Final Inspection Analysis.

Acceptance testing. The Tractor with Angle Blade IROAN under the provisions of this SOW shall be accomplished in accordance with TM 09062A-14/1, MCO P11262.2A, and this SOW.

d. Failure of the contractor to promptly correct deficiencies discovered shall be a reason for suspension of acceptance until corrective action has been made.

3.9 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection. The contractor at no additional cost to the Marine Corps shall provide the following:

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

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

4.0 REPORTS. The following reports shall be provided to Commanding General, MCSC, (Code PMM152), 814 Radford Blvd., Suite 20343, Albany, GA 31704-0343.

4.1 Pre-Induction Checklist. The Contractor shall provide a detailed Initial Inspection Checklist for each Tractor with Angle Blade to be repaired. Contractor may use contractor owned inspection reports however, these reports shall be modified, if necessary, as directed by MCSC, Code PMM152, Albany, GA. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCSC, Code PMM 152, Albany, GA after final acceptance of the Tractor with Angle Blade.

4.2 Final Inspection Checklist. The Contractor shall provide one copy, per vehicle of the Final Inspection Checklist for each Tractor. Full Tracked repaired. Contractor may use contractor owned inspection reports however, these reports shall be modified, if necessary, as directed by MCSC, Code PMM152, Albany, GA. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCSC, Code PMM152, Albany, GA after final acceptance of the Tractor with Angle Blade.

4.3 Configuration Checklist. The Contractor shall provide one copy, per vehicle of the Configuration Checklist (Appendix A) for each Tractor with Angle Blade repaired. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCSC, Code PMM152, Albany, GA after final acceptance of the Tractor with Angle Blade.

CONFIGURATION CHECKLIST
TRACTOR, FULL TRACKED
WITH ANGLE BLADE AND WINCH
NSN 2410-01-254-1667

Vehicle Serial Number _____

Engine Serial Number:	Original	Replacement
	_____	_____

Transmission Serial Number	Original	Replacement
	_____	_____

Modification Instructions:	Applied Prior to IROAN	Applied During IROAN
MI 09062A-25/1	_____	_____
MI 09062A-25/3	_____	_____

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	E. CONTRACT/PR NO.	F. CONTRACT
Tractor, Full Tracked		

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A001	Request For Deviation (RFD)	Configuration Management

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE
DI-CMAN-80640C	SOW Para 3.4.2	MARCORLOGCOM (566)

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

16. REMARKS

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

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.

RFDs shall be transmitted via E-Mail to the following address: smblogcomconfigmngmnt@logcom.usmc.mil

Distribution Statement A: Approved for public release, distribution is unlimited.

14. DISTRIBUTION

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

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

G. PREPARED BY	H. DATE	I. APPROVED BY	J. DATE
Dan Smith	20 Nov 03		24 Nov 03