

ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 12/11/2009		2. CONTRACT NO. (If any) DTMA8C05019		6. SHIP TO: No Contacts Identified		
3. ORDER NO. CLS19S10010		4. REQUISITION/REFERENCE NO.		a. NAME OF CONSIGNEE DOT/Maritime Administration, Atlantic Division Operations		
5. ISSUING OFFICE (Address correspondence to) DOT/Maritime Administration, Atlantic Division Acquisition Office of Acquisition, MRG-7200 7737 Hampton Boulevard, Building 19, Suite 300 Norfolk VA 23505				b. STREET ADDRESS WRIGHT		
				c. CITY		e. ZIP CODE
7. TO: a. NAME OF CONTRACTOR				f. SHIP VIA		
b. COMPANY NAME Crowley Technical Management, Inc.				8. TYPE OF ORDER		
c. STREET ADDRESS 9487 REGENCY SQ BLVD				<input type="checkbox"/> a. PURCHASE REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.		<input type="checkbox"/> b. DELIVERY - Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.
d. CITY JACKSONVILLE		e. STATE FL	f. ZIP CODE 32225-8126			
9. ACCOUNTING AND APPROPRIATION DATA 2010 - - X4303 - RRF 931 - 40 - WRT0 - 0 - 0000 - 000000 - 70 - 106131 - 40 - WRT0 - 25432 - 6100 - 6600 -				10. REQUISITIONING OFFICE DOT/Maritime Administration, South Atlantic Region		
11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. EMERGING SMALL BUSINESS						12. F.O.B. POINT Destination
13. PLACE OF		14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS	
a. INSPECTION	b. ACCEPTANCE					

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
SEE LINE ITEM DETAIL						

18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOT. (Cont. pages)
21. MAIL INVOICE TO: Gloria Fullerton						
a. NAME DOT/ Enterprise Services Center (ESC) OFO/FAA, Oklahoma City						
b. STREET ADDRESS (or P.O. Box) MARAD A/P SAR Invoices Branch, AMZ-150 PO Box 25710,						
c. CITY Oklahoma City		d. STATE OK	e. ZIP CODE 73125			\$417,000.00
						17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature) 			23. NAME (Typed) Milton G. Spears TITLE: CONTRACTING/ORDERING OFFICER			
---	--	--	---	--	--	--

**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO.
3 of 3

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 12/11/2009	CONTRACT NO. DTMA8C05019	ORDER NO. CLS19S10010
-----------------------------	-----------------------------	--------------------------

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)				
0001	<p>CLIN 0501AE WRIGHT FY10 M&R REPAIRS PROJECT NUMBER: CLS-WRI10-1005A</p> <p>SHIP MANAGER IS AUTHORIZED TO ACOMPLISH FY10 PROJECT CLS-WRI10-1005A. The purpose of this project is to accomplish MARAD approved specific work items on the ship's approved business plan as identified below. All completed work shall be in compliance with applicable standards as set forth in the Ship Manager contract at C.6.3, Compliance Documents, and subparagraphs thereto, at the time of acceptance.</p> <p>Attached Work Item List</p> <table border="0"> <tr> <td><i>Start Date</i></td> <td><i>End Date</i></td> </tr> <tr> <td>12/11/2009</td> <td>12/31/2010</td> </tr> </table>	<i>Start Date</i>	<i>End Date</i>	12/11/2009	12/31/2010	1.00	JOB	417,000.000	417,000.00	
<i>Start Date</i>	<i>End Date</i>									
12/11/2009	12/31/2010									

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17i) ⇒ \$417,000.00

**S.S. WRIGHT
FY-10 M&R REPAIRS**

1. WORK ITEM SUMMARY

SR/WO 5100585 - REPAIR STBD SETTLER DRAINS.

1. ABSTRACT
- 1.1. The intent of this item is to pipe two stbd. settler drain lines into the fwd. E/R Slop tank.
2. REFERENCES / ENCLOSURES
- 2.1. None.
3. ITEM LOCATION / DESCRIPTION
- 3.1. Lower Engine Room.
4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
- 4.1. None.
5. STATEMENT OF WORK

Note: In performing all phases of this Repair Specification, Contractor shall perform any and all “Hot Work” in compliance with applicable regulations, i.e. USCG, NFPA, ABS, etc. Obtaining “Hot Work” permit shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain “Hot Work” permit status shall be responsibility of Contractor.

- 5.1. Open tank top cover to Slop Tank, Engine Room Port DB Fwd. for pipe installation.
- 5.1.1. Requires services of Marine Chemist to certify tank “Safe For Men” and “Safe For Hot Work”.
- 5.1.1.1. Contractor to perform all required cleaning, inerting, etc. to obtain certification.
- 5.1.2. Coordinate with vessel C/E to locate a penetration into the tank for a drain line. Location must be easily accessible from tank top adjacent to and within 10 ft. of manhole cover.
- 5.2. Provide and install size 1 in. B.I. pipe penetration into tank.
- 5.2.1. Pipe to penetrate into tank, minimum 2 ft. Install bracket and clamp to secure pipe.
- 5.2.2. Provide and install “Horse Collar” or other ABS approved tank doubler plate for penetration.
- 5.2.3. Provide and install size 1 in. threaded ball valve (stainless trim) before penetration on horizontal run.
- 5.3. Pipe line to stbd. settler drain lines (2).
- 5.3.1. Pipe to be size 1 in. sched. 40, B.I. with fittings as required.
- 5.3.2. Pipe run to be to inbd. drain valve and “Tee” to outbd. drain valve. These valves are #150 psi. ball valves, threaded connections.
- 5.3.3. Pipe run to lead across tank top to installed Slop Tank penetration.
- 5.3.4. Provide and install pipe hangers as required by all pertinent regulations.
- 5.3.5. Pipe runs to be threaded connections.
- 5.4. When piping is complete, coat all new and disturbed surfaces as per MARAD Coating Guidelines to match existing color scheme.
6. PERFORMANCE CRITERIA /DELIVERABLES
- 6.1. Approved location of tank penetration.

SR/WO 5101244 - MAIN DECK AND RO-RO DECK HATCH COVER REPAIRS.

1. ABSTRACT
- 1.1. The intent of this item is to conduct repairs to the Main Deck and Ro-Ro deck hatch covers as per this specification.
2. REFERENCES / ENCLOSURES
- 2.1. As per ABS and USCG Regs.
- 2.2. As per MARAD Coating Guidelines.
3. ITEM LOCATION / DESCRIPTION
- 3.1. Various
4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
- 4.1. None.
5. STATEMENT OF WORK

Note: Contractor is advised to visit the ship to check access of the location and inspect the interference's that shall be attended during the accomplishment of this work item.

- 5.1 Contractor shall provide all labor, material and equipment to conduct hatch cover repairs as per this specification and to the satisfaction of all regulatory bodies and the CLS Representative.
- 5.2 Hatch cover repair shall consist of replacing gaskets, gaskets channels, weld build up hatch wheel tracks, replace wheel pins, bushing, and shims.
- 5.3 The following is a list of hatch cove repairs, List will continue to grow during FY09 & FY10.
 - 5.3.1 Main Deck Hatches:
 - 5.3.1.1 Replaced hatch wheel pins, bushings & spacer washers on Hatch # 3 Port, 3 Stbd, 4 Port, 4 Center, 4 Stbd, 5 Port , 5 Center, 5 Stbd, 6 Port, 6 Center, 6 Stbd
 - 5.3.1.2 Replace Hatch gaskets and gaskets channels on #6 center and gasket channels, #3 Center (Fwd),
 - 5.3.2 Repair (shim / weld) hatch wheel tracks:
 - 5.3.2.1 Hatch 3 Port, 3 Center, 3 Stbd, 4 Port, 4 Center, 5 Port, 5 Center
 - 5.3.2.2 Repair all hatch cover hydraulic control cabinet lids. On the following control stands:
- 5.4 Coat and touch-up all new and disturbed surfaces as per MARAD Coating Guidelines to match existing color scheme.
- 5.4 Bleed air from system in preparation for operation.
- 5.5 Prove proper operation of all overhauled hatch covers, with no leakages.
- 5.6 Any Discrepancies found to equipment are to be addressed by a Condition report, including price presented for repairs. All repairs are to be at discretion of CLS Rep.
- 5.7 In performing all phases of this Repair Specification, Contractor shall perform any and all "Hot Work" in compliance with applicable regulations, i.e. USCG, NFPA, ABS, etc. Obtaining "Hot Work" permit shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain "Hot Work" permit status shall be responsibility of Contractor.
- 5.8 As possibility of vessel Activation exists, the job shall never exceed a period where the equipment cannot be put back in "ship-shape" condition within five (5) calendar days.
- 5.9 All repairs shall meet all ABS and USCG approval.
- 6 PERFORMANCE CRITERIA /DELIVERABLES
 - 6.1 Prove satisfactory operation of the reconditioned

SR/WO 1101885 MOTOR OVERHAUL / REPAIRS

The intent of this item is overhaul a number motors as described.

- All Cargo Winch motors and MG set have been megged. The following need to be cleaned and baked because of low meg readings.
 - # 10 Inbd topping winch
 - # 10 Outbd topping winch
 - # 9 Outbd topping winch
 - # 3 MG DC motor
 - # 4 MG DC motor (overhaul MG set 3-4)
 - # 8 MG DC motor
 - # 9-10 MG set complete
 - Vent fan 01-58-2: In addition to motor overhaul replace fan. an has a broken blade.
 - Aft Mid-Ship Mooring Winch Motor (megger readings 12 mu)

1. ABSTRACT
 - 1.1. The intent of this item is overhaul a number motors as per this specification.
2. REFERENCES / ENCLOSURES
 - 2.1. As per ABS and USCG Regs.
3. ITEM LOCATION / DESCRIPTION
 - 3.1. Various
4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
 - 4.1. None.
5. STATEMENT OF WORK

Note: In performing all phases of this Repair Specification, Contractor shall perform any and all “Hot Work” in compliance with applicable regulations, i.e. USCG, NFPA, ABS, etc. Obtaining “Hot Work” permit shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain “Hot Work” permit status shall be responsibility of Contractor.

- 5.1. Contractor shall provide all labor, equipment and material to complete the work specification to the satisfaction of the vessel’s Port Engineer.
- 5.2. Coordinate with vessel C/E to tag-out motor.
- 5.3. Release motor and fan and rig ashore to repair facility.
- 5.4. Seal vent intake ducting to make weather tight.
- 5.5. Needle scale and wire brush to clean fan assembly.
- 5.6. Perform motor overhaul including but not limited to;
 - 5.6.1. Clean, bake & dip.
 - 5.6.2. Dynamically balance rotating element including fan.
 - 5.6.3. Machine and sleeve motor end bells as required.
 - 5.6.4. Renew motor bearings with sealed bearings.
 - 5.6.5. Provide condition Report including megger report and condition of motor heater circuit and any discrepancies found.
- 5.7. Upon Satisfactory overhaul of supply fan motor, rig motor aboard and make up all connections.
 - 5.7.1. Renew fasteners with CRES. Coat threads with Molybdenum based anti-seize compound.
 - 5.7.2. Renew flange gasket.
- 5.8. Prove proper operation of the supply fan motor to the vessels Chief Engineer prior to signing off the job.
- 5.9. Touch-up all new and disturbed surfaces as per MARAD Coating Guidelines, to match existing color scheme.
- 5.10. Provide a Condition Report with pricing to the Port Engineer of any discrepancies found outside this work specification for any additional repairs. All repairs will be at discretion of Port Engineer.
6. PERFORMANCE CRITERIA /DELIVERABLES
 - 6.1. Condition Report of Megger readings and balance report.
 - 6.2. Proper operation of fan.

WO/SR 1102366 – REPAIR CREW QUARTERS AC

1. ABSTRACT
 - 1.1. The intent of this item is to complete the Crew Qrts AC repairs in accordance with this specification and to the satisfaction of the CLS Representative.
2. REFERENCES / ENCLOSURES
 - 2.1. As per USCG and ABS.
3. ITEM LOCATION / DESCRIPTION
 - 3.1. Location: Main Deck
 - 3.2. Description: Air Handling Unit Tech Manual #117 (onboard)
4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
 - 4.1. None.
5. STATEMENT OF WORK

Note: Contractor shall visit the ship and discuss motor to fan alignment and check the access, location and inspect the interference’s that shall be attended during the accomplishment of this work item prior to issuing a bid.

In performing all phases of this Repair Specification, Contractor shall perform any and all “Hot Work” in compliance with applicable regulations, i.e. USCG, ABS, NFPA etc. Obtaining and maintaining “Hot Work” permit’s shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain “Hot Work” permit status shall be the responsibility of the Contractor.

- 5.1. Contractor shall provide all labor, material and equipment to conduct repairs to the Crews Qrts A/C unit repairs in accordance with this specification and to the satisfaction of the CLS Representative.
- 5.2. Only one Air Handler Unit shall be worked at a time.
- 5.3. Contractor shall renew the Aft AC unit condenser and Port and Stbd Crew Qrts AC unit obsolete thermostatic valves and controls, replace with contractor furnished new updated controls.

- 5.4. Reassemble the Aft AC Condenser and the Port and Stbd Air Handling Units and test operate to the satisfaction of the Chief Engineer.
- 5.5. All work, materials and procedures shall be in compliance with the latest requirements of the USCG and American Bureau of Shipping.
- 5.6. Coat or Touch-up all new and disturbed areas as per Marad coating guidelines.
- 5.7. No work outside of this Specification shall be undertaken without prior approval of Owner's Rep. Contractor must first submit Condition Report detailing proposed changes and/or additional work with proposed price.
6. PERFORMANCE CRITERIA /DELIVERABLES
- 6.1. Prove satisfactory operation upon completion of repairs.

WO/SR 1102583 – CONDUCT HABITABILITY REPAIRS TO THE RADIO ROOM.

This work item will continuously be amended as additional repairs are identified.

1. ABSTRACT
 - 1.1. The intent of this item is to conduct the habitability repairs called out in this specification to satisfaction and approval of the CLS Representative.
 2. REFERENCES / ENCLOSURES
 - 2.1. As per OSHA, ABS and USCG regs.
 3. ITEM LOCATION / DESCRIPTION
 - 3.1. Location: Various.
 4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
 - 4.1. None.
 5. STATEMENT OF WORK
- Note: Contractor is advised to visit the ship to check access of the location and inspect the interference's that shall be attended during the accomplishment of this work item.
- 5.1. Contractor shall provide all labor, material and equipment to complete the following Radio Room repairs; repair the inboard radio room bulkhead, remove the existing two desks and replace with new desk fabricated from aluminum with wood top and middle drawer, remove and replace all overhead panels and secure the ships Mercoms computer, USMC computer and the NS5 Server computer in locations to be determined by the Chief Mate.
 - 5.2. Coordinate with vessel's C/E to properly secure all systems prior to conducting repairs/work.
 - 5.3. In performing all phases of this Repair Specification, Contractor shall perform any and all "Hot Work" in compliance with applicable regulations, i.e. USCG, NFPA, OSHA and ABS. Obtaining "Safe to Work", "Hot Work" permits and providing a certified competent person shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain "Hot Work" permit status shall be responsibility of Contractor.
 - 5.4. During all hotwork, grinding, cleaning and veneer molding repairs contractor shall provide ventilation fans in all areas and exhaust shall terminate outside of the ship.
 - 5.5. On the RFQ issue a price to conduct all repairs in accordance with this specification and also show the individual cost for items.
 - 5.6. All materials used shall meet all USCG reqs for shipboard use.
 - 5.7. Upon completion of repairs Contractor and the Chief Engineer shall inspect all areas of work prior to signing job completion.
 - 5.8. No work outside of this Specification shall be undertaken without prior
 - 5.9. approval from the Port Engineer. Contractor must first submit a Condition Report detailing the proposed changes and additional work with the pricing. No Additional work shall be started without written approval from the Port Engineer.
 - 5.10. As possibility of vessel Activation exists, the job shall never exceed a period where the equipment cannot be put back in "ship-shape" condition within five (5) calendar days.
 - 5.11. All work shall be completed under the terms of the attached SS Wright Industrial Work Guidelines.
 6. PERFORMANCE CRITERIA /DELIVERABLES
 - 6.1. Inspections by Port Engineer prior to signing job completion

WO/SR 1102584 REPAIR HATCH AND DOOR HYDRAULIC CYLINDERS.

1. ABSTRACT

1.1. The intent of this item is to conduct satisfactory repairs in accordance with this specification.

2. REFERENCES / ENCLOSURES

2.1. As per ABS and USCG Regs.

2.2. As per MARAD Coating Guidelines.

3. ITEM LOCATION / DESCRIPTION

3.1. Various

4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES

4.1. None.

5. STATEMENT OF WORK

Note: In performing all phases of this Repair Specification, Contractor shall perform any and all “Hot Work” in compliance with applicable regulations, i.e. USCG, NFPA, ABS, etc. Obtaining “Hot Work” permit shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain “Hot Work” permit status shall be responsibility of Contractor.

There will be a Contractor walkthrough. All questions will be answered at that time.

5.1 Contractor shall provide all labor, material and equipment to complete this work specification to the satisfaction of all regulatory bodies and the CLS Representative.

5.2 Release and remove the following list of hydraulic cylinders and hand pump deliver to a repair facility for overhaul. Cap all lines to prevent leakage, Degrease and wipe-up all spills as they occur. Due to limited funding, the Port Engineer shall decide which group of Hydraulic repairs shall be completed.

5.3 Hydraulic Cylinder and Hand pump Overhaul shall consist of but not limited to: Replace all “O” rings, gaskets, seals, wipers and packing, honing of cylinders and polishing rams, replace all hydraulic hoses for each cylinder that shall be overhauled. Bid shall include to replace/re-chrome three rams.

5.4 The following is a list of Hydraulic Cylinders that require overhaul. Items 5.3.2 and 5.3.6 shall be the first cylinders to be overhaul and reinstalled to support other on going work.

5.3.1 Main Deck #2 Hatch

5.3.1.1 Mn DK. Port – Aft Cyl #1

5.3.1.2 Mn Dk. Port – Aft Cyl #2.

5.5 Upon Completion of hydraulic cylinder repair/overhaul, contractor shall prep and paint the hydraulic cylinders white and stencil the month and year of the repair in two inch black numbers in a location that shall be readable from the below deck upon installation.

5.6 Contractor shall degrease and clean approximately a ten foot area around each hydraulic cylinder, actuator and pump repair including deck and all scaffolding in way of repairs. Cleaning may consist of different levels due to scaffolding.

5.7 Upon re-installing the overhauled hydraulic cylinders all pins, clevis’, yokes, fasteners, etc. shall be wire brushed and lubricated with Molybdenum based anti-seize compound before re-assembly.

5.8 Coat and touch-up all new and any disturbed surfaces as per MARAD Coating Guidelines to match existing color scheme.

5.9 Bleed air from system in preparation for operation.

5.10 Upon completion of all hydraulic cylinder, pump overhaul, Contractor shall prove satisfactory operation to the Chief Engineer with zero oil leakage allowed prior to signing job completion.

5.11 No work outside of this Specification shall be undertaken without prior approval from the Port Engineer. Contractor must first submit a Condition Report detailing the proposed changes and additional work with the pricing. No Additional work shall be started without written approval from the Port Engineer.

5.12 As possibility of vessel Activation exists, the job shall never exceed a period where the equipment cannot be put back in “ship-shape” condition within five (5) calendar days.

5.13 All work shall be completed under the terms of the attached SS Wright Industrial Work Guidelines.

6. PERFORMANCE CRITERIA /DELIVERABLES

6.1 Prove satisfactory operation to the Chief Engineer in accordance with item.

WO/SR 1102635 PIPING REPAIRS.

1. ABSTRACT

1.1. The intent of this item is to complete this work item to the satisfaction and approval of Regulatory Bodies and Chief Engineer as a turnkey repair.

2. REFERENCES / ENCLOSURES

2.1. As per USCG and ABS reqs.

2.2. As per MARAD Coating Guidelines

3. ITEM LOCATION / DESCRIPTION

3.1. Locations: Portside outboard, 17ft Level, frame 104.

4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES

4.1. NONE

5. STATEMENT OF WORK

Note: Contractor shall visit the ship to check for hazardous materials, access, location and inspect the interference's that shall be attended during the accomplishment of this work item prior to issuing a bid. In performing all phases of this Repair Specification, Contractor shall perform any and all "Hot Work" in compliance with applicable regulations, i.e. USCG, NFPA, ABS, etc. Obtaining "Hot Work" permit and a competent person shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain "Hot Work" permit status shall be responsibility of Contractor.

5.1. Contractor shall provide all labor, material and equipment to complete this work specification to the satisfaction and approval of Regulatory Bodies and the Chief Engineer as a turnkey repair.

5.2. All required safety and precautionary measures must be adhered to while performing this job.

5.3. All welder certifications and weld procedures shall be approved by ABS and USCG prior to starting work.

5.4. This work scope falls under the auspices of ABS requirements. ABS must be contacted for approval of all installations before beginning work.

5.5. Coordinate with vessel's C/E to secure systems and disable any possible discharge into lines prior to beginning worked.

5.6. All measurements of piping are approximate, the exact material, size and lengths shall be the contractors responsible. During piping renewal contractor shall furnish and include all new pipe, flanges, gaskets, fasteners and piping brackets

5.7. The following is a list of piping that requires replacing:

5.7.1. Tank vent # 1 Fwd Deep tank sounding tube at main deck. Steel sch 80 with coupling waste piece.

5.7.2. Tank vent # 2 Aft Stbd deep tank sounding tube at main deck. Steel sch 80 with coupling waste piece.

5.7.3. Ship Service air line: RORO deck at frame 103 (overhead). Replace damage 1-1/2" x 30' line (steel sch 80). (2) 1-1/2" "T". Repair Port & Stbd 1/2" lines.

5.7.4. Ship Service air line: AMR isolation valve to deck air. Valve is located Fwd of bulkhead 101 Port side of the WTD. Replace valve (1-1/2") with welded pipe section. Steel sch 80

5.7.5. Ship Service Air line: Lower engine room Stbd side 17' level. 2" x 40' steel sch 80 socket weld fittings (2) couplings.

5.7.6. Ship Service air line: AMR stair tower at bulkhead 103. 1-1/2" x 15' steel sch 80 with socket weld fittings (2) 90* socket elbows.

5.7.7. Port & Stbd shore steam lines at main deck: replace deck penetration flanges and studs.

5.7.8. Cargo hold sounding tubes: # 1 hold 3rd deck P/S bilge wells. 1-1/2" x 4' steel sch 80

5.7.9. Deck drain line: # 1 hold head deck drain in lower hold. 2" x 3' steel sch 80 with socket weld fittings (1) 2" "T" and (2) 2" couplings.

5.7.10. Deck drain line: AFFF deck drain line at overboard. 2" x 4' steel sch 80.

5.7.11. Deck drain lines: Port & Stbd boat deck at fish plate below life boats. This is a new drain to be added. Install 3" angle type with strainer deck drain (without trap & baffle). Pipe drain to existing 5" drain in Port & Stbd fan rooms below deck. 3" x 30' steel sch 80.

5.7.12 Re-pipe control air lines to receivers & dryers.

5.7.13 Pipe ovbd discharge for MF condensate drains into scupper ovbd lines.

5.7.14 Overhaul (2) 4" hydraulic operated ballast system gate valves.

5.7.15 Overhaul (2) 8" hydraulic operated ballast gate valves. (Port Upper anti-roll dump valves)

5.8. Upon completion of repairs, contractor shall hydro the repaired section of piping to the satisfaction of Regulatory Bodies and the Chief Engineer.

- 5.9 Contractor shall Coat or Touch-up all new and disturbed areas in accordance with Marad Coating Guidelines.
- 5.10 Cleanup the work areas, and dispose of all waste generated by this item and related growth, in accordance with all applicable; Federal, State and Local Statutes on a daily basis.
- 5.11 Provide Condition Report of any additional discrepancies found outside this work scope and present a price for repairs. All repairs will be at discretion of Port Engineer.
- 6. PERFORMANCE CRITERIA /DELIVERABLES
- 6.1. ABS approved Welder Certificates and procedures.
- 6.2. Satisfactory hydro testing.

WO/SR 1102840 ASBESTOS REMOVAL / INSTALLATION RENEWAL.

- 1. ABSTRACT
 - 1.1. The intent of this item is to remove and dispose of the asbestos overhead panels, lagging and insulation material and conduct repairs as per this specification.
 - 2. REFERENCES / ENCLOSURES
 - 2.1. As per EPA, OSHA, ABS and USCG Regs..
 - 3. ITEM LOCATION / DESCRIPTION
 - 3.1. None
 - 4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
 - 4.1. None.
 - 5. STATEMENT OF WORK
- Note: Contractor is advised to visit the ship to discuss this work item with the Chief Engineer and check access of location/s and inspect shipboard cleanliness and interference's that shall be attended during the accomplishment of this work item. Upon completion of this work item the Ship shall return to the same level of cleanliness as prior to starting this work and before signing the job completion.
- 5.1. Contractor shall provide all labor, material and equipment to remove, contain and dispose of the asbestos overhead panels, lagging and insulation material called out in this specification in accordance with all Federal, State and Local Statutes.
 - 5.2. The disposal of all waste generated as a result of this specification shall be under the Contractor's Environmental Protection Agency (EPA) Identification Number. All hazardous material waste shall be appropriately documented and copies of all manifest and final disposal documents, confirmation forms and associated documentation IAW all Federal, State and Local Statutes shall be provided to the CLS Port Engineer prior to signing the contract completion.
 - 5.3. On the RFQ the following information shall be displayed, Contractors EPA#, DOT Registration #, how and where the contractor is going to dispose of the Hazmat. The Hazmat must be moved under a manifest.
 - 5.4. Contractor shall obtain all applicable insurance, permits and provide all Personnel Protection Equipment (PPE) required to complete this specification including but not limited to: Respirators, Coveralls, Gloves, Goggles and Disposal bags.
 - 5.5. All containers used to transport asbestos materials and waste, etc. ashore, shall be considered HAZMAT and sealed to prevent any contamination or dropping of loose material in/or on the vessel, dock or Harbor.
 - 5.6. The following is a list of Rooms to include the bathrooms that require the Asbestos overhead paneling to be removed. The Asbestos overhead paneling shall be replaced with 1/8" Aluminum sheet metal, coated with a gloss white bake on finish on the interior side. Panels shall be cut and mounted to fit as original installation. (No gaps, wavy or uneven fit ups allowed.)
 - 5.6.1. Chief Engineers Office and Stateroom
 - 5.6.2. Chief Mate Stateroom
 - 5.6.3. 1st AE Stateroom
 - 5.6.4. 2nd Officers Stateroom
 - 5.6.5. Engineering Office
 - 5.6.6. Pursers Office
 - 5.7. The following is a list of Piping that requires Asbestos lagging removed and Non-Asbestos lagging reinstalled.
 - 5.7.1. 25 ft of 8inch Main Steam piping
 - 5.7.2. 55 ft of 6 inch Main Steam Piping

- 5.8. During the Contractor walk thru and prior to issuing a bid, contractor shall view and observe all interferences which inhibit the accomplishment of this Specification, such as electrical wiring, lights, vent, access doors, moldings, piping, cables, lagging, etc. which shall require removal and re-installation to original conditions in order to complete this specification.
- 5.9. Contractor shall set up Barriers at doorways and provide an approved Air filtration system to filter asbestos particulate matter from the air in each room during the asbestos removal as not to allow contamination of passageways and adjacent spaces. All cloth materials items shall be removed from the room and stored in a location determined by the Chief Engineer.
- 5.10. Contractor shall take samples of overhead insulation and paint chips from each Stateroom, Port and Stbd fan rooms and passageways and have tested for asbestos material and to check for lead base paint. A complete report identifying the removed material/s, Stating: Sample Identification/Location, Tests and Results shall be delivered to the Port Engineer prior to completion of the job.
- 5.11. As possibility of vessel Activation exists, the job shall never exceed a period where the equipment cannot be put back in "ship-shape" condition within five (4) calendar days.
- 5.12. Provide Condition Report of all additional discrepancies found outside this work scope and present a price for repairs. All repairs shall be at discretion of Port Engineer.
- 5.13. Contractor shall issue a bid to complete the repairs to One Stateroom in accordance with this specification to use for Bidding additional work if required
- 5.14. This work specification will require the contractor to break down their bid into two separate lines showing a total cost for this repair specification as follows:
- 5.14.1. Line One - Setup, removal of asbestos panels/materials, testing for asbestos material and lead base paint, cleanup and procurement of all materials required to complete this work in accordance with specification. Contractor shall properly and safely store all materials until ready for installation.
- 5.14.2. Line two – To install all new panels as per this specification at a later date which shall be determined upon completion of the new lifeboat installation.
6. PERFORMANCE CRITERIA /DELIVERABLES
- 6.1. Original Copies of all Manifest and Documentation of proper removal and disposal. (Documentation shall discuss how the asbestos is disposed of and where.)
- 6.2. A complete report identifying the removed material, Stating: Sample Identification/Location, Tests and Results

WO/SR 1103032 OVERALL AUXILIARY VACUUM PUMP

1. ABSTRACT
- 1.1. The intent of this item is to Overhaul the Aux vacuum pump as per this specification.
2. REFERENCES / ENCLOSURES
- 2.1. As per Manufacture recommendations, USCG, NFPA and ABS reqs.
- 2.2. As per Tech manual T6225-E9-MMC-010, Ships tech manual 109 (onboard)
3. ITEM LOCATION / DESCRIPTION
- 3.1. EQ: 470542280008, MFR. NASH, MOUNTING: HORIZONTAL, TYPE CL-203, DECK, RPM: 1170, PRESSURE: 1.5" HG ABS SUCTION, CAPACITY: 4.5 SCFM, LOC: ENGINE ROOM\\ MID-LEVEL\\ FRAME 115\\ PORT\\
4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
- 4.1. None
5. STATEMENT OF WORK
- 5.1. Contractor shall provide all labor, material and equipment to deliver the vessels vacuum pump to an approved repair facility for overhaul.
- 5.2. Overhaul shall consist of but not limited to the following:
- 5.2.1. Renew all packing, O-rings, gaskets, seals, shims and bearings.
- 5.2.2. Balance rotating element.
- 5.2.3. Machining of end bells.
- 5.3. Upon closing of the vacuum pump, contractor shall record all tolerances and clearances on a typed written condition report and deliver to the Port Engineer upon completion of overhaul and prior to issuing an Invoice.
- 5.4. Upon reassembling vacuum pump deliver to vessel.

- 5.5. Any and all discrepancies found shall be addressed by Condition Report, including price presented for the identified repairs. All additional repairs are to be at discretion of CLS Rep.
- 5.6. All work shall be completed under the terms of the attached SS Wright Industrial Work Guidelines.
- 6. PERFORMANCE CRITERIA /DELIVERABLES
 - 6.1. Typed written Condition report showing close up clearances and tolerances.
- 7. PERFORMANCE PERIOD
 - 7.1. From start of disassembly to completion of testing, Contractor is allowed a period of 7 calendar days. As possibility of vessel Activation exists, the job shall never exceed a period where the equipment cannot be put back in "ship-shape" condition within five (5) calendar days.
 - 7.2. Contractor is urged to have all renewal materials, staging, lighting, tools, permits, etc. in place before starting disassembly.
 - 7.3. Deviation from time schedule is permitted only with written permission of Crowley Port Engineer.
 - 7.4. Performance period for completion of Specification is 10 calendar days from notice to proceed .

WO/SR 1103038 REPLACE ENGINE ROOM CONSOLE AC UNIT

- 1. ABSTRACT
 - 1.1. The intent of this item is to replace the engine room console ac unit and conduct repairs in accordance with this specification to the satisfaction of the vessels Chief Engineer.
- 2. REFERENCES / ENCLOSURES
 - 2.1. As per USCG and ABS regs.
- 3. ITEM LOCATION / DESCRIPTION
 - 3.1. Location: Engine Room Operating Level.
- 4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
 - 4.1. None
- 5. STATEMENT OF WORK

NOTE: In performing all phases of this Repair Specification, Contractor shall perform any and all "Hot Work" in compliance with applicable regulations, i.e. USCG, NFPA, ABS, etc. Obtaining "Hot Work" permit shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain "Hot Work" permit status shall be responsibility of Contractor.

There will be a Contractor walkthrough.. All questions shall be answered at this time.

- 5.1. Contractor shall provide all labor, material and equipment to remove the existing engine room console ac unit, procure a new ac unit and blower of equal size, install as per manufacture and the chief engineer recommendation, repair all ventilating ducting identified during the walk thru, test operation to the satisfaction of the Chief Engineer prior to signing the job completion.
- 5.2. While the vent ducting and console areas are opened Contractor shall degrease and clean these areas as to remove all dust, dirt and grime.
- 5.3. Coat and touch-up all new and any disturbed surfaces as per MARAD Coating Guidelines to match existing color scheme.
- 5.4. Contractor shall provide three tech manuals (one original and two copies) of the new contractor furnished AC unit to the Chief Engineer prior to completion of the job.
- 5.5. No work outside of this Specification shall be undertaken without prior approval from the Port Engineer. Contractor must first submit a Condition Report detailing the proposed changes and additional work with the pricing. No Additional work shall be started without written approval from the Port Engineer.
- 5.6. As possibility of vessel Activation exists, the job shall never exceed a period where the equipment cannot be put back in "ship-shape" condition within five (5) calendar days.
- 5.7. All work shall be completed under the terms of the attached SS Wright Industrial Work Guidelines.
- 5. PERFORMANCE CRITERIA /DELIVERABLES
 - 6.1. Operation testing
 - 6.2. Tech Manuals for the new AC unit.

WO/SR 1103195 OVERHAUL THE SSTG #1 & 2 AUXILIARY LUBE OIL SERVICE PUMPS

- 1.0 ASTRACT
- 1.1 Then intent of this item is to overhaul the SSTG #1 & 2 Lube oil service pumps as per this specification and to the satisfaction of Regulatory bodies.
- 2.0 REFERENCES / ENCLOSURES
- 2.1 As per ABS and USCG Regs.
- 2.2 Manufacture tech manual (onboard)..
- 3.0 ITEM LOCATION / DESCRIPTION
- 3.1 Location : Engine room
- 3.2 Description:
- 4.0 OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
- 4.1 GFE: None
- 4.2 GFM: None
- 4.3 GFS: None
- 5.0 STATEMENT OF WORK: 5.1 Contractor shall provide all labor, material and equipment to overhaul the vessels #1 & 2 SSTG Aux Lube oil service pumps as per this specification and to the satisfaction of Regulatory bodies.
- 5.2 Only one pump shall be removed for overhaul at a time.
- 5.3 Overhaul shall consist of but not limited:
 - 5.3.1 Replacing impeller and casing wear rings,
 - 5.3.2 Throat bushing, bearings sleeves,
 - 5.3.3 Gaskets, o-rings, packing/mechanical seals,
 - 5.3.4 Balancing rotating unit
 - 5.3.5 Conduct a laser alignment upon reinstalling to the satisfaction of the Chief Engineer.
- 5.4 While pumps are open call out internal inspection for Chief Engineer and ABS prior to reassembling pump.
- 5.5 Upon completion of reinstallation of the overhauled pumps, contractor shall test operate each pump to the satisfaction of the Chief Engineer.
- 5.6 Contractor shall present a typed Pump tolerance sheet for as found conditions and overhauled final assembled conditions to the Chief Engineer.
- 5.7 Provide a condition report of all additional discrepancies found outside this work scope and present a price for repairs. All repairs will be at discretion of the Port Engineer.
- 6.0 PERFORMANCE CRITERIA / DELIVERABLES
- 6.1 Typed Pump tolerance sheet for as found conditions and overhauled final assembled conditions

WO/SR 1103197 OVERHAUL INPORT FEED PUMP

- 1.0 ASTRACT
- 1.1 Then intent of this item is to overhaul the Inport Feedwater pump overhaul as per this specification and to the satisfaction of Regulatory bodies.
- 2.0 REFERENCES / ENCLOSURES
- 2.1 As per ABS and USCG Regs.
- 2.2 Manufacture tech manual (onboard)..
- 3.0 ITEM LOCATION / DESCRIPTION
- 3.1 Location : Engine room
- 3.2 Description:
- 4.0 OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
- 4.1 GFE: None
- 4.2 GFM: None
- 4.3 GFS: None
- 5.0 STATEMENT OF WORK:
- 5.1 Contractor shall provide all labor, material and equipment to overhaul the vessels Inboard Feedwater pump overhaul as per this specification and to the satisfaction of Regulatory bodies.
- 5.2 Only one pump shall be removed for overhaul at a time.
- 5.3 Overhaul shall consist of but not limited:

- 5.3.1 Replacing impeller and casing wear rings,
- 5.3.2 Throat bushing, bearings sleeves,
- 5.3.3 Gaskets, o-rings, packing/mechanical seals,
- 5.3.4 Balancing rotating unit
- 5.3.5 Conduct a laser alignment upon reinstalling to the satisfaction of the Chief Engineer.
- 5.4 While pumps are open call out internal inspection for Chief Engineer and ABS prior to reassembling pump.
- 5.5 Upon completion of reinstallation of the overhauled pumps, contractor shall test operate each pump to the satisfaction of the Chief Engineer.
- 5.6 Contractor shall present a typed Pump tolerance sheet for as found conditions and overhauled final assembled conditions to the Chief Engineer.
- 5.7 Provide a condition report of all additional discrepancies found outside this work scope and present a price for repairs. All repairs will be at discretion of the Port Engineer.
- 6.0 PERFORMANCE CRITERIA / DELIVERABLES
- 6.1 Typed Pump tolerance sheet for as found conditions and overhauled final assembled conditions.

WO/SR 1103515 HABITABILITY REPAIRS

- 1. ABSTRACT
 - 1.1. The intent of this item is to conduct the habitability repairs called out in this specification to satisfaction and approval of the CLS Representative.
- 2. REFERENCES / ENCLOSURES
 - 2.1. As per OHSA, ABS and USCG regs.
- 3. ITEM LOCATION / DESCRIPTION
 - 3.1. Location: Various.
- 4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
 - 4.1. None.
- 5. STATEMENT OF WORK:

NOTE: Contractor is advised to visit the ship to check access of the location and inspect the interference's and hazardous materials that shall be attended during the accomplishment of this work item.

 - 5.1. Contractor shall provide all labor, material and equipment to complete this work specification to the satisfaction and approval of ABS, USCG and the CLS Representative.
 - 5.2. In performing all phases of this Repair Specification, Contractor shall perform any and all "Hot Work" in compliance with applicable regulations, i.e. USCG, NFPA, OSHA and ABS. Obtaining "Safe for Men" and "Hot Work" permits and providing a certified competent person that shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain "Hot Work" permit status shall be responsibility of Contractor.
 - 5.3. During all hot work, grinding, cleaning and veneer molding repairs contractor shall provide ventilation fans in all areas which shall exhaust outside of the ship.
 - 5.4. Coordinate with vessel's C/E the work schedule as not to interfere with the Crew during breakfast, lunch, dinner and breaks.
 - 5.5. Procure and install new main passageway deck doors on the port and stbd entrance. Doors shall be flush mount, fire rated to meet all regulatory requirements, glass lite doors with hinges, framing, hydraulic closing actuator, door open stops, locking door knobs with four keys. Both doors shall be key alike and painted to match existing color scheme.
 - 5.6. Contractor shall issue a separate bid to conduct the following list of repairs for each stateroom listed below. Replace the shower floor pans, shower drain piping and install new terrazzo floor covering in the following staterooms as original. All repairs shall be sealed and water tight, the new flooring coatings shall match the existing floor color scheme.
 - 5.6.1.1. 2nd Officer Stateroom 4-8
 - 5.6.1.2. 3rd Officer Stateroom 12-4
 - 5.6.1.3. 3rd Assistance Eng Stateroom 12-4
 - 5.6.1.4. 3rd Assistance Eng Stateroom 8-12
 - 5.6.1.5. Dk Eng Mech Stateroom 8-12
 - 5.6.1.6. Steward Stateroom, S-5

- 5.7. Officers Mess, issue separate bid for the following repairs:
 - 5.7.1. Remove the cabinet, foundation and mirror located at Blhd 103, at The galley entrance without damaging so they be relocated in the crews mess, install a new foundation and hard mount the Officers mess refrigerator on the foundation, the new foundation shall be enclosed and painted to match the surrounding color scheme.
 - 5.7.2. Reupholster the two (2) torn bench seat cushions with exact color and material to match the backrest cushions. If color can not be matched contractor shall issue a bid to reupholster all eight cushions (8).
 - 5.7.3. Remove seven chair stanchions from the deck. Fill or weld up the stanchions and install threaded chair tie downs in each of the stanchions. The surfaces in way of stanchions removals shall be ground smooth and below the tile area as to allow for new tiles to be installed to retain proper deck height.
 - 5.7.4. Repair all loose Veneer laminate in the Officers mess and the elevator pass away. The Veneer may be replaced or re glued, contractors choice. Repairs must meet the approval of the Chief Engineer.
- 5.8. Crews Mess, Crop and remove the double unit refrigerator and overhead cabinet, grind mounts flush with the deck and recover using similar materials of same color scheme. Reinstall the previously removed cabinet, mirror and foundation from the officers mess in this same area. Exact location of cabinet setting shall be determined by the Chief Engineer.
- 5.9. Upon completion of repairs Contractor and the CLS Representative shall inspect all areas of work prior to signing job completion.
- 5.10. Any item of this work specification not required to be completed shall be a credit to Crowley Liner Services.
- 5.11. Due to limited habitability funding the Port Engineer shall decide which items in this specification shall be completed during this repair. Items not picked to be completed will be lined out on the purchase order.
- 5.12. Provide Condition Report of all additional discrepancies found outside this work scope and present a price for repairs prior to proceeding. All repairs will be at discretion of Port Engineer.
6. PERFORMANCE CRITERIA /DELIVERABLES
 - 6.1. Inspections by Port Engineer prior to signing job completion.

WO/SR 1103549 HOUSE AND MAIN DECK REFER REPAIRS

1. ABSTRACT
 - 1.1. The intent of this item is to conduct repairs to the Main deck reefer container as per this specification.
2. REFERENCES / ENCLOSURES
 - 2.1. As per ABS and USCG regs.
 - 2.2. DAIKIN, Container Refrigeration Unit Tech Manual #45 (Onboard)
3. ITEM LOCATION / DESCRIPTION
 - 3.1 None
4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
 - 4.1. None
5. STATEMENT OF WORK
 - 5.1 Contractor shall provide all labor, material and equipment to complete this specification to the satisfaction of the Chief Engineer.
 - 5.2 The following is a list of repairs to the Mn Dk and House Reefers:
 - 5.2.3 Evaporator leaking – Replace
 - 5.2.4 Replace faulty Compressor and dryer
 - 5.3 Upon completion of all repairs each unit shall be placed under a vacuum and test for leaks.

5.4 Upon satisfactory testing fill compressor with oil, charge compressor with Freon, start the reefer unit, make all necessary adjustments and prove satisfactory operational test to the Chief Engineer prior to signing off the job.

5.5 Contractor shall provide the Port Engineer with a condition report with recommended repair/discrepancies and pricing prior to proceeding.

6. PERFORMANCE CRITERIA /DELIVERABLES

6.1. Satisfactory operation test.

WO/SR 1103557 REPAIR PORT AND STBD PILOT LADDER PLATFORMS

1.0 ASTRACT

1.1 Then intent of this item is to remove the existing Port and Stbd Pilot Ladders platforms and fabricate new platforms as per original to the satisfaction of the CTM Representative.

2.0 REFERENCES / ENCLOSURES

2.1 As per ABS and USCG Regs

3.0 ITEM LOCATION / DESCRIPTION

3.1 Location : Various

3.2 Description: Various

4.0 OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES

4.1 GFE: None

4.2 GFM: None

4.3 GFS: None

5.0 STATEMENT OF WORK:

Note: Contractor is advised to visit the ship to check the access, location and inspect the interference's that shall be attended during the accomplishment of this work item and discuss shipboard cleanliness upon completion of this work item.

5.1 Contractor shall provide all labor, material and equipment to fabricate new Port and Stbd Pilot platforms using the existing platforms as a sample.

5.2 The new platform shall be fabricated from Aluminum with removable handrails. Handrails shall be approximately three feet in height, securely bolted in place, top lifeline shall be a solid bar bolted to each stanchion, knee and foot lines shall be wire rope and mounted utilizing turn buckles.

5.3 All materials and procedures which shall include weight testing shall at a minimum meet all USCG and ABS approved. The Pilots Platform shall be constructed to the satisfaction and approval of all regulatory bodies and the CLS Rep.

5.4 Prior to signing the job completion, Contractor and Chief Engineer shall walk the job and agree the job is completed to the satisfaction of the Chief Engineer.

5.5 Contractor shall provide a Condition Report of any discrepancies found outside this work scope and present a price for repairs. All and any additional work/repairs will be at discretion of the Port Engineer.

5.6. All work shall be completed under the terms of the attached SS Wrights industrial Work Guidelines to the satisfaction of the CTM Port Engineer.

6.0 PERFORMANCE CRITERIA / DELIVERABLES

6.1 None.

PERFORMANCE PERIOD – CRITICAL EQUIPMENT

1. From start of disassembly of work to completion of testing, Contractor is allowed a period of twenty (20) calendar days.

2. Contractor is urged to have all renewal materials, staging, lighting, tools, permits, etc. in place before starting disassembly work.

3. Deviation from this time schedule is permitted only with written permission of Crowley Port Engineer.

PERFORMANCE PERIOD – PURCHASE ORDER

Performance period for completion of Specification is twenty five (25) calendar days from notice to proceed.

WO/SR 1104100 REPAIR 1 AND 2 SSTG HEAT EXCHANGERS

Contractor shall provide all labor, material and equipment to remove the stainless steel cooler from #1 SSTG, disassemble, clean, take all required measurements to reproduce a second cooler as per design, reassemble and reinstall #1 SSTG cooler.

The new cooler shall be opened for inspection by Regulatory bodies, upon approval close and install the new manufactured cooler on #2SSTG in the same order as #1 SSTG Cooler.

1.0 ASTRACT

1.1 Then intent of this item is to conduct repairs to the Inboard SSTG Lube Oil Cooler in accordance with Manufacture recommendations and Tech Manual.

2.0 REFERENCES / ENCLOSURES

2.1 As per ABS and USCG Regs

3.0 ITEM LOCATION / DESCRIPTION

3.1 Location: Operating Platform aft of the Inboard SSTG.

4.0 OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES

4.1 GFE: None

4.2 GFM: None

4.3 GFS: None

5.0 STATEMENT OF WORK:

Note: Contractor shall conduct a ship check to check the access, location and inspect the interference's that shall be attended during the accomplishment of this work item.

5.1 Contractor shall provide all labor, material and equipment to remove the Inboard SSTG Lube Oil Cooler to an approved repair facility for overhaul/repairs.

5.2 The lube oil cooler tube sheets are badly wasted and will required the following repairs but not limited to:

5.2.1 Disassemble

5.2.2 Clean

5.2.3 Resurface tube sheets, or provide new tube sheets. Contractor shall price accordingly. Cooler is presently opened for viewing, contractor shall bid to resurface or replace during the ship visit.

5.2.4 Resurface end bells

5.2.5 Retube using all new materials.

5.2.6 Reassemble cooler, making sure that end bells and tube sheet division lines are properly aligned.

5.2.7 Prior to reinstallation of the Lube Oil Cooler, Contractor shall conduct an onboard Hydro of the cooler to the satisfaction of the Chief Engineer.

5.2.8 Reinstall the Cooler using new gaskets and fasteners.

5.3 Contractor shall list a cost to fabricate a New Lube Oil Cooler using Stainless Steel Materials to be a direct replacement for the original cooler.

5.3.1 Cost for Additional Cooler if required.

5.4 Contractor shall cleanup the work areas and dispose of all waste generated by this item and related growth, in accordance with all applicable; Federal, State and Local Statutes on a daily basis.

5.5 Provide a condition report of any additional discrepancies found outside this work scope and present a price for repairs. All repairs will be at discretion of the Port Engineer.

6.0 PERFORMANCE CRITERIA / DELIVERABLES

6.1 Cost to fabricate a new Lube Oil cooler as per original using stainless steel material.

WO/SR 1104148 OVERHAUL OF THE SHIPS TWO SPERRY GYROS

1. ABSTRACT

1.1. The intent of this item is to conduct an overhaul of the ships two Sperry Gyro's as per manufacture recommendations as a turnkey overhaul and repair and to the satisfaction of all Regulatory bodies and the CTM Representative.

2. REFERENCES / ENCLOSURES

2.1. As per Sperry Manufacture, ABS, USCG and IEEE regs.

2.2. Sperry Tech manual – D039A (onboard)

3. ITEM LOCATION / DESCRIPTION

3.2.1 SS Wright, Baltimore MD. Gyro Room

4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES

- 4.1. None
5. STATEMENT OF WORK
- 5.1. Contractor shall provide all labor, material and equipment and an approved Sperry Gyro tech to disassemble, clean, replace all worn and recommended manufacture parts required to properly overhaul the SS Wright's Sperry Marine MK 37 Mod D/E and MK 37 VT Gyro's as a turnkey repair/overhaul and to the satisfaction of the Regulatory bodies and the CTM Representative.
- 5.2. Gyro shall be overhauled in place.
- 5.3. Upon satisfactory overhaul, contractor shall start up and test both Gyro's to the CTM Representative prior to signing job complete.
- 5.4. All procedures, materials and repairs shall meet/exceed all USCG, IEEE and ABS regulations/requirements.
- 5.5. Provide Condition Report of all additional discrepancies found outside this work scope and present a price for repairs. All repairs shall be at discretion of Port Engineer.
6. PERFORMANCE CRITERIA /DELIVERABLES
- 6.1. Documentation of satisfactory operational testing of the Gyros prior to Signing job completion.

WO/SR 5103903 OVERHAUL SWITCH BOARD BREAKERS

1. ABSTRACT
 - 1.1. The intent of this item is to overhaul or replace the following list switchboard breakers as per this specification as a turnkey repair and to the satisfaction of all Regulatory bodies and the CLS Representative.
 2. REFERENCES / ENCLOSURES
 - 2.1. As per ABS, USCG and IEEE regs.
 3. ITEM LOCATION / DESCRIPTION
 - 3.2.1 As per the attached list of breakers
 - 3.2.2 Tech Manuals for breakers are onboard.
 4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES
 - 4.1. None
 5. STATEMENT OF WORK
- Note: Contractor shall conduct a ship check to check for accessibility and Interferences that may be attained during completion of the work specification prior to bidding this work item. There will be a Contractor walkthrough. All questions will be answered at that time.
- 5.1. Contractor shall provide all labor, material and equipment to overhaul or replace, contractors option, the list of switchboard breakers called out in item 3.1 thru 3.5 as a turnkey repair and to the satisfaction of the Regulatory bodies and the CLS Representative.
 - 5.2. Prior to removal of any breakers, Contractor shall discuss this work item with the Chief Engineer in detail as not to allow for any interruption with shipboard daily routine, maintenance and loss of ships power which shall not be more than four (4) hours max due to maintaining shipboard reefer temperatures and heating. If lost of power shall be more than four (4) hours, contractor shall provide electrical power to operate shipboard reefers, heaters and necessary lighting.
 - 5.3. Ship is expected to be out of Status from March 23, 2009 to April 3, 2009. At this time Breakers may be removed but must be back onboard and operational not later than April 3, 2009.
 - 5.4. On the RFQ Contractor shall issue a bid to cover all work associated with completing this work specification, contractor shall bid the list of breakers separately, it shall be to the contactor to determine whether he wishes to overhaul or replace the breaker/s called out in item 3.1 thru 3.5 and price accordingly as a turnkey repair/installation.
 - 5.4.1. Item 3.1: OVHL or Replace
 - 5.5. The Port Engineer will determine which breakers shall be worked as to the available funding.
 - 5.6. Upon satisfactory shop testing of the overhauled or replacement breakers contractor shall delivery documentation describing the overhaul and operational testing for each breaker to the Chief Engineer prior to signing job complete.
 - 5.7. All new breakers shall be supplied with 3 original copies of operation, maintenance and parts manuals and delivered to the Chief Engineer prior to signing job completion.

5.8. All procedures, materials and repairs shall meet/exceed all USCG, IEEE and ABS regulations/requirements.

5.9. Prior to re-installing breakers contractor shall discuss the procedure with the Chief Engineer prior to beginning any breaker installation. Shore power breaker may need to be tripped to install breakers.

5.10. Upon completion of the breaker installation, contractor shall conduct an operational test of each breaker to the satisfaction of Regulatory Bodies and Vessel's Chief Engineer.

5.11. Provide Condition Report of all additional discrepancies found outside this work scope and present a price for repairs. All repairs shall be at discretion of Port Engineer.

6. PERFORMANCE CRITERIA /DELIVERABLES

6.1. Documentation of satisfactory operational testing of breakers prior to delivery and installation.

6.2. Manuals for the new breakers.

LOCATION:

MAIN SWITCHBOARD

NAME OF BREAKER	RATED AMPS	CIRCUIT NO.	BREAKER
DECK MACHINERY, POWER PANELS NO 3A & 3B	1200	P-421	GE: AKU-
2-50			
PORT VITAL / GROUP CONTROL	900	P-425	GE: AKU-2-
50			
STBD VITAL / GROUP CONTROL	900	P-427	GE: AKU-2-
50			
BUS TIE BREAKER TO 2S, BREAKER 52-1S	4000	2S-4P-1S	GE: AKR-
6F-100			

LOCATION:

AMR SWITCHBOARD

BUS TIE BREAKER TO 1S, BREAKER 52-2S	3600	2S-4P-1S	GE: AKR-
GF-100E		SSDG BREAKER 52G	
SG-4P-25	GE: AKR-6F-75E	2720	

LOCATION:

EMERGENCY SWITCHBOARD

EMERGENCY GENERATOR, BREAKER 52EG	350	EP-400	GE: AK-
2-25			
TIE BREAKER TO MN SWBD, BREAKER 52EBT	350	P-400	GE: AK-
2-25			
WHEEKHOUSE IC PANEL	70	EP-110	GE: AK-2-
15			
ENGINE ROOM IC PANEL	70	EP-113	GE: AK-2-
15			
ELECTRONIC POWER PANEL	50	EP-114	GE: AK-2-
15			
ASTERN GUARGIAN VALVE	90	EP-116	GE: AK-2-
15			
EMERGENCY LIGHTING / PANEL NO. 1	90	EL-101	GE: AK-
2-15			
EMERGENCY LIGHTING / PANEL NO. 2	90	EL-102	GE: AK-
2-15			
WHEELHOUSE EMERG LTG. & NAV LTG PANEL	70	EL-103	GE: AK-
2-15			

WO/SR 5103904 REPAIRS TO THE VESSELS ELECTRIC FORKLIFT

1. ABSTRACT

1.1. The intent of this item is to conduct repairs to the vessels electric forklift/s as per this specification.

2. REFERENCES / ENCLOSURES

- 2.1. As per Manufacture Recommendation, OSHA, USCG and ABS regs.
- 2.2. Hyster Tech Manual TG800-AC-MMC-010 (OnBoard 170)

3. ITEM LOCATION / DESCRIPTION

- 3.1. Locations: SS Wright, 2000 S. Clinton St.; Pier 1, Baltimore, MD. 21224
- 3.2. Description: Hyster Forlift, Model E60B

4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES

- 4.1. NONE

5. STATEMENT OF WORK

Note: In performing all phases of this Repair Specification, Contractor shall perform any and all “Hot Work” in compliance with applicable regulations, i.e. USCG, NFPA, ABS, etc. Obtaining “Hot Work” permit and a competent person shall be the responsibility of the Contractor. Any and all cleaning, inerting, degreasing, and any other treatment required to obtain and maintain “Hot Work” permit status shall be responsibility of Contractor.

5.1. Contractor shall provide all labor, material and equipment to conduct repairs to the vessels electric forklift as per this specification and to the satisfaction of the CTM Representative as a turnkey repair.

5.2. The following is a list of required forklift repairs. Contractor shall issue a cost to complete all work in this specification in the RFQ Ext. Price column. The items listed below 5.2.1 thru 5.2.3. Contractor shall issue separate bids to complete each of the following items listed below. The Port Engineer shall determine which repairs are to be completed as per funding allows.

- 5.2.1. Forklift number one (1)
 - 5.2.1.1. Replace drive batteries in forklift
 - 5.2.1.2. Replace brakes, wheel cylinders and master cylinder.
 - 5.2.1.3. Replace all hydraulic hoses.
 - 5.2.1.4. Replace all four tires.

- 5.2.2. Forklift number two (2)
 - 5.2.2.1. Replace all four tires.

- 5.2.3. Forklift number three (3)

5.3. All forklift repairs and materials are to be in compliance with all OSHA and Regulatory rules and regulations.

5.4. Provide Condition Report of all additional discrepancies found outside this work scope and present a price for repairs. All repairs will be at discretion of Port Engineer.

5.5. All work covered in this specification shall be Satisfactorily completed under the the attached SS Wright Industrial Work Guidelines.

6. PERFORMANCE CRITERIA /DELIVERABLES

- 6.1. Satisfactory testing of repairs and Certificates for the new battery/s.

7. PERFORMANCE PERIOD

7.1. From start of disassembly to completion of testing, Contractor is allowed a period of 14 calendar days. As possibility of vessel Activation exists, the job shall never exceed a period where the equipment cannot be put back in “ship-shape” condition within five (5) calendar days.

7.2. Contractor is urged to have all renewal materials, staging, lighting, tools, permits, etc. in place before starting disassembly.

7.3. Deviation from time schedule is permitted only with written permission of Crowley Port Engineer.

7.4. Performance period for completion of Specification is 20 calendar days from notice to proceed (issuance of Purchase Order).

WO/SR 5100482 SERVICE THE VESSEL’S OFFICE EQUIPMENT.

1. ABSTRACT

- 1.1. The intent of this item is to service all of the vessel’s office equipment as per this specification.

2. REFERENCES / ENCLOSURES

- 2.1. None.

. ITEM LOCATION / DESCRIPTION

- 3.1. Location: SS Wright, 2000 S. Clinton Street, Pier 1, Baltimore, MD. 21224.

- 3.2. Description: Computers, Printers and Copiers throughout the vessel.

4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES

4.1. None.

5. STATEMENT OF WORK

Note: Contractor shall conduct a ship check to check the work accessibility and interferences in order to complete this work specification prior to bidding job.

5.1 Contractor shall provide all labor, material and equipment to service and repair all shipboard office computers, printers, copiers, install updated Virus Protection program on all computers, procure two new computer's, one in the Captain's office and one in the Chief Mates office. The new Computers shall be loaded with Microsoft Windows XP and Microsoft Office Professional and capable of running all shipboard required programs to the satisfaction of the CLS Representative.

5.2. The following is a list of equipment that shall be worked under this specification:

- 5.2.1. Captain Office Equipment
 - 5.2.1.1. Computer –
 - 5.2.1.2. Printer –
 - 5.2.1.3. Copier -
- 5.2.2. Chief Engineer Office Equipment
 - 5.2.2.1. Computer –
 - 5.2.2.2. Printer –
 - 5.2.2.3. Printer -
 - 5.2.2.4. Copier –
- 5.2.3. Engineering office Equipment
 - 5.2.3.1. Computer –
 - 5.2.3.2. Printer –
- 5.2.4. Chief Mates Office Equipment
 - 5.2.4.1. Copier/Fax -
 - 5.2.5. Radio Room
 - 5.2.5.1. Fax –
 - 5.2.5.2. Copier -

5.3. All Office Equipment servicing shall include but not be limited to the following:

- 5.3.1. Open and clean all CPU's, Printer's and Copiers.
- 5.3.2. Conduct hard drive maintenance and virus-scans of all CPU's .
- 5.3.3. Provide and install the latest version of 360 Norton Antivirus protection on all CPU's

covered in item 5.2.

5.2 Upon completion of all servicing, Contractor shall prove proper operation of all office equipment to the Satisfaction of the Port Engineer and the vessel's Chief Engineer.

5.3 Contractor to provide a written report detailing any repairs which may be necessary to perform on ducting following completion of cleaning. Repairs or replacements will be handled as a separate job item or as a Change Order to this job scope at the discretion of the CLS Port Engineer.

6. PERFORMANCE CRITERIA /DELIVERABLES

6.1. Contractor to provide copy of completed Job Safety Analysis (JSA) to Chief Engineer prior to commencement of any work onboard the Vessel.

6.2 Contractor to provide signed copy of attached Job Completion Form to Port Engineer as proof of completion of project. Job Completion Form to be signed by Chief Engineer of vessel.

SR/WO 5104869 CARGO BOOM REPAIRS

1. ABSTRACT

1.1. The intent of this item is to replace #6 Cargo Boom wire rope as per the specification.

2. REFERENCES / ENCLOSURES

- 2.1. As per ABS and USCG Regs.
- 2.2. Cargo Winch Tech Manual #013 & 032(on board)
- 2.3. Cargo Gear Joy Stick Stands (on board)

3. ITEM LOCATION / DESCRIPTION

3.1. #6 CARGO BOOM

4. OWNER FURNISHED EQUIPMENT / MATERIAL / SERVICES

- 4.1. Wire Rope
- 4.2. Marine wire rope dressing.
- 5. STATEMENT OF WORK

Note:

Contractor is advised to visit the ship to check access of location and inspect shipboard cleanliness and interference's that shall be attended during the accomplishment of this work item. The Ship shall return to the same level of cleanliness prior to starting the work before signing the job complete.

- 5.1 Contractor shall provide all labor, material, equipment and personnel including a qualified crane operator and riggers, to replace the #6 Cargo Boom Runner Wire as a turnkey repair and to the satisfaction of Regulatory bodies and the CLS Representative.
- 5.2 Ship Crew shall demonstrate proper operation of the boom and equipment to contractor prior to turning over #6 Boom for wire replacement.
- 5.3 Upon reassemble Wire shall be slushed with owner furnished marine wire dressing. Wire shall be re-reeved as not to allow for kinks, twists with no slack wire raps.
- 5.4 Upon reassemble of booms, Clean and Slush all wires with an approved marine wire rope dressing as per Chief Mate's direction. Test operate to prove all gear
- 5.5 Gear shall be rigged and operated as per design plans.
- 5.6 Upon completion of all cargo gear work, Contractor shall rig boom as original and perform a final operational test to prove satisfactory operation including all safety and limit switches. Neatly stow all gear as directed by the Vessel's Chief Mate and thoroughly clean and degrease all areas affected by the work.
- 5.7 Provide Condition Report of all additional discrepancies found outside this work scope and present a price for repairs. All repairs shall be at discretion of Port Engineer.
- 5.8 All work to be completed under the terms of the attached SS Wright Industrial Work Guidelines.
- 6 PERFORMANCE CRITERIA /DELIVERABLES
- 6.1 Proper operation of boom upon completion of new wire installation