



USCGC HARRIET LANE (WMEC 903)

SPECIFICATION FOR DOCKSIDE REPAIRS

FY2023

Developed By: Brett M Gardner

(Rev-0, 22 March 2023)

TABLE OF CONTENTS

Revisions Record.....	iii
Consolidated List of References.....	iv
Consolidated List of Government-furnished Property	viii
Consolidated List of Critical Inspection Items	xi
Principal Characteristics	xii
General Requirements	1
WORK ITEM 1: 28 Volt DC Helo Power Supply, Load Test	17
WORK ITEM 2: 400 Hz Power Supply (FCX Systems Inc), Load Test	21
WORK ITEM 3: Galley Gaylord Hood, Commercial Cleaning, Inspect and Repair	25
WORK ITEM 4: Compressed Air Receivers and System Valves, All, Clean, Inspect, Hydro and Lift	27
WORK ITEM 5: Steering Gear, General, Overhaul	32
WORK ITEM 6: Commissary Hoist, Inspect and Service	39
WORK ITEM 7: Decks, Helicopter Operating Areas, Preserve	43
WORK ITEM 8: Decks - Exterior, Preserve, Mil-Spec/Flight Deck System,	48
WORK ITEM 9: Interior Space and Compartment, Preserve	53
WORK ITEM 10: Watertight Doors and Scuttles, External, Renew	57
WORK ITEM 11: AC Units, Renew	61
WORK ITEM 12: Refrigeration Plants, Renew	66
WORK ITEM 13: Compartment Insulation, General, Renew	70
WORK ITEM 14: Interior Spaces, Preserve	73
WORK ITEM 15: Sanitary Space Equipment, Renew	77
WORK ITEM 16: Watertight Sliding Door, Overhaul	86
WORK ITEM 17: Temporary Services, Provide - Cutter	89
WORK ITEM 18: Auxiliary Salt Water Pump, Replace.....	92

REVISIONS RECORD

This page is used to record specification revisions, which may have occurred subsequent to a Revision 0 (Rev-0) package. Information listed is intended to provide contractors and field unit personnel a means to ensure all the current specification revision pages are present when reviewing or utilizing this specification package.

DATE	REV#	WORK ITEM#	CHANGES MADE

NOTE : All work item and paragraph numbers listed above for a given revision correspond to same numbers in the previous revision. This revised specification is self-contained with all of the above listed changes incorporated.

CONSOLIDATED LIST OF REFERENCES

The below-listed documents form a part of this specification to the extent specified herein. Approval/publication dates or revision dates/numbers are also identified, to ensure that same document versions are used at the time of specification writing and during contract execution.

All Coast Guard drawings, technical publications, and standard specifications will be provided to contractors by the Coast Guard at an appropriate time, or upon request, free of charge. Other Government documents may be accessed – free of charge – from links located on the SFLC website. Commercial sites provide access to their respective documents.

COAST GUARD DRAWINGS

«DRAWING_»

Coast Guard Drawing 901 WMEC 123-001, Rev C, Dumbwaiter TRK & FDN FR 165
Coast Guard Drawing 901 WMEC 167-001, Rev W, List of Structural Closures
Coast Guard Drawing 901 WMEC 185-015, Rev J, Aux Mchry Space No2 Fnds
Coast Guard Drawing 901 WMEC 256-002, Rev T, Mn And Aux SW Cooling Sys A&D
Coast Guard Drawing 901 WMEC 256-004, Rev A, Aux. Salt Water Mods.
Coast Guard Drawing 901 WMEC 256-013, Rev A, Mn and Aux SW Cooling Sys Diag
Coast Guard Drawing 901 WMEC 314-005, Rev B, 28.5 VDC Hlcptr Start Rect Replacement Diagram
Coast Guard Drawing 901 WMEC 314-006, Rev D, 400 Hz Hlcptr Svce Freqconv Installation Diagram
Coast Guard Drawing 901 WMEC 320-002, Rev T, Power System Feeders IWD
Coast Guard Drawing 901 WMEC 320-003, Rev U, Power System Hold
Coast Guard Drawing 901 WMEC 320-035, Rev AR, As-Built Electrical One-Line Diagram
Coast Guard Drawing 901 WMEC 331-026, Rev F, Lighting System 01 Level
Coast Guard Drawing 901 WMEC 514-001, Rev K, HVAC Sys Diag
Coast Guard Drawing 901 WMEC 516-014, Rev B, Mods Incidental to the Carrier A/C Plant Install
Coast Guard Drawing 901 WMEC 516-017, Rev A, Mods Incidental to the Carrier Reefer Plant Install
Coast Guard Drawing 901 WMEC 533-005, Rev H, H & C Potable Water System Mn Dk – A & D
Coast Guard Drawing 901 WMEC 533-006, Rev H, H & C Potable Water System, 01 Lvl & Abv A & D
Coast Guard Drawing 901 WMEC 533-007, Rev J, H & C Potable Water Blw Mn Dk
Coast Guard Drawing 901 WMEC 551-001, Rev AA, Diagram Compressed Air System
Coast Guard Drawing 901 WMEC 551-003, Rev H, Compressed Air OMS A&D
Coast Guard Drawing 901 WMEC 551-010, Rev A, Air Compressor Relocation Piping Mod
Coast Guard Drawing 901 WMEC 551-011, Rev -, Air Compressor Relocation Mchry Sp Arr Mod
Coast Guard Drawing 901 WMEC 561-009, Rev -, Steering Gear Hydraulic Cylinder Assembly
Coast Guard Drawing 901 WMEC 572-001, Rev G, Svce Hoist Instl A&D
Coast Guard Drawing 901 WMEC 584-001, Rev C, Sliding Watertight Door Piping A&D
Coast Guard Drawing 901 WMEC 621-001, Rev M, Joiner Arr Hold & 1st Platf Frs 47-82
Coast Guard Drawing 901 WMEC 621-002, Rev K, Joiner Arr 1st Platf Frs 151-228
Coast Guard Drawing 901 WMEC 621-003, Rev M, Joiner Arr Main Deck Frames 47 – 103

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

Coast Guard Drawing 901 WMEC 621-004, Rev N, Joiner Arr Main Deck Fr 103 – 207
Coast Guard Drawing 901 WMEC 621-005, Rev L, Joiner Arr 01 Level
Coast Guard Drawing 901 WMEC 621-006, Rev G, Joiner Arr 02 Level & PH
Coast Guard Drawing 901 WMEC 634-001, Rev G, Deck Covering Schedule
Coast Guard Drawing 901 WMEC 635-001, Rev K, Hull Thermal & Acoustic Insulation A/D
Coast Guard Drawing 901 WMEC 644-001, Rev E, Plumbing Fixtures List
Coast Guard Drawing 901 WMEC 800-002, Rev A, Strg Sys Hyd Mchry & Ppg Installations
Coast Guard Drawing 901 WMEC 801-003, Rev M, General Arrangement-02/Pilothouse & Above
Coast Guard Drawing 901 WMEC 801-004, Rev K, General Arrangement 01 Level
Coast Guard Drawing 901 WMEC 801-005, Rev L, General Arrangement Main Deck
Coast Guard Drawing 901 WMEC 801-006, Rev M, General Arrangement 1st Platform
Coast Guard Drawing 901 WMEC 801-007, Rev J, General Arrangement Hold
Coast Guard Drawing 905 WMEC 185-015, Rev F, Aux Mchry Space No2 Fdn
Coast Guard Drawing 905 WMEC 256-004, Rev E, AMS SW Cooling Sys A&D
Coast Guard Drawing 905 WMEC 256-011, Rev A, Mn and Aux SW Cooling Sys Diag
Coast Guard Drawing 905 WMEC 320-002, Rev H, Power System Feeders IWD
Coast Guard Drawing 905 WMEC 320-003, Rev K, Power System Hold
Coast Guard Drawing 905 WMEC 320-014, Rev AN, Electrical One-Line Diagram
Coast Guard Drawing 905 WMEC 801-018, Rev G, Booklet of General Notes and Details
NAVSEA Drawing 167-7379842, Rev A, Procedure & Welding Sequence for Non-Ballistic, Watertight
& Airtight Quick Acting or Individually Dogged Personnel Doors
NAVSEA Drawing 804-5773931, Rev A, Acoustic & Thermal Insulation For Compartments Installation
Details

COAST GUARD PUBLICATIONS

Coast Guard Commandant Instruction (COMDTINST) M10360.3, Jun 2006, Coatings and Colors
Manual
Coast Guard Technical Publication (TP) 2712, Jun 2015, Hood, Gaylord
Coast Guard Technical Publication (TP) 2721, May 2016, SWBS 572, Dumbwaiter
Coast Guard Technical Publication (TP) 2722, Feb 2019, Door, Sliding Watertight
Coast Guard Technical Publication (TP) 3910B, Apr 2020, Air Conditioning System, R-134A S/W
Cooled Chilled – Model 90RMC050-D-610
Coast Guard Technical Publication (TP) 4911, July 2008, R-134A Low Temperature Refrigeration Plat –
Type 2 – Operating and Maintenance Manual
Coast Guard Technical Publication (TP) 4931, Aug 2009, Section 321A, Precision Frequency Converters
Coast Guard Technical Publication (TP) 7099, SWBS 314, Oct 2009, Rectifier Power Supply - 28 VDC,
300 A
Coast Guard Technical Publication (TP) 9169, Aug 2018, SWBS 561, Electro-Hydraulic Steering System
& Alarm System Upgrade
Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General
Requirements
Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and
Allied Processes

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

- Surface Forces Logistics Center Standard Specification 0850 (SFLC Std Spec 0850), 2020, General Requirements for Drawing Preparation
- Surface Forces Logistics Center Standard Specification 3020 (SFLC Std Spec 3020), 2020, Overhaul AC Electrical Motors
- Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2020, General Requirements
- Surface Forces Logistics Center Standard Specification 3042 (SFLC Std Spec 3042), 2020, Shipboard Electrical Cable Removal, Relocation, Splice, Repair, and Installation
- Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2020, Auxiliary Machine Systems
- Surface Forces Logistics Center Standard Specification 5100 (SFLC Std Spec 5100), 2020, Clean Shipboard Ventilation Systems
- Surface Forces Logistics Center Standard Specification 5550 (SFLC Std Spec 5550), 2022, Fire Prevention and Response
- Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures
- Surface Forces Logistics Center Standard Specification 6341 (SFLC Std Spec 6341), 2020, Install Interior Deck Covering Systems
- Surface Forces Logistics Center Standard Specification 8635 (SFLC Std Spec 8635), 2020, Temporary Services
- Surface Forces Logistics Center Standard Specification 8636 (SFLC Std Spec 8636), 2020, Temporary Hull Accesses

OTHER REFERENCES

- American Society for Testing and Materials (ASTM) International F1508, 2016, Standard Specification for Angle Style, Pressure Relief Valves for Steam, Gas, and Liquid Services
- American Society of Mechanical Engineers (ASME) B16.34, 2017, Valves-Flanged, Threaded, and Welding End
- American Society of Mechanical Engineers (ASME) B31.5, 2013, Refrigeration Piping and Heat Transfer Components
- ASTM International (ASTM) D1330, 2010, Standard Specification for Rubber Sheet Gaskets
- Code of Federal Regulations (CFR) Title 29, Part 1915, Occupational Safety and Health Standards for Shipyard Employment
- Commercial Item Description (CID) A-A-59316, 2016, Abrasive Materials; for Blasting
- Flow Serve User Instructions Manual, 71569102
- Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-61, 2019 Edition, Pressure Testing Of Valves
- Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-67, 2017 Edition, Butterfly Valves
- Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-72, 2010 Edition, Ball Valves with Flanged or Butt-Welding Ends for General Service
- Manufacturers' Standardization Society of the Valve and Fittings Industry (MSS) SP-80, 2019 Edition, Bronze Gate, Globe, Angle and Check Valves
- Manufacturers Standardization Society of the Valve and Fittings Industry (MSS), SP-58, 2018, Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application and Installation

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

- MIL-G-21164, Jul 2019, Grease, Molybdenum Disulfide, for Low and High Temperatures, NATO Code Number G-353
- Military Specification MIL-A-22262B, March 1996, Abrasive Blasting Media Ship Hull Blast Cleaning
- MIL-PRF-24667C, March 2018, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application
- MIL-STD-1399 Section 300, Part 1, 25 September 2018, Low Voltage Electric Power, Alternating Current
- MIL-STD-419 E, Aug 2017, Cleaning, Protecting, and Testing Piping, Tubing, and Fittings for Hydraulic Power Transmission Equipment
- NAVAIR SI-ACS-AFB-1P, 01 July 2020, Air Capable Ship Aviation Facilities Bulletin No. 1P
- Naval Air Warfare Center (NAVAIR) Drawing 621055, Rev F, Visual Landing Aids Installation WMEC-270 Class Ships
- Naval Sea Systems Command (NAVSEA) Underwater Ship Husbandry Manuals (UWSH) S0600-AA-PRO-160, Jan 2011, Chapter 16, Cofferdams
- NAVSEA Technical Publication T9074-AD-GIB-010/1688, (TP 1688), July 2012, Requirements for Fabrication, Welding, and Inspection of Submarine Structure
- QPL-24667, Qualified Product List (Military) of Products Qualified Under Detail Specification MIL-PRF-24667, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application
- The Society for Protective Coatings (SSPC) Surface Preparation Standard No. 11 (SSPC-SP 11), 2013, Power-Tool Cleaning to Bare Metal
- The Society for Protective Coatings (SSPC)/NACE-International (NACE) Joint Surface Preparation Standard SSPC-SP 10/NACE No. 2, 2007, Near-White Metal Blast Cleaning

CONSOLIDATED LIST OF GOVERNMENT-FURNISHED PROPERTY

The following is a list of property, which the Government will furnish. This list supersedes any other material obligations indicated or implied by referenced drawings.

WORK ITEM	MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST (\$/UNIT)
5	N	Hydraulic Cylinder Rod Packing Shim and Ring Kit	NSN: 3040-01-118-5840	2 ea.	339.48
5	Y	Hydraulic Cylinder	NSN: 3040-01-123-6695	2 ea.	9,738.00
5	N	Dual Rotary Pump, 11/9 Ring	NSN: 4320-01-674-9389	2 ea.	1,200.00
5	N	Coupling half, shaft	NSN: 3010-01-461-2488 PN: RC4-1875-500	2 ea.	19.86
5	N	Coupling half, shaft	NSN: 3010-01-461-2486 PN: RC4-0875-187	2 ea.	19.86
5	N	Insert, flexible coupling	NSN: 3010-01-675-3035 PN: RG4-H5 50 D	2 ea.	33.00
5	N	Valve, check	NSN: 4820-01-569-6605 PN: CVH161P	2 ea.	50.00
5	N	Valve, safety relief	NSN: 4820-01-571-9823 PN: RAH121S30	2 ea.	41.70
5	N	Float switch, liquid level	NSN: 6680-01-673-5099	2 ea.	425.00
9	N	CCOL Holder	NSN: 9905-00-866-0334	40 ea.	7.99
10	N	QAWTD 01-103-4	NAVSEA # 1677044215	1 ea.	8,000
10	N	WTD 1-214-3	Unknown	1 ea.	8,000
10	N	QAWTD 1-26-2	NSN 2040-00-554-6216	1 ea.	6,255
10	N	QAWTD 1-27-1	NSN 2040-00-542-0198	1 ea.	6,000
10	N	WTH 1-216-2	Unknown	1 ea.	8,000
11	N	Flow switch	NSN: 5930-00-181-3868	2 ea.	
11	N	Gauge pressure dial indicating	NSN: 6685-01-472-4397	4 ea.	
11	N	High pressure switch	NSN: 5930-01-555-3811	4 ea.	
11	N	Oil psi switch	NSN: 5930-01-616-2012	4 ea.	
11	N	Cartridge filter drier	NSN: 4130-00-895-7967	4 ea.	
11	N	Pressure switch	NSN: 5930-01-555-3837	4 ea.	
11	N	Filter element fluid	NSN: 4330-00-957-5047	4 ea.	
11	N	TXV VALVE	NSN: 4820-01-532-9692	4 ea.	
11	N	Water regulating valve	NSN: 482-012831927	4 ea.	
11	N	Gasket flange wrv	NSN: 5330-01-644-4094	4 ea.	
11	N	Rupture disk assembly	NSN: 4820-01-420-4421	4 ea.	
11	N	Pressure relay	NSN: 4820-01-535-4011	4 ea.	
11	N	Flow control valve	NSN: 4820-01-168-2248	4 ea.	
11	N	Valve solenoid	NSN: 4810-01-122-0997	4 ea.	
11	N	Temperature control	NSN: 6685-00894-4098	4 ea.	
11	N	Differential gage	NSN: 6685-00-956-1383	4 ea.	

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

11	N	Regulating flow valve	NSN: 4820-01-164-7070	4 ea.	
11	N	Valve, calibrated flow	NSN: 4820-01-186-8687	4 ea.	
11	N	Valve, calibrated flow	NSN: 4820-00-913-44711	4 ea.	
11	N	Valve, calibrated flow	NSN: 4820-00-913-4713	4 ea.	
11	N	Right side condenser assembly	NSN: 4130-01-537-3527	2 ea.	
11	N	Gasket	NSN: 5330-00-905-5347	4 ea.	
11	N	Gage pressure dial	NSN: 6685-01-472-4397	4 ea.	
11	N	Anode, corrosion preventive	NSN: 5342-01-535-9098	4 ea.	
11	N	Head safety pressure	NSN: 4820-01-420-4421	4 ea.	
11	N	Valve safety relief	NSN: 4820-01-535-4011	4 ea.	
11	N	Gasket waterhead	NSN: 5330-01-535-3737	4 ea.	
11	N	Left side condenser assembly	NSN: 4130-01537-3507	2 ea.	
11	N	Compressor unit refrigeration	NSN: 4130-01-535-4882	4 ea.	
12	N	Vibration isolator discharge	NSN: 4820-01-589-4921	2 ea.	
12	N	Vibration isolator suction	NSN: 4820-01-589-4917	2 ea.	
12	N	Strainer assembly compressor	NSN: 4935-008184793	2 ea.	
12	N	Suspension kit springs, studs, snubbers, retainers	NSN: 5342-01-397-8769	2 ea.	
12	N	Compressor unit	NSN: 4130-01-571-5391	2 ea.	
12	N	Gasket	NSN: 5330-00-812-2395	2 ea.	
12	N	Spring-rct oil	NSN: 5360-00-719-5463,	2 ea.	
12	N	Guide oil feed	NSN: 4130-00-719-4809	2 ea.	
12	N	Strainer assembly	NSN: 4130-00-733-1526	2 ea.	
12	N	Gasket	NSN: 5330-00801-1568	2 ea.	
12	N	Gauge oil psi	NSN: 6685-01-568-9594	2 ea.	
12	N	Gauge discharge pressure	NSN: 6685-01-568-9589	2 ea.	
12	N	Gauge suction	NSN: 6685-01-569-3172	2 ea.	
12	N	Valve air condition water regulating valve	NSN: 4130-00-015-3620	2 ea.	
12	N	Gauge pressure dial	NSN: 6685-01-472-4397	2 ea.	
12	N	Condenser	NSN: 4130-01-576-56801	2 ea.	
12	N	Brass pin tube plug	NSN: 5315-01-569-1052	4 ea.	
12	N	Anode corrosion	NSN: 5342-01-535-9098	2 ea.	
12	N	Brass ring tube plug	NSN: 5365-01-569-1051	4 ea.	
12	N	Strainer sediment 3/4" Y strainer	NSN: 4730-01-672-0550	2 ea.	
12	N	Valve pressure relief	NSN: 4820-01-569-8534	2 ea.	
12	N	Rupture disk	NSN: 4820-01-569-1931	2 ea.	
12	N	Gasket 3/4" Y	NSN: 5330-01-672-0221	2 ea.	

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

		strainer			
12	N	Strainer element sediment	NSN: 4730-01-672-0541	2 ea.	
12	N	Rupture disk	NSN: 4820-01-577-5419	2 ea.	
12	N	Gasket set	NSN: 5330-01-540-7317	2 ea.	
16	N	Hydraulic Cylinder	NSN: 3040-01-115-3242	1 ea.	2,452.03
16	N	Hydraulic Pump	NSN: 4320-01-115-3476	1 ea.	1,103.49
18	N	***Auxiliary Salt Water Pump	PN: Durco MK3 Pump 2K6X4V-13	2 ea	\$42,000.00

***Government-furnished property, which is to be supplied by either the vessel or the C4IT ServiceCenter

CONSOLIDATED LIST OF CRITICAL INSPECTION ITEMS

The following is a list of work items, which contain Critical Inspection reports, which the Contractor must complete within the first 25% of the availability contract period (see SFLC Std Spec 0000, paragraph 3.2.6.5 (Inspection report particulars)):

Work Item	Title
6	Commissary Hoist, Inspect and Service
7	Decks, Helicopter Operating Areas, Preserve
18	Auxiliary Salt Water Pump, Replace

PRINCIPAL CHARACTERISTICS

270' WMEC (A-CLASS)	
PHYSICAL	
Length overall	270' 0"
Length between perpendiculars	255' 0"
Beam molded	38' 0"
Depth molded, main deck amidships	23' 6"
01 level amidships	31' 4"
Full load displacement	1,902.2 long tons
Draft, full load to baseline amidships	14' 3"
Highest projection above baseline *height approximated	≈ 110' 0"
Shore tie voltage requirements	2 cables, 400A / 450V, 3 phase
Frame spacing	1' 0"
MACHINERY	
Main propulsion	2 ALCO Model 18-251-F Diesel Engines, 3,600 BHP each
Ship's service generators	2 Caterpillar Model D-398-TA Diesel-driven KATO 6P6-1350 Generators. 475 KW each @ 0.8 power factor, 450VAC, 3 phase, 60 cycle
Emergency generators	Caterpillar Model D-348-TA Diesel-driven KATO 4P4-1900. 475KW @ 0.8 power factor, 450VAC, 3 phase, 60 cycle
Number of propellers	2
Propeller diameter	9' 0"
Number of blades, Each	4
Pitch	Controllable
Shaft RPM	260
Shaft diameter	10.55" at exit of hull
Anchor & chain	Two 4,000 lb Navy Stockless Anchors, 8 shots of chain each
TANK CAPACITIES	
Diesel fuel total (95%)	79,210 gal.
JP-5 total (95%)	25,890 gal.
Potable water total (100%)	8,553 gal.
Hydraulic & lube oil total (95%)	2,237 gal.

General Requirements

1. SCOPE

1.1 Intent. This standard specification invokes general requirements for conducting vessel repairs performed by commercial contractors at a Coast Guard facility for Coast Guard vessels.

1.2 Term interchangeability. The terms 'Contractor', 'CG Yard', 'NAVSTA EVERETT', 'shipyard', 'Base', and 'Coast Guard Industrial' are used interchangeably in this specification. Where the primary service provider is Coast Guard personnel, references to contractor and other noted descriptors within this specification or within drawings, publications, SFLC Standard Specifications or other commercial and military references are deemed the same as prime service provider.

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

Coast Guard Commandant Instruction (COMDTINST) M10360.3 (series), Coatings and Color Manual
Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General
Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and
Allied Processes

Surface Forces Logistics Center Standard Specification 5550 (SFLC Std Spec 5550), 2022, Fire
Prevention and Response

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements
for Preservation of Ship Structures

OTHER REFERENCES

Code of Federal Regulations (CFR) Title 29, Part 1915, Occupational Safety and Health Standards for
Shipyard Employment

NAVSEA Technical Publication T9074-AD-GIB-010/1688, (TP 1688), July 2012, Requirements for
Fabrication, Welding, and Inspection of Submarine Structure

3. REQUIREMENTS

3.1 General. The Contractor must conform to all requirements specified in SFLC Std Spec 0000 and in this item, as applicable, during the performance of this availability. The requirements of this WI applies to all work under the scope of this contract, whether explicitly stated in all following work items or not, and to all other work subsequently authorized by changes, modifications, or extensions to the contract.

3.1.1 The Contractor must conform to all requirements specified in SFLC Std Spec 5550 and in the Fire Protection and Response work item, as applicable, during the performance of this availability.

NOTE

NAVSEA drawings listed will be available FOR INSPECTION ONLY from the Coast Guard Port Engineer post-award. SFLC will not redistribute NAVSEA documents. Contractors can apply to NAVSEA headquarters directly for copies.

3.2 Fire watch requirements. The Contractor must refer to 3.3.1.3 (Fire watch requirements) of SFLC Std Spec 0000, in accomplishing the following task:

- Provide portable fire extinguishers for Coast Guard fire watch personnel. Coast Guard fire watch is in lieu of contractor personnel during the hours of 0800-1600, Monday through Friday, and limited to two Coast Guard fire watch personnel.
- Provide fire watch personnel and fire extinguishers for the duration of the availability period, during and beyond noted Coast Guard fire watch support.

3.3 Preservation requirements. The Contractor must accomplish all preservation tasks, including touch-ups, in accordance with SFLC Std Spec 6310.

3.3.1 Brand name approval. Ensure that all contractor-furnished coatings are in accordance with SFLC Std Spec 6310, Appendix C (Authorized Coatings for Use on Cutters and Boats).

3.3.2 Coating colors and system color schemes. The Contractor must obtain a written KO authorization to deviate from any coatings required in SFLC Std Spec 6310 Appendix C before work.

3.3.3 In-process quality control measures. The Contractor must abide by all the safety, preservation, and quality control requirements specified in SFLC Std Spec 0000, paragraph 3.2.4.2 (In-process QC measures for “critical-coated surfaces”).

3.3.3.1 Quality control requirements. The Contractor must abide by the following when performing preservation related inspections. The following measurements must be randomly spaced throughout for the purposes of providing a representation of the entire prepared or coated surface.

3.3.3.1.1 Surface profile measurements. One surface profile measurement must be taken for every 200 square feet for the first 1000 square feet; for each additional 500 square feet or less, one profile measurement must be taken. Profile measurements must be taken in accordance with SFLC Std Spec 6310, paragraph 3.1.8.3 (Surface profile measurements). A “measurement” for surface profile is defined as follows:

- ASTM D4417, Method B: One profile measurement is the average (mean) of 10 individual readings.
- ASTM D4417, Method C: One profile measurement is the average (mean) of 2 individual readings.

3.3.3.1.2 Soluble salt conductivity measurements. 5 conductivity measurements must be taken every 1000 square feet. For submerged (immersed) applications conductivity measurements must not exceed 30 microsiemens/cm. For non-submerged (non-immersed) applications conductivity measurements must not exceed 70

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

microsiemens/cm. If a conductivity check fails, clean the surface in accordance with SFLC Std Spec 6310, paragraph 3.1.8.5 (Soluble salt removal).

3.3.3.1.3 Coating thickness measurements. Three area measurements must be taken for the first 1000 square feet; for each additional 1000 square feet, perform an additional area measurement. A “measurements” for coating thickness is defined as follows:

- SSPC-PA 2 defines an area measurement as 5 separate spot measurements randomly spaced throughout a 100 square foot area.
- SSPC-PA 2 defines a spot measurement as 3 gage readings and each new gage reading the probe must be moved to a new location within a 1.5 inch diameter circle defining the spot.

3.4 Welding and brazing requirements. The Contractor must perform all welding and allied processes, and NDE in accordance with SFLC Std Spec 0740.

3.4.1 HY-130 material substitution. The Contractor must be aware that HY-130 steel plating is no longer commercially available. For the purpose of performing flight deck repairs on US Coast Guard WMEC-270 “B-Class” cutters, Weldox 900 steel plating has been approved as a replacement for HY-130. Due to the similarity in material properties and weldability of HY-130 and Weldox 900, all welding procedures and welder qualifications for welding Weldox 900 must be the same as those outlined in NAVSEA TP 1688 as applicable for welding HY-130.

3.4.2 Standard spec modification. For any welding involving HY-130 on the flight deck of WMEC-270 “B-Class” cutters, perform all welding and allied processes, and non-destructive evaluation (NDE) in accordance with NAVSEA TP 1688. The Contractor must be aware that the welding requirements specified in this document take precedence over paragraph 3.3.6 of SFLC Standard Spec 0000 for the purpose of welding involving HY-130.

3.4.3 Approval to weld HY-130. To obtain Coast Guard approval to weld on HY-130 steel for WMEC-270 “B-Class” cutters, the Contractor must provide written Performance Qualification Records (PQR’s) for each process to be used. The PQR’s must be approved by one of the regulatory agencies affirming that the WPS meets the welding requirements of NAVSEA TP 1688. In addition, the Contractor must ensure that all subcontractors, prior to performing welding operations, have qualified procedures by meeting all the requirements set forth in this document.

NOTE

NAVSEA approval is NOT required for welding procedures submitted but the procedures must be reviewed and shown to satisfy the requirements set forth in NAVSEA TP 1688, by a welding regulatory agency. The requirements for welding Weldox 900 are considered the same as those for welding HY-130.

3.5 Environmental protection requirements. The Contractor must adhere to the following environmental protection requirements in accordance with the SFLC Stand Spec 0000:

3.5.1 USCG facilities. The Contractor must provide and maintain environmental protection as defined in SFLC Std Spec 0000 Appendix B, Requirements for Environmental Protection at USCG Facilities, during the performance of this availability. Contractor must plan for and provide environmental protective measures to control pollution that develops during normal practice, as well as plan for and provide environmental protective measures required to correct conditions that develop during the project. Contractor must comply with applicable Federal, state, and local laws, codes, ordinances, and regulations in their entirety. Any reference to a specific portion of a Federal, state, or local law, code, ordinance, or regulation in this or any other item must not be construed to mean that relief is provided from any other sections of the law, code, ordinance, or regulation.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.5.1.1 USCG Generator status. The activity Generator Status for the Coast Guard Facility is Large.

3.5.1.2 Plans and permits. The CG Facility has unit specific permits including the following:

- Spill Prevention Control and Countermeasures (SPCC) Plan: Unit has a SPCC Plan which requires certain unit-specific procedures be followed for the storage, inspection, and transfer of petroleum products in containers 55 gallons or greater.
- National Pollutant Discharge Elimination System (NPDES) Storm Water (SW) Permit: Unit has an NPDES SW permit which requires unit-specific procedures be followed for the storage and inspection of equipment and materials which may contribute contaminants to storm water discharges.
- Air Emission Permit: Unit has an Air Emission Permit which requires unit-specific procedures be followed for the emissions of VOCs and hazardous air pollutants.

3.5.2 Test and procedures. The Contractor is required to promptly conduct tests and procedures for the purpose of assessing whether operations are in compliance with applicable Environmental Laws. Analytical work must be done by qualified laboratories; and where required by law, the laboratories must be certified.

3.5.3 Regulatory notifications. The Contractor is responsible for all regulatory notification requirements in accordance with Federal, State and local regulations. In cases where the Coast Guard must also provide public notification, such as storm water permitting, the Contractor must coordinate with the Contracting Officer or COR, and if work is being performed at a USCG Facility, the local Facility Engineer or Engineering Officer. The Contractor must submit copies of all regulatory notifications to the Contracting Officer and the local Facility Engineer or Engineering Officer prior to commencement of work activities. Regulatory notifications must be provided for including but not limited to demolition, renovation, National Pollutant Discharge Elimination System (NPDES) defined site work, and remediation of controlled substances such as asbestos, hazardous waste, and lead paint.

3.5.4 Environmental manager. The Contractor must appoint in writing an Environmental Manager for the project, who is responsible for coordinating Contractor compliance with Federal, State, local, and station environmental requirements. The Environmental Manager must ensure compliance with Hazardous Waste Program requirements, including hazardous waste handling, storage, manifesting, and disposal; implement the Contractors' Environmental Management Plan; ensure that all environmental permits are obtained, maintained, and closed out; ensure compliance with Storm Water Program Management requirements; ensure compliance with Hazardous Materials including storage, handling, and reporting requirements; as well as coordinate any remediation of regulated substances such as lead, asbestos, and polychlorinated biphenyl (PCB). This may be a collateral position; however the individual must be trained to accomplish the following duties; ensure waste segregation and storage compatibility requirements are met; inspect and manage Satellite Accumulation areas; ensure only authorized personnel add wastes to containers; ensure all Contractor personnel are trained in 40 CFR requirements and individual position requirements; coordinate removal of waste containers; and maintain the Environmental Records binder and required documentation, including environmental permits compliance and close-out.

3.5.5 HW disposal. Contractor must comply with SFLC Std Spec 0000 Appendix B, Requirements For Environmental Protection At USCG Facilities for HW disposal, and ensure that waste removals are conducted during normal business hours (0800-1600) on Monday through Friday (excluding holidays).

3.5.6 Additional Requirements. The Contractor must be aware of the following:

3.5.6.1 No Contractor or Subcontractor must have the authority to sign a Hazardous Waste Manifest using the Coast Guard facility's EPA Generator ID Number or remove contract generated hazardous waste from the Coast Guard facility without COR or KO-approval.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.5.6.2 Local environmental regulations at the Government facilities may be more stringent. As with all environmental regulations, the Contractor must prepare for and comply with local and state regulations.

3.5.6.3 Coast Guard facilities do not maintain Facilities Response Plans (FRPs) per 33 CFR 154. Contractor must furnish the FRP when required for over-the-water liquids transfers to and from vessels, and is required for oil/fuel transfers to/from vessels for 250 barrels (10,500 gallons) or more.

3.6 Local Policy. The Contractor must refer to site (e.g. Base) Regulations and Instructions for details regarding local policies (e.g. crane services, parking, or facility usage).

3.7 SFLC Standard Specification approved changes. The Contractor must be aware that the following are approved changes to published SFLC 2020 Edition Standard Specifications and supersede published content:

3.7.1 SFLC Standard Specification 8636. Add missing paragraphs between 3.2 and 3.5 of Std Spec 8636 as follows:

“3.3 Access cut boundaries. The Contractor shall ensure that access cuts comply with the requirements and restrictions detailed in the following and in SFLC Std Spec 0740, and referenced codes.

3.3.1 Location of boundaries. Boundaries of access cuts and closure plates shall, in general, be located between principal ship framing, bulkheads, and other structural members and shall be at least three inches from any of these members or from the toes of other welds. A reduction in this three inch minimum may be approved by the KO on a case by case basis provided sufficient clearance is maintained for welding and inspection requirements. The boundaries of access cuts and closure plates should land on existing butts or seams, wherever practicable. The boundaries of prior access cuts should be utilized wherever possible. Boundaries may extend across one or more frames as required for the size of the opening.

3.3.2 Access hole dimensions and arrangements. Holes or access cuts shall be the minimum size necessary and shall be in accordance with the following:

- Rectangular access cuts and closure plates welded into primary hull structure shall be at least 12 inches wide in the lesser dimension.
- For circular access cuts, the minimum diameter shall be $4T$, where T = thickness of the involved structural member, but not less than three inches.
- Circular closure plates for access cuts less than two feet in diameter shall be dished $1/16$ to $1/8$ inch to allow for shrinkage when welded.
- Corners of rectangular access cuts and closure plates shall have a minimum radius of 6 inches except when a boundary lands on an existing hull longitudinal seam or transverse butt weld.
- Corners at an existing seam or butt shall intersect at a 90 degree angle.
- Cuts that are to cross existing butts or seams shall do so at an angle of 90 degrees plus or minus 15 degrees.
- In primary hull structure, existing welds forming the boundary of a cut shall be cut back 3 inches beyond the toe of the access cut, except that the cut back shall not intersect or cross an existing weld, frame, or structural member. In which case, the cut back may be reduced to a minimum of two inches in length.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

- Existing welds crossed by the cut shall not be cut back.

3.3.3 Primary hull structure. Primary Hull Structure includes the shell, main strength decks, principal longitudinal bulkheads, vertical keel, deep web girders and stiffeners designed to withstand the ship bending stress.

3.3.4 Mechanically fastened joints. Welding closer than six inches to a mechanically fastened joint should be avoided. When access cuts cross or come within six inches of a mechanically fastened joint, the fasteners shall be checked for tightness and if necessary, loose fasteners shall be seal welded or removed, and replaced for a distance of 6 inches beyond the edge of the cut. When a cut crosses a mechanically fastened seam the cut plates shall be repaired using single V welds backed with glass tape (MIL-C-20079) to prevent fusion between the mechanically fastened plates.

3.4 Ship integrity maintenance. The Contractor shall maintain safety and ship integrity by installing temporary guarding and coaming, in addition to weathertight and watertight closures. Remove these temporary fabrications after closing the hull access, and grind surfaces flush in way of removals. For shell plating cuts made at or below the waterline where temporary closures are impractical, the Contractor shall secure each vulnerable compartment and subdivision to minimize potential damage to the extent permitted by the scope and urgency of the work.

3.4.1 Guarding. Install temporary guards in accordance with 29 CFR 1915.73.

3.4.2 Coaming. Ensure that in areas where flammable liquids may be stored, a 4 inch high metal coaming shall be installed on the surface of the deck with tack welds and fully sealed with caulking compound. The coaming shall encircle the access cut in the deck.

3.4.3 Weathertight and contamination closures. Fabricate temporary closures, using fire retardant material, before cutting access openings and install closures whenever access is not in use. Closures shall be:

- Constructed to protect the access from inclement weather and entry of contaminants (shall include a coaming or dam on the deck to redirect rain runoff away from the opening).
- Fitted with fasteners that permit rapid installation and removal.
- Able to support a minimum of 150 pounds per square foot for horizontal deck closures.
- Where the access opening is in way of a removed hatch, scuttle or door, the closure shall be configured to allow normal passage of ship's personnel and equipment.

3.4.4 Watertight closures. Ensure that access openings created four feet or less above the maximum anticipated waterline shall include temporary watertight closures when the vessel is waterborne.

NOTE

NAVSEA S0600-AA-PRO-160/CH16 provides requirements for design, fabrication, and installation of temporary watertight closures.”

3.7.2 SFLC Standard Specification 0000. Replace paragraph 3.3.4 Vessel access, as follows:

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

"3.3.4 Vessel access. During work at the Contractor's facility, provide access and/or egress to and from the vessel in accordance with 29 CFR 1915.74, Subpart E. Provide a minimum of two gangways that have the following:

- Adequate walking surface width and strength and be safely secured.
- A railing, with a mid-rail, on each side of the gangway, and a turn table if necessary.
- Substantial steps properly secured and equipped with at least one handrail, when the upper end of the gangway rests on or is flush with the top of the bulwark of the dock.
- Nets or other suitable protection on both sides, when there is a danger of personnel falling between the ship and the dock. Nets and other suitable protection must extend beyond the projected area of the access and egress points so as to catch a personnel that may be falling outward: i.e., the nets must be wider than the gangway.
- Proper trimming at all times.
- Adequate illumination for their full length.
- Separated by one-fourth the length of the vessel, at a minimum, as to mitigate the possibility that an incident could block both means of escape."

3.7.3 SFLC Standard Specification 8635. Replace and add paragraphs as follows,

"3.3.10.4.1 Contractor-furnished supporting equipment. Provide all hoses and fittings needed to supply water to the system. Provide pressure gauges at the connection(s) to the ship and the furthest firehose station to allow personnel to clearly read the gage-face to demonstrate or record the required water pressure is available at all energized portions of the system."

"3.2.3 Shipboard access/egress and routing of temporary services. Maintain a primary and secondary means of access/egress for each vessel, where practicable. Pre-plan for the installation of temporary services to minimize the total number of service leads penetrating the hull by maximizing the use of backbones and/or manifolds for industrial services. Pre-planning for the installation of temporary services shall include removal (first in, last out, when no longer required). Pay special attention to transitional spaces (cross passages, top and bottom of stairwells) where services could potentially fall and restrict emergency personnel egress and/or casualty responder access."

"3.2.3.2 Materials used for suspending temporary services. Temporary services shall be suspended at regular intervals, to prevent impeding personnel access/egress and emergency response, using a high temperature line that meets the noncombustibility test requirements contained in reference (e). When using steel wire rope, or other potentially abrasive material, an anti-chafing material shall be used to prevent damage of the temporary service line. When available, temporary service lines may be run through the ship's structural elements (i.e., cable ways, light stanchions, etc.). When the routing of temporary services overhead is not practicable, temporary services, rigging of hoses, welding leads, and temporary lights shall be clear of the decks on temporary "trees" or brackets and be arranged to minimize tripping and other hazards."

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

"3.2.3.5 Quick Disconnect Fittings. QDFs shall be located within 10 feet of designated vertical and horizontal fire zone boundaries. When practicable, QDFs shall be installed within 10 feet of hull penetrations used for personnel access, to facilitate the deployment of smoke control curtains. QDFs must be capable of being disconnected safely on pressurized or energized systems unless approved for use as described in paragraph 3.2.3.7. Pressurized and disconnected QDFs must prevent wetting of energized equipment. For hull openings used for services only, QDFs are not required, provided the opening is fitted with an air and smoke control "sock" that remains in place around the services. Air and smoke control curtains are not intended to provide an air tight seal of the hull opening. Rather, the curtains or socks, are to ensure that emergency responders can control the flow of air and smoke through the opening to allow for de-smoking of compartments, and minimize "chimney" effects. Curtains shall be made of fire resistant fabric meeting the requirements of NFPA 701."

"3.2.3.7 Service lines crossing fire zone boundaries. When service lines transit a fire zone boundary which cannot be safely disconnected locally (e.g., high voltage cables), the COR shall approve, in advance, the method to safely secure and remove the service."

3.7.4 SFLC Standard Specification 6310.

3.7.4.1 On page 2, replace REFERENCE "MIL-PRF-24667C, May 2008, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application" with "MIL-PRF-24667D, FEB 2021, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application"

3.7.4.2 On page 9, replace the NOTE under paragraph 3.1.8.5 as follows:

<p>NOTE</p> <p>De-ionized water may be used in cases where available fresh water has excessive chloride/chlorine content. Submit a CFR prior to using de-ionized water.</p>

4. NOTES

4.1 QA inspection forms. QA inspection forms (QA-1 thru QA-5), required in SFLC Std Spec 6310 to be completed and submitted during preservation of "critical-coated surfaces", are provided at the end of this document.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023
QA-1 - QUALITY ASSURANCE INSPECTION FORM
(PRESERVATION CHECKLIST)

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE
LOCATION OF WORK (INCL. FRAME #'S)		AREA (SQFT)	

CHECKPOINT 1 – COATING SYSTEM COMPLIANCE			
	Ensure all coatings are in compliance with SFLC Std Spec 6310, Appendix C.		
CHECKPOINT 2 - PAINT STORAGE			
	Ensure all coatings are kept at a temperature of 65 to 85°F at all times, unless otherwise specified by the coating mfg.		
CHECKPOINT 3 - AMBIENT CONDITIONS			
	Ensure surface and surrounding temperatures are each between 50 and 90°F for water-containing coatings, and 35 and 95°F for other coatings, unless otherwise specified by the coating manufacturer(s).		
	Ensure maximum relative humidity (RH) is as follows, from surface preparations through final curing of topcoat: 50% for tanks, voids, and vent plenum; and 85% for all other areas, unless otherwise specified by manufacturer(s).		
	Ensure surface temperature is at least 5°F above the dew point, unless otherwise specified by the coating mfg.		
CHECKPOINT 4 - PRE-SURFACE PREPARATION			
	Remove surface contaminants (soluble salts, loose rust, mud, and marine growth) with low pressure fresh water wash down (maximum 5,000 psi). If oil and grease are present, perform solvent cleaning, as per SSPC SP-1.		
	Verify equipment setup, blast media, and surface preparation methods match designated test coupon.		
CHECKPOINT 5 - SURFACE PREPARATION			
	Verify environmental conditions (see CHECKPOINT 3).		
	Ensure cleanliness of prepared surface is as per specification (i.e.: SSPC SP-11, SP-10, SP WJ-2...).		
	Verify surface anchor profile using ASTM D4417-Methods B or C against SFLC Std Spec 6310. Conduct profile readings at a minimum of 5 locations for the first 1000-sqft area, and 2 locations for each succeeding 1000-sqft area.		
	Measure soluble salt conductivity in accordance with SSPC-Guide 15. Conduct 5 measurements per each 1000-sqft area (max. threshold: 70 microsiemens/cm for non-submerged surfaces, 30 microsiemens/cm for submerged surfaces).		
CHECKPOINT 6 - PRIMER COAT APPLICATION			
	Verify environmental conditions (see CHECKPOINT 3).		
	Verify proper mixing and stand-in (induction) times.		
	Ensure no paint is applied when the temperature is expected to drop to freezing before the paint has dried.		
	Ensure surfaces are completely dry, unless otherwise allowed by the coating manufacturer(s).		
	Verify wet film thickness (WFT) at random, to prevent under or over application. Verify final DFT.		
	Brush out all runs, sags, drips, and puddles.		
	Perform visual inspection for holidays and other defects.		
CHECKPOINT 7 – STRIPE COAT APPLICATION			
	Verify environmental conditions (see CHECKPOINT 3).		
	Ensure overcoating window is as per manufacturer’s instructions.		
	After primer coat (mist coat after inorganic zinc), brush-apply un-thinned coat of same primer paint over edges, weld seams, cut-outs, and areas of complex geometries @ 3-4 mils wet film thickness (WFT).		
CHECKPOINT 8 – TOP COAT APPLICATION			
	Verify environmental conditions (see CHECKPOINT 3).		
	Ensure overcoating window is as per manufacturer’s instructions.		
	Verify proper mixing and stand-in (induction) times, as applicable.		
	Verify wet film thickness at random, to prevent under or over application.		
	Brush out all runs, sags, drips, and puddles.		
CHECKPOINT 9 – FINAL INSPECTION			
	Verify final system dry film thickness. Conduct 5 sets of 3 readings for each of the first 3 100-sqft areas, followed by 5 sets of 3 readings for each succeeding 1000-sqft area.		
	Ensure that system cure is in accordance with manufacturer's recommendation for intended service.		
	Ensure potable water tank exhaust ventilation is maintained continuously from and during coating application through final system cure, to exhaust all solvent to the atmosphere and to prevent solvent entrapment.		
	For immersion coatings (including tank U/W body), record date and time of the following events: Final coat application: / ; Return to service or removal from environment controls: /		
CHECKPOINT 10 – RECORD KEEPING			
	Complete, sign, and submit all provided QA Inspection Forms.		
NAME OF QP-1/NACE INSPECTOR	SIGNATURE	CERT. #	DATE / TIME
NAME OF CG REPRESENTATIVE	SIGNATURE	UNIT	DATE/TIME

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023
QA-3a - QUALITY ASSURANCE INSPECTION FORM
(SURFACE PROFILE LOG FOR PROFILE MEASUREMENTS IAW ASTM D4417-METHOD-C)

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE
LOCATION OF WORK (FRAME REFERENCES)			AREA (SQFT)

SURFACE PREPARATION METHOD	PROFILE ACHIEVED (MILS)		
	MIN	MAX	MEAN
SSPC-SP-10/NACE No. 2	<input type="checkbox"/>		
SSPC-SP WJ-2/NACE WJ-2	<input type="checkbox"/>		
SSPC-SP-3	<input type="checkbox"/>		
SSPC-SP-11	<input type="checkbox"/>		
SSPC-SP-11 (inaccessible area)	<input type="checkbox"/>		
Brush-blasting (non-metallic substrate)	<input type="checkbox"/>		
ABRASIVE MANUFACTURER:		ABRASIVE SIEVE SIZE:	

PLACE SURFACE PROFILE REPLICA TAPES IN THE SPACES PROVIDED BELOW, TO SERVE AS PERMANENT QA RECORD. MAINTAIN A SEPARATE LOG FOR EACH LOCATION. WHEN AN AREA IS DIVIDED INTO SEPARATE SECTIONS, MAINTAIN A SEPARATE LOG FOR EACH SECTION.					
Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here	
Reading (mils):		Reading (mils):		Reading (mils):	
Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here	
Reading (mils):		Reading (mils):		Reading (mils):	
Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here	
Reading (mils):		Reading (mils):		Reading (mils):	
Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here	
Reading (mils):		Reading (mils):		Reading (mils):	
Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here		Place Surface Profile Replica Tape Here	
Reading (mils):		Reading (mils):		Reading (mils):	
MEAN MIL READING (IAW ASTM D4417-METHOD C) FOR ABOVE 15 READINGS:					

NAME OF QP-1/NACE INSPECTOR	SIGNATURE	CERT. #	DATE / TIME
NAME OF CG REPRESENTATIVE	SIGNATURE	UNIT	DATE/TIME

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023
QA-3b - QUALITY ASSURANCE INSPECTION FORM
(SURFACE PROFILE LOG FOR PROFILE MEASUREMENTS IAW ASTM D4417-METHOD-B)

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE
LOCATION OF WORK (INCL. FRAME #'S)			AREA (SQFT)

SURFACE PREPARATION METHOD		PROFILE ACHIEVED (MILS)		
		MIN	MAX	MEAN
SSPC-SP-10/NACE No. 2	<input type="checkbox"/>			
SSPC-SP WJ-2/NACE WJ-2	<input type="checkbox"/>			
SSPC-SP-3	<input type="checkbox"/>			
SSPC-SP-11	<input type="checkbox"/>			
SSPC-SP-11 (inaccessible area)	<input type="checkbox"/>			
Brush-blasting (non-metallic substrate)	<input type="checkbox"/>			
ABRASIVE MANUFACTURER:		ABRASIVE SIEVE SIZE:		

RECORD MEASUREMENTS TAKEN IN THE SPACES PROVIDED BELOW, TO SERVE AS PERMANENT QA RECORD. MAINTAIN SEPARATE LOG FOR EACH LOCATION. WHEN AN AREA IS DIVIDED INTO SEPARATE SECTIONS, MAINTAIN A SEPARATE LOG FOR EACH SECTION.

Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Mean Mils Reading (IAW ASTM D4417-Method B for above 10 readings (by column):					
Mean Reading (mils)					

NAME OF QP-1/NACE INSPECTOR	SIGNATURE	CERT. #	DATE / TIME
NAME OF CG REPRESENTATIVE	SIGNATURE	UNIT	DATE/TIME

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023
 QA-5 - QUALITY ASSURANCE DATA FORM
 (COATING THICKNESS)

(Use one sheet for each sequence)

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE

COATING MFG	PRODUCT NAME	BATCH #	INDUCTION TIME	COATING SYSTEM SEQUENCE (PRIMER/TOUCHUP/3RD COAT, ETC.)

DRY FILM THICKNESS (DFT) MEASUREMENTS IAW SSPC-PA 2.						
SPOT	1	2	3	4	5	AVERAGE VALUE
*BASE METAL READING (BMR)						
*Required, If Magnetic Pull-Off (Type I/Banana) Gauge Is Used.						

LOCATION (FRAME REFERENCE):								
SPOT	1	2	3	4	5	OVERALL AVG. DFT	ADJUSTMENTS	
1							AVG. BMR	DEVIATION
2								
3							BEFORE ADJUSTMENTS	AFTER ADJUSTMENTS
AVG.								

LOCATION (FRAME REFERENCE):								
SPOT	1	2	3	4	5	OVERALL AVG. DFT	ADJUSTMENTS	
1							AVG. BMR	DEVIATION
2								
3							BEFORE ADJUSTMENTS	AFTER ADJUSTMENTS
AVG.								

LOCATION (FRAME REFERENCE):								
SPOT	1	2	3	4	5	OVERALL AVG. DFT	ADJUSTMENTS	
1							AVG. BMR	DEVIATION
2								
3							BEFORE ADJUSTMENTS	AFTER ADJUSTMENTS
AVG.								

APPLICATION METHOD (AIRLESS, CONVENTIONAL SPRAY, ROLLED)	AVERAGE DFT

NAME OF QP-1/NACE INSPECTOR	SIGNATURE	CERT. #	DATE / TIME
NAME OF CG REPRESENTATIVE	SIGNATURE	UNIT	DATE/TIME

4.2 Tank and Void Assessment form.

SFLC-ESD-25		TANK AND VOID ASSESSMENT FORM			
<input type="button" value="PRINT"/> <input type="button" value="RESET"/>					
GENERAL DATA Note: Use SFLC-ESD-29 for Compartments other than Tanks & Voids.					
Inspector's Name:		Organization:		Contact Info:	
Cutter Name:		Cutter Class:		Hull:	
Tank:		Service:		Tank Area:	Gallons:
Solid Balast:	Access Compt:		Date:	Assessment Reason:	
ACCESS DATA					
Manhole and cover condition:			Tank Penetration Condition:		
VENT OVERFLOW DATA					
Present: <input type="radio"/> Yes <input type="radio"/> No		Check Valve Installed: <input type="radio"/> Yes <input type="radio"/> No		Check Valve Operates Properly: <input type="radio"/> Yes <input type="radio"/> No	
LADDER DATA					
NR of Ladder(s) Present: <input type="radio"/> Yes <input type="radio"/> No		Ladder Damaged: <input type="radio"/> Yes <input type="radio"/> No		Ladder Material:	
TANK LEVEL INDICATOR (TLI) DATA					
TLI Present in Tank: <input type="radio"/> Yes <input type="radio"/> No		TLI Damaged: <input type="radio"/> Yes <input type="radio"/> No		TLI Type:	
SOUNDING TUBE DATA					
Sounding Tube Present in Tank: <input type="radio"/> Yes <input type="radio"/> No		Sounding Tube Damaged: <input type="radio"/> Yes <input type="radio"/> No			
Striker Plate Damaged (>50%): <input type="radio"/> Yes <input type="radio"/> No					
CATHODIC PROTECTION DATA					
Cathodic Protection in Tank: <input type="radio"/> Yes <input type="radio"/> No		Total Zincs:		Number of Zincs > 50% Depleted:	
1-6 Cleanliness & Housekeeping					
Clean to light layer or residue		1-2 (G)	Comments:		
Loose accumulation scale		3-4 (Y)			
Impending residue and sediments		5-6 (R)			
% 1-6 Coating Systems					
All Painted Surfaces		1-2 (G)	Comments:		
		3-4 (Y)			
		5-6 (R)			
% 1-6 Structural					
Corrosion		1-2 (G)	Comments:		
		3-4 (Y)			
		5-6 (R)			
Pitting & Grooving		1-2 (G)	Comments:		
		3-4 (Y)			
		5-6 (R)			
Page 1 of 2 18MAR2015					

SFLC-ESD-25	TANK AND VOID ASSESSMENT SHEET
<div style="border: 1px solid black; padding: 2px; display: inline-block;">PRINT</div>	

Structural Integrity Data			
Estimated Total Linear Feet of Structure Requiring Repair:		Estimated Total Square Feet of Plating Requiring Repair:	
Cracks/ Fractures Present:	<input type="radio"/> Yes <input type="radio"/> No	Buckling/Deflections/ Distortions Present:	<input type="radio"/> Yes <input type="radio"/> No
Holes Present:	<input type="radio"/> Yes <input type="radio"/> No	Material Wastage Present:	<input type="radio"/> Yes <input type="radio"/> No
All Welds Intact:	<input type="radio"/> Yes <input type="radio"/> No	Structural Evaluation Recommended:	<input type="radio"/> Yes <input type="radio"/> No

PHOTOGRAPHS

Pictures Taken (enter quantity):

Note: To add pictures to this form, Work Station must have Adobe Acrobat (not Reader) installed.
 Add all photos and photo comments to a word document and save file. Open this form and click "Combine Files". Add the document with photos you've just saved and save as a new combined .pdf files.

Additional Comments:

WORK ITEM 1: 28 Volt DC Helo Power Supply, Load Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to load test the 28 Volt DC Helo Power Supply.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 314-005, Rev B, 28.5 VDC Hlcptr Start Rect Replacement Diagram

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 7099, SWBS 314, Oct 2009, Rectifier Power Supply - 28 VDC, 300 A

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

OTHER REFERENCES

NAVAIR SI-ACS-AFB-1P, 01 July 2020, Air Capable Ship Aviation Facilities Bulletin No. 1P

3. REQUIREMENTS

3.1 General. The Contractor must refer to the Coast Guard drawing(s) listed under Section 2 (References) for guidance in accomplishing this work item.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences).

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.3 Load test 28 VDC helo start rectifier. The Contractor must load test the 28 VDC Helo Start Rectifier in accordance with NAVAIR Air Capable Ship Aviation Facilities Bulletin (latest revision as cited in Section 2 References) and using Coast Guard Drawing 901 WMEC 314-005 and TP 7099, as guidance. Submit completed Data Sheet via CFR.

3.3.1 In the event the load test for the 28 VDC helo start rectifier fails, the Contractor must troubleshoot and identify faulty component and submit CFR for repairs.

3.3.2 Once repairs are complete, the Contractor must re-conduct load test in accordance with paragraph 3.3 (Load test 28 VDC helo start rectifier).

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.4 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

3.5 Report. The Contractor must submit a CFR for the completed Data Sheet in Section 4.1.

4. NOTES

4.1 Data sheet.

28 VOLT DC HELO START POWER SUPPLY TEST DATA SHEET (SHEET 1 OF 2)

HULL NUMBER _____

TABLE 1: PERFORMANCE TEST DATA¹

AMPS		OUTPUT VOLTS ²
NOMINAL	ACTUAL	
0		
25		
50		
75		
100		
125		
150		
175		
200		
225		
250		
275		
300		
300 ³		

1. The calibrated load bank must be connected to the Power Supply using the helo start cable supplied with the cutter used for starting the aircraft. The cable must be adjusted prior to conducting the test so that its length is sufficient to service the aircraft in its normal landing position on the flight deck. If required to make connections to the load bank, it is permissible to conduct the test before installing the helicopter end plug.
2. The voltage at the aircraft end of all installed system servicing cables must be between 24.0 to 29.0 volts for steady state load currents from 0 to 300 amperes.
3. Perform full load test at 300A for 60 minutes. Record values at the conclusion of the full load test. Increase no-load voltage to 28.5V prior to start of this burn-in test to ensure output voltage will not drop below 24.0 during the burn-in period.

28 VOLT DC HELO START POWER SUPPLY TEST DATA SHEET (SHEET 2 OF 2)

Name Plate Data of the Power Supply

Make _____ Model _____

Serial No. _____

Calibrated Load Bank Information

Make _____ Model _____

Serial No. _____ Calibration Due Date _____

Calibrated Hand Held Voltage Meter

Make _____ Model _____

Serial No. _____ Calibration Due Date _____

Certification of Test Results

The voltage at the aircraft end of all installed system servicing cables must be between 24.0 to 29.0 volts for steady state load currents from 0 to 300 amperes.

Name of Testing Facility or Company _____

Test Conductor _____ Date _____

Test Supervisor/QC _____ Date _____

WORK ITEM 2: 400 Hz Power Supply (FCX Systems Inc), Load Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to load test the 400 HZ FCX power supply.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 314-006, Rev D, 400 Hz Hlcptr Svce Freqconv Installation Diagram

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 4931, Aug 2009, Section 321A, Precision Frequency Converters

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

OTHER REFERENCES

NAVAIR SI-ACS-AFB-1P, 01 July 2020, Air Capable Ship Aviation Facilities Bulletin No. 1P
MIL-STD-1399 Section 300, Part 1, 25 September 2018, Low Voltage Electric Power, Alternating Current

3. REQUIREMENTS

3.1 General. The Contractor must refer to the Coast Guard drawing(s) listed under Section 2 (References) as guidance in accomplishing this work item.

3.1.1 CIR.

None.

3.1.2 Tech Rep. The Contractor must provide the services of a Qualified Technical Representative who is

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

familiar with the FCX Systems Inc. PFC 400 Hz Power Supply equipment/system, to accomplish the following on site:

- Advise on manufacturer's proprietary system information.
- Ensure compliance with manufacturer's procedures and standards during system disassembly, inspection, and reassembly as applicable.

3.1.2.1 Ensure the Tech Rep has experience with the system/equipment stated above and demonstrated on their résumé.

3.1.2.2 Submit the name and résumé of the Tech Rep to the COR at the Arrival Conference.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences).

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR

3.3 Load test. The Contractor must perform load test of the 400 HZ FCX Solid State Frequency Converter in accordance with MIL-STD-1399 Section 300, Part 1 and NAVAIR Air Capable Ship Aviation Facilities Bulletin (latest revision as cited in Section 2 References), using Coast Guard Drawing 901 WMEC 314-006 and TP 4931 as guidance. Submit a CFR.

3.3.1 In the event the load test for the 400 HZ (FCX) Power Supply fails, troubleshoot and identify faulty component and submit CFR for repairs.

3.3.2 Once repairs are complete, re-conduct load test in accordance with paragraph 3.3 (400 HZ (FCX) Power Supply, load test). Submit CFR.

3.4 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

3.5 Report. The Contractor must submit a CFR for the completed Data Sheet in Section 4.1.

4. NOTES

4.1 Data sheet.

400 HZ HELICOPTER POWER SUPPLY TEST DATA SHEET (SHEET 1 OF 2)

HULL NUMBER _____

TABLE 1: PERFORMANCE TEST DATA^{1,2}

AMPS ³ (NOMINAL)	VOLTS ^{4,5}			AMPS ⁶			FREQUENCY ^{6,7}
	AN	BN	CN	A	B	C	
2							
7							
12							
17							
22							
27							
29							
29 ⁸							
Continuity between pins “E” and “F”					Satisfactory <input type="checkbox"/>		
Plug pin “N” grounded to the ship’s hull and not interrupted by the disconnect switch.					Satisfactory <input type="checkbox"/>		

- The 400Hz Helicopter Service System must be tested by connection to a suitably sized load bank and operated at loads from 2 amps up to the load specified for the Coast Guard H-65 Helicopter (10 KVA).
- The power supply must be connected to the load bank using the cable supplied to the cutter for aircraft servicing. If necessary to make the connection to the load bank, the test may be conducted prior to attachment of the helicopter end plug. The cable must be adjusted to the length necessary to service the aircraft in its normal landing position on the flight deck.
- The required amperage for this test is calculated as:

$$I = P / [(E)(3)^{1/2}]$$
 At P = 10 kVA (for H-65 Helicopter), and E = 200V (line to line), the maximum current required is 28.9 amps.
- Verify the voltage output is between the limits of 113.0 to 118.0 Volts RMS, line-to-neutral, for steady state loads from no load to full rated load, at 0.7 lagging power factor. To allow for flexibility in loading techniques, the acceptable power factor range is from 0.7 lagging to 0.8 leading power factor.
- The maximum allowable voltage unbalance is 3.0 volts RMS throughout the load range. Voltage unbalance = maximum difference between RMS phase voltage amplitudes at the utilization equipment terminals (Vmax – Vmin).
- Verify the phase rotation and frequency is in accordance with Type III power requirements of MIL-STD-1399 Section 300, Part 1.
- Frequency range must be between 398 to 402 Hz (400 Hz +/- 0.5%).
- Perform burn-in test at 29A for 60 minutes. Record values at the conclusion of the full load test.

400 HZ HELICOPTER POWER SUPPLY TEST DATA SHEET (SHEET 2 OF 2)

4.1.1 Name Plate Data of the Power Supply

Make _____ Model _____

Serial No. _____

4.1.2 Calibrated Load Bank Information

Make _____ Model _____

Serial No. _____ Calibration Due Date _____

4.1.3 Calibrated Hand Held Voltage Meter

Make _____ Model _____

Serial No. _____ Calibration Due Date _____

4.1.4 Calibrated Hand Held Ammeter

Make _____ Model _____

Serial No. _____ Calibration Due Date _____

4.1.5 Certification of Test Results

- The phase rotation and frequency is IAW the Type III power requirements of MIL-STD-1399 Section 300 Part 1.
- Voltage does not fall outside of the range of 118 Volts to 113 Volts, line-to-neutral, for the entire load range at 0.7 lagging power factor. To allow for flexibility in loading techniques, the acceptable power factor range is from 0.7 lagging to 0.8 leading power factor.
- Frequency must not fall outside of the range of 398 Hz to 402 Hz.
- Continuity must exist between pins “E” and “F”. Plug pin “N” must be grounded to the ship’s hull and not be interrupted by the disconnect switch.

Name of Testing Facility or Company _____

Test Conductor _____ Date _____

Test Supervisor/QC _____ Date _____

WORK ITEM 3: Galley Gaylord Hood, Commercial Cleaning, Inspect and Repair

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean, inspect, and repair the Gaylord Hood located in the Galley (1-145-2-Q).

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 514-001, Rev K, HVAC Sys Diag

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 2712, Jun 2015, Hood, Gaylord

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020,
General Requirements

Surface Forces Logistics Center Standard Specification 5100 (SFLC Std Spec 5100), 2020, Clean
Shipboard Ventilation Systems

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences). Known interferences include, but are not limited to the following:

- Ducting screens
- Overhead sheathing

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard Personnel perform an initial operational test of the ventilation systems included in this work item, to demonstrate existing operational condition. Submit a CFR.

NOTE

It is recommended that the Contractor conduct a ship check to verify dimensions in the table below.

3.3 Gaylord hood, repair. The Contractor must clean, inspect and troubleshoot the Gaylord hood dampening system. Submit a CFR with findings and perform repairs using Coast Guard Tech Pub 2712 as guidance.

3.4 Additional requirements. In addition to the above, the Contractor must accomplish the following:

3.4.1 Notification. Give written notification to the COR, 48 hours before starting cleaning work.

3.4.2 Additional protective covering. In addition to providing protective covering as specified in SFLC Std Spec 5100, subsection 3.1.3 (Protective measures), provide additional protective covering for all food preparation and serving surfaces in the immediate work area, as applicable, to prevent contamination.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.5 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate the ventilation systems included in this work item to be in satisfactory operating condition. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 4: Compressed Air Receivers and System Valves, All, Clean, Inspect, Hydro and Lift

1. SCOPE

1.1 Intent. The work item describes the requirements for the Contractor to clean, inspect, lift test and hydrostatically test the below designated air receivers and system valves:

TABLE 1 – RECEIVERS

SERVICE	LOCATION	QTY	OPERATING PRESSURE (PSI)
Ships Service	2-82-0-E	1	125
Start Air	3-103-0-E	2	250
Clutch Air	4-108-0-E	2	140
Ship's Whistle	02-106-0-Q	1	125

TABLE 2 – RELIEF VALVES

TYPE	SIZE	DESIGNATION	QTY	SET PRESSURE (PSI)
Relief	3/4"	Air Compressors	3	300
Relief	1/2"	Cleaning Stations	1	155
Relief	1/4"	Outboard Purifier Rdcr	1	115
Relief	3/4"	Inl DSA	2	155
Relief	2"	Ship's Service Air Receiver	1	155
Relief	2"	Diesel Engine Start Air	2	300
Relief	3/4"	Clutch Air Receiver	2	170
Relief	3/4"	Ship's Whistle Air Receiver	1	155

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 551-001, Rev AA, Diagram Compressed Air System

Coast Guard Drawing 901 WMEC 551-003, Rev H, Compressed Air OMS A&D

Coast Guard Drawing 901 WMEC 551-010, Rev A, Air Compressor Relocation Piping Mod

Coast Guard Drawing 901 WMEC 551-011, Rev -, Air Compressor Relocation Mchry Sp Arr Mod

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

OTHER REFERENCES

American Society of Mechanical Engineers (ASME) B16.34, 2017, Valves-Flanged, Threaded, and Welding End

American Society for Testing and Materials (ASTM) International F1508, 2016, Standard Specification for Angle Style, Pressure Relief Valves for Steam, Gas, and Liquid Services

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-61, 2019 Edition, Pressure Testing Of Valves

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-67, 2017 Edition, Butterfly Valves

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-72, 2010 Edition, Ball Valves with Flanged or Butt-Welding Ends for General Service

Manufacturers' Standardization Society of the Valve and Fittings Industry (MSS) SP-80, 2019 Edition, Bronze Gate, Globe, Angle and Check Valves

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences). Known interferences include, but are not limited to the following:

- Piping system.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.1.5 Operational test - initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of the compressed air system, to demonstrate existing operational condition. Submit a CFR.

3.2 Air receiver cleaning and inspection. The Contractor must clean and inspect each designated air receiver in paragraph 1.1 (Intent) as follows.

3.2.1 Blowdown the air receivers and collect the blowdown (condensate) into a separate container for inspection.

3.2.2 Visually inspect the blowdown (condensate) under a bright white light for oil or particulate contamination. Clean and visually inspect the internal and external surfaces of the air receiver for signs of corrosion, pitting, and other damage. Submit a CFR.

3.3 Hydrostatic test. The Contractor must perform a hydrostatic test of the designated air receiver(s) in accordance with SFLC Std Spec 0740, Appendix C and manufacturer’s recommended procedures. In the event a test pressure is not listed on the applicable drawing, test to 1-1/2 times the nominal operating pressure and hold for five minutes. Refer to Coast Guard Drawings 901 WMEC 551-001, 901 WMEC 551-003, 901 WMEC 551-010, and 901 WMEC 551-011 for guidance. Submit a CFR.

3.3.1 To hydrostatic test, isolate the air receiver by disconnecting all piping, relief valves, and pressure switches. Install pipe plugs/caps, to prevent backflow into compressors and other system components.

3.3.2 Hydrostatically test the air receiver(s) using clean fresh water. Ensure zero leakage from or permanent deformation of pressure-containing parts by repairing all leaks, deformations, and discrepancies.

3.3.3 Instruments and equipment that might be damaged by clean fresh water must be excluded from hydrostatic pressure test.

3.3.4 After testing, drain and thoroughly dry the air receivers with warm air. Dispose of testing fluids in accordance with all applicable Federal, state, and local regulations. Reconnect all disconnected piping and restore system. Renew any disturbed gaskets.

WARNING
Do not drain any fluids, including fresh water, into any space, bilge, or exterior location.

3.4 Contractor’s option for valve renewal. The Contractor may, at no additional cost to the Government, opt to renew valves designated for inspection and testing if preferable for the Contractor. If the Contractor elects to renew valves, the Contractor must ensure the following:

- New valves are commercial-standard type valves, conforming to the applicable standard listed in Table 1(Valve Standards).
- New valves must be equivalent (including identical material) to the valve being renewed.

TABLE 1 - VALVE STANDARDS

VALVE TYPE	INDUSTRY STANDARD
Steel Valves	MSS SP-61

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

Butterfly Valve	MSS SP-67
Ball Valves, Flanged or Butt-Welded Ends	MSS SP-72
Bronze Gate, Globe, Angle and Check Valves	MSS SP-80
Angle Style. Pressure Relief Valves	ASTM F1508
All others	ASME B16.34

3.4.1 Visually inspect the piping and mounting arrangements; and submit a CFR detailing any required modifications to accommodate the new valve(s).

3.4.2 Provide original documentation to the COR certifying each valve has been satisfactorily shop-tested. Documentation must include the set pressure, date of inspection / test, and testing facility.

3.5 Valve inspection and testing. The Contractor must inspect and test each designated air system valve as follows. Refer to Coast Guard Drawings 901 WMEC 551-001, 901 WMEC 551-003, 901 WMEC 551-010, and 901 WMEC 551-011 for guidance.

3.5.1 Relief valves. Disassemble as required, and visually inspect all parts for defects and deterioration. Submit a CFR.

3.5.1.1 Perform a lifting test on each relief valve in accordance with manufacturer's recommendations and ASME PTC 25. Ensure that each valve seats cleanly after pressure relief (without simmering), and with no allowable leakage.

3.5.1.2 Adjust the relief pressure on the designated relief valve as necessary to obtain the specified lifting pressure. After adjustment, perform a final check to confirm each relief valve's lifting pressure in the presence of the Coast Guard Inspector. After successful confirmation, install the relief valves. Renew all O-rings and gaskets. Submit a CFR.

3.5.2 Pressure reducing valves. Disassemble as required, and visually inspect all parts for defects and deterioration. Submit a CFR.

3.5.2.1 Adjust the setting on the designated reducing valve as necessary to obtain the specified pressure setting.

3.5.2.2 After adjustment, perform a final check to confirm each reducing valve's ability to maintain set pressure in the presence of the Coast Guard Inspector. After successful confirmation, install the pressure reducing valves. Renew all O-rings and gaskets. Submit a CFR.

3.6 Valve reinstallation/installation. Upon completion of all authorized work, the Contractor must accomplish the following:

- Remove and dispose of all blank flanges and associated gaskets.
- Reinstall/install all overhauled and new valves with new gaskets.
- Renew all missing or damaged valve label plates.
- Renew all bolting hardware.

3.7 Touch-up preservation, general. The Contractor must prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, paragraph 3.1.13 (Touch-ups and minor coating repairs.)

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.8 Data plates- valve. The Contractor must affix an anodized aluminum test data plate with lock wire to each valve. The data plate must be engraved with ¼-inch high letters, stating the following:

- Valve number / designation
- Set pressure (if applicable)
- Date of inspection / test.

3.9 Documentation. The Contractor must provide documentation to the Coast Guard Inspector certifying each valve tested. Documentation must include the valve number / designation, set pressure, date of inspection / test, and testing facility.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.10 Operational test – post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate the compressed air system to be in satisfactory operating condition. Submit a CFR.

3.11 Surface preservation. The Contractor must prepare and coat the receiver exterior surfaces, using the system specified for “Machinery, Operating Temperatures Under 200 °F” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select finish/top coat color to match previous paint scheme.

3.12 Data plates- air receiver. The Contractor must affix an anodized aluminum test data plate with epoxy resin cement to each air receiver. The data plate must be engraved with ¼-inch high letters, stating the following:

- Receiver name / number.
- Hydrostatic test pressure (if applicable).
- Date of inspection / test.
- Testing facility.

3.13 Documentation. The Contractor must provide documentation to the Coast Guard Inspector certifying each air receiver tested. Documentation must include the receiver name / number, method of testing, hydrostatic test pressure (if applicable), date of inspection / test, and testing facility.

4. NOTES

4.1 Air receiver definition. An air receiver is a pressure vessel for the storage of air at 600 psig and below.

WORK ITEM 5: Steering Gear, General, Overhaul**1. SCOPE**

1.1 Intent. This work item describes the requirements for the Contractor to overhaul the port and starboard steering system assemblies, located in the Steering Gear Room.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST (\$/UNIT)
N	Hydraulic Cylinder Rod Packing Shim and Ring Kit	NSN: 3040-01-118-5840	2 ea.	339.48
Y	Hydraulic Cylinder	NSN: 3040-01-123-6695	2 ea.	9,738.00
N	Dual Rotary Pump, 11/9 Ring	NSN: 4320-01-674-9389	2 ea.	1,200.00
N	Coupling half, shaft	NSN: 3010-01-461-2488 PN: RC4-1875-500	2 ea.	19.86
N	Coupling half, shaft	NSN: 3010-01-461-2486 PN: RC4-0875-187	2 ea.	19.86
N	Insert, flexible coupling	NSN: 3010-01-675-3035 PN: RG4-H5 50 D	2 ea.	33.00
N	Valve, check	NSN: 4820-01-569-6605 PN: CVH161P	2 ea.	50.00
N	Valve, safety relief	NSN: 4820-01-571-9823 PN: RAH121S30	2 ea.	41.70
N	Float switch, liquid level	NSN: 6680-01-673-5099	2 ea.	425.00

2. REFERENCES**COAST GUARD DRAWINGS**

Coast Guard Drawing 901 WMEC 800-002, Rev A, Strg Sys Hyd Mchry & Ppg Installations

Coast Guard Drawing 901 WMEC 561-009, Rev -, Steering Gear Hydraulic Cylinder Assembly

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 9169, Aug 2018, SWBS 561, Electro-Hydraulic Steering System & Alarm System Upgrade

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

Surface Forces Logistics Center Standard Specification 3020 (SFLC Std Spec 3020), 2020, Overhaul AC Electrical Motors

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2020,
Auxiliary Machine Systems

OTHER REFERENCES

MIL-G-21164, Jul 2019, Grease, Molybdenum Disulfide, for Low and High Temperatures,
NATO Code Number G-353

MIL-STD-419 E, Aug 2017, Cleaning, Protecting, and Testing Piping, Tubing, and Fittings for
Hydraulic Power Transmission Equipment

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

3.1.3.1 Protection of fine surfaces. The Contractor must protect all fine surfaces in accordance with SFLC Std. Spec 5000.

3.1.3.2 Hydraulic system contamination protection. The Contractor must maintain existing hydraulic cleanliness in accordance with SFLC Std. Spec 5000.

3.1.3.3. Immediately after disconnecting or removing components from the hydraulic system, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

Be aware that plastic bags may be used only when arrangement or configuration prevents the use of the other sealing methods specified above.

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000 (Interferences). Known interferences include, but are not limited to the following:

- Piping
- Controls
- System Fluids
- Wiring

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.1.4.1 The Contractor must drain the hydraulic fluid (up to 150 gallons) to a suitable container and dispose of in accordance with Federal, state and local regulations.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of the steering system to demonstrate existing operational condition. Submit a CFR.

3.2.1 Record the time it takes to run the rudders hard over from 35 deg right rudder to 35 deg left rudder, then repeat in the other direction. Verify that the rudder hard over time is not greater than 20 seconds for single HPU operation, or 10 seconds when operating both HPU's. Record the maximum pressure observed during rudder swing.

3.2.2 Record accuracy of helm commands and rudder angle indicators to actual tiller position at amidships, 5, 15, 25, and 35 degrees (left and right rudder). Verify that the error does not exceed 1/4 degree for rudder angles of 5 degrees and less and 1/2 degree for larger rudder angles.

3.2.3 Use an ammeter to record the amperage at startup and during rudder swing to three different positions - hard over port, amidships, and hard over starboard.

WARNING

Take all necessary precautions to prevent injury due to electric shock and potential arc-flash from energized equipment. Only necessary personnel (contracted or Ship's Force) may be present in the compartment while energized panels are open.

3.2.4 Submit a list of readings to the Coast Guard Inspector for the pump and motor units, including speeds, accuracy readings, discharge pressures, and motor current draw.

3.3 Removal/disassembly. The Contractor must remove/disassemble the steering system assembly to the extent necessary to accomplish overhaul procedures.

3.4 Overhaul specifics. The Contractor must accomplish the following overhaul tasks in accordance with SFLC Std Spec 5000 Appendix C, using Coast Guard drawings and tech pubs listed in Section 2 (References) and MIL-STD-419 as guidance. Submit a CFR.

3.4.1 Motor and pump couplings. Remove, clean, inspect, and reinstall the couplings for the motors and pumps. Renew all keys, set screws, gaskets, and seals. Ensure alignment.

3.4.2 Dual pump. Remove, disassemble, clean, inspect, reassemble, and reinstall both pump assemblies. Clean and visually inspect all disassembled components for wear and deterioration. Renew the bearings, shaft seals, vanes, springs and gaskets.

3.4.2.1 Government's right for change out. The Contractor must be aware that the Government reserves the right to furnish a new dual rotary pump for installation in place of an existing dual rotary pump. If the Government exercises this right, the Contractor must dispose of the removed dual rotary pump in accordance with all applicable Federal, state, and local regulations.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.4.3 Electric motors. Remove both pump motors to a suitable repair facility for overhaul. Completely disassemble, overhaul, test, and reassemble the motors in accordance with SFLC Std Spec 3020 and using TP 9169 as guidance. Renew the bearings and lubricate in accordance with manufacturer’s instructions.

3.4.4 Valves, switches, and sensors. Perform the following for hydraulic valves, switches, sensors, and gauges.

DESCRIPTION	QTY
HPU Check Valves	4
HPU Relief Valves*	2
Counterbalance Valves**	4
Directional Control Valves	2
Sequence Valves***	2
Blocking Valves	2
Level/Temperature Sensors	2
Pressure Switches	2
Pressure Gauges	2
Dual Relief Valves****	2
System Ball Valves	14

*Reset pump relief valves to lift at 1750 psi

**Reset counterbalance valves to lift at 1750 psi (15/16 turns CCW)

*** Sequence valves are set at the factory to prevent motor from exceeding max rated amps at full load conditions, DO NOT ADJUST.

****Reset dual relief valves to lift at 2130 psi

3.4.4.1 HPU valve manifold assemblies. Disassemble, clean, inspect, bench test, and reassemble the Hydraulic Power Unit (HPU) valve manifold assemblies in accordance with SFLC Std Spec 5000, Appendix C, paragraph C2.4, consisting of the following components.

- Directional control valves
- HPU relief valves
- HPU check valves
- Counterbalance valves
- Sequence valves
- Blocking valves

3.4.4.2 Cylinder relief valves. Remove and test each cylinder relief valve to the designated lifting pressure in accordance with SFLC Std Spec 5000, Appendix C, and manufacturer’s instructions. Ensure that each valve seats cleanly after pressure relief, and with no leakage. Adjust the relief pressure as necessary to obtain the lifting pressure. After adjustment, perform a final test to confirm each relief valve's lifting pressure with the Coast Guard Inspector present. After successful testing, install the relief valves. Renew all O-rings and gaskets.

NOTE

For valve renewals, a separate lifting pressure test is not required provided the valve is supplied with all necessary documentation showing evidence of testing (shop set records from the manufacturer) at the correct lifting pressure.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.4.4.2.1 Written certification. After completion of testing (and after any authorized repairs), submit written documentation listing each relief valve tested, the date of test, and testing facility to the COR.

3.4.4.2.2 Data plates. Affix to relief valve body an anodized aluminum test data plate using lock wire to lanyard to the valve body. Engrave the data plate with ¼-inch high letters stating the following:

- Vessel name and hull number.
- Valve identification number.
- Valve lifting pressure or set pressure.
- Date of test and set.
- Name of testing facility.

3.4.4.3 System ball and check valves. Remove, disassemble, clean, inspect, bench test, reassemble and reinstall ball valves and check valves with new gaskets, seals and O-rings.

3.4.4.4 Pressure gauges. Remove, calibrate, and reinstall pressure gauges in accordance with SFLC Std Spec 5000, Appendix C, Paragraph C2.5.

3.4.4.5 Switches and sensors. Remove, test, and reinstall switches and sensors in accordance with SFLC Std Spec 5000, Appendix C, Paragraph C2.4.4.2.

3.4.4.6 Government's right for change out. The Contractor must be aware that the Government reserves the right to furnish new hydraulic valves, sensors, and switches for installation in place of the existing. If the Government exercises this right, the Contractor must dispose of the removed valve(s), sensor(s), or switch(s) in accordance with all applicable Federal, state, and local regulations.

3.4.5 Filters, strainers and magnetic plugs. Renew all hydraulic power unit filters and clean and inspect all strainers and magnetic plugs in accordance with TP 9169.

3.4.6 Hand pump assembly/fluid motor. Remove, disassemble, clean, inspect, reassemble, and reinstall the emergency hand pump assembly/fluid motor, including integral check valve assembly.

3.4.7 Hydraulic actuators. Disassemble, clean, inspect, and reassemble hydraulic cylinders or ram assembly, including spherical bearings, pins, connecting links, and retainers, as applicable, in accordance with TP 9169. Visually inspect all the components for wear and deterioration. Remove all burrs, nicks and scratches from sliding surfaces with emery cloth.

3.4.7.1 Submit CFR with repair recommendations for any damage to ram or cylinder surfaces that cannot be corrected by minor dressing. Any resurfacing must be accomplished using WSC-1 Tungsten Carbide.

3.4.7.2 Reassemble with new Government-furnished parts.

3.4.7.3 Government's right for change out. The Contractor must be aware that the Government reserves the right to furnish a new hydraulic cylinder for installation in place of the existing cylinder. If the Government exercises this right, the Contractor must turn over the removed hydraulic cylinder to the Coast Guard PA as an MTI item.

3.4.8 Hydraulic reservoir cleaning. Clean the hydraulic reservoirs with a lint-free cloth to remove all foreign debris.

3.4.9 Mechanical linkages. Inspect all mechanical linkages for excessive play.

3.5 Reassembly/reinstallation. The Contractor must reassemble the steering system assemblies with new seals, O-rings, and gaskets, and restore the system to its original configuration as shown on Coast Guard drawings and tech pubs listed in Section 2 (References). Properly lubricate the system in accordance with manufacturer's recommendations, with lubricant conforming to MIL-G-21164, Symbol GMD.

3.6 Hydraulic fluid renewal. The Contractor must renew the system hydraulic fluid in accordance with TP 9169 and SFLC Std Spec 5000, Appendix C, Paragraph C2.1 (Fluids).

3.7 Alignment. The Contractor must accomplish alignment procedures for the steering system in accordance with TP 9169.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.8 Leak test. After completing all authorized mechanical (i.e. threaded, bolted, etc.) joint repairs, the Contractor must test the steering system's operation using the system fluid at normal operating pressure. Ensure zero visible leakage from or deformation of mechanical parts by repairing all leaks and discrepancies. Submit a CFR.

3.9 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate the steering gear to be in satisfactory operating condition. Submit a CFR.

3.9.1 Record the time it takes to run the rudders hard over from 35 deg right rudder to 35 deg left rudder, then repeat in the other direction. Verify that the rudder hard over time is not greater than 20 seconds for single HPU operation, or 10 seconds when operating both HPU's. Record the maximum pressure observed during rudder swing.

3.9.2 Record accuracy of helm commands and rudder angle indicators to actual tiller position at amidships, 5, 15, 25, and 35 degrees (left and right rudder). Verify that the error does not exceed 1/4 degree for rudder angles of 5 degrees and less and 1/2 degree for larger rudder angles.

3.9.3 Use an ammeter to record the amperage at startup and during rudder swing to three different positions - hard over port, amidships, and hard over starboard.

WARNING

Take all necessary precautions to prevent injury due to electric shock and potential arc-flash from energized equipment. Only necessary personnel (contracted or Ship's Force) may be present in the compartment while energized panels are open.

3.9.4 Submit a list of readings to the Coast Guard Inspector for the pump and motor units, including speeds, accuracy readings, discharge pressures, and motor current draw.

3.10 Dock trial. Ensure that the rudders travel a total of a 70-degree arc (35 degrees to port and to starboard) without chattering or binding. Document and fix all leaks detected.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 6: Commissary Hoist, Inspect and Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and service the Commissary Hoist system.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 123-001, Rev C, Dumbwaiter TRK & FDN FR 165

Coast Guard Drawing 901 WMEC 572-001, Rev G, Svce Hoist Instl A&D

Coast Guard Drawing 905 WMEC 801-018, Rev G, Booklet of General Notes and Details

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 2721, May 2016, SWBS 572, Dumbwaiter

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020,
General Requirements

Surface Forces Logistics Center Standard Specification 3020 (SFLC Std Spec 3020), 2020,
Overhaul AC Electrical Motors

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2020,
Auxiliary Machine Systems

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the inspections listed in the following paragraph:

- 3.2. Table 2, Task 1 (Operate and Inspect - initial).

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences).

3.1.5 Special requirements for various components. If a repair task specified in paragraph 3.2 below, or any related subsequent repairs associated with this work item, requires work to be performed on one or more of the special component types listed in the first column of Table 1 below, the Contractor must perform all work on those components in accordance with the corresponding Appendix and paragraph of SFLC Std Spec 5000 listed in the second column of Table 1 below. The Contractor must refer to the Coast Guard drawings listed in Section 2 (References) for guidance in accomplishing this work item.

TABLE 1 – COMPONENTS WITH SPECIAL REQUIREMENTS

COMPONENT	APPENDIX & PARAGRAPH
Fastener assemblies	D2.1
Wire rope assemblies	D2.2
Brakes and clutches	D2.3
Open gearing and gear reducers	D2.4

3.2 Repairs or other maintenance. The Contractor must perform the tasks listed in Table 2 below in accordance with Coast Guard Drawing 901 WMEC 572-001 and TP 2721; and using SFLC Std Spec 5000 as guidance. Refer to paragraph 3.2 of SFLC Std Spec 5000 for definitions of task types (e.g. “Service and Inspect”). Submit CFR(s) for all tasks unless otherwise specified in Other column, to document all inspections, to recommend additional repairs, and to document completed maintenance and repair tasks.

TABLE 2 – MAINTENANCE REQUIREMENTS

#	TASK TYPE	QTY	COMPONENT OR ASSEMBLY	ADDITIONAL REQUIREMENTS	
				APPENDIX AND/OR PARA. FROM SFLC STD SPEC 5000	OTHER
1	Operate and Inspect (initial)	1	Commissary Hoist	3.2.1 (Operate and inspect)	Submit a CIR.
2	Operational Test	1	Carriage Broken Rope Safety Device Assembly	N/A	Test in accordance with referenced Coast Guard TP. Accomplish after Service and Inspect task
3	Weight Test	1	Commissary Hoist	3.2.8 (Operational and weight testing)	Weight test in accordance with referenced Coast Guard TP. Static Load Test Weight: 2000 (+100 -0)

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

				ADDITIONAL REQUIREMENTS	
#	TASK TYPE	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND/OR PARA. FROM SFLC STD SPEC 5000	OTHER
					lbs. Dynamic Load Test Weight: 1500 (+75 - 0) lbs. Rated Load Test Weight: 1000 (+50 -0) lbs.
4	Fabricate and Install	1	Label plates	B-2.9 (Label plates)	System: Commissary Hoist Static Load Test Weight: 2000 lbs. Dynamic Load Test Weight: 1500 lbs Rated Load Test Weight: 1000 lbs
5	Service and Inspect	1	Head Sheave Assembly	3.2.2 (Service and inspect)	N/A
6	Service and Inspect	1	Deflection Sheave Assembly	3.2.2 (Service and inspect)	N/A
7	Service and Inspect	2	Carriage Guide Roller and Side Roller Assemblies	3.2.2 (Service and inspect)	N/A
8	Service and Inspect	1	Carriage Sheave Assembly	3.2.2 (Service and inspect)	N/A
9	Service and Inspect	1	Carriage Broken Rope Safety Device Assembly	3.2.2 (Service and inspect)	N/A
10	Service and Inspect	1	Slack Rope Safety Device Assembly	3.2.2 (Service and inspect)	N/A
11	Service and Inspect	1	Wire Rope Drum and Drum Shaft Assembly	3.2.2 (Service and inspect)	N/A
12	Service and Inspect	1	Sprockets and Sprocket Shaft Assemblies, Roller Chain, and Chain Tension Assembly	3.2.2 (Service and inspect)	N/A
13	Service and Inspect	1	Electric Disk Brake	D-2.3 (Brakes and clutches)	Renew friction discs.
14	Service and Inspect	1	Main Deck Door Assembly	3.2.2 (Service and inspect)	N/A
15	Service and Inspect	1	Main Deck Control Station	3.2.2 (Service and inspect)	N/A
16	Service and Inspect	1	Main Deck Door Switch Assembly	3.2.2 (Service and inspect)	N/A
17	Service and Inspect	1	Hold Level Door Assembly	3.2.2 (Service and inspect)	N/A
18	Service and Inspect	1	Hold Level Deck Control Station	3.2.2 (Service and inspect)	N/A

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

#	TASK TYPE	QTY	COMPONENT OR ASSEMBLY	ADDITIONAL REQUIREMENTS	
				APPENDIX AND/OR PARA. FROM SFLC STD SPEC 5000	OTHER
19	Service and Inspect	1	Hold Level Deck Door Switch Assembly	3.2.2 (Service and inspect)	N/A
20	Service and Inspect	All	Guide Rail Assemblies	3.2.2 (Service and inspect)	N/A
21	Service and Inspect	1	Carriage Assembly	3.2.2 (Service and inspect)	N/A
22	Service and Inspect	1	Up Over Travel Limit Switch Assembly	3.2.2 (Service and inspect)	N/A
23	Service and Inspect	1	Down Stop Limit Switch Assembly	3.2.2 (Service and inspect)	N/A
24	Service and Inspect	1	Up Stop Limit Switch Assembly	3.2.2 (Service and inspect)	N/A
25	Service and Inspect	1	Slack Rope Safety Device Limit Switch Assembly	3.2.2 (Service and inspect)	N/A
26	Service and Inspect	1	Worm Gear Reducer	D-2.4 (Open gearing and gear reducers)	N/A
27	Service and Inspect	1	Electric Motor	N/A	Perform initial inspection only in accordance with SFLC Std Spec 3020 section 3.3.
28	Service and Inspect	1	Electric Motor Controller Assembly	N/A	Clean interior of controller cabinet. Inspect interior components for burnt spots, fraying, overheating, damage, loose connections. Tighten any loose connections.
29	Renew	1	Wire Rope Assembly	D-2.2 (Wire rope assemblies)	Submit pull test certification documents supplied with wire rope assembly to COR.
30	Groom and Lubricate	1	Commissary Hoist Assembly	3.2.6 (Groom and lubricate)	N/A
31	Operational test - final	1	Commissary Hoist	3.2.1 (Operate and Inspect)	N/A

4. NOTES

This section is not applicable to this work item.

WORK ITEM 7: Decks, Helicopter Operating Areas, Preserve

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to preserve the Helicopter Operating (HELO Ops)/Flight Deck and adjacent areas (see 4.1 (Definition of HELO Ops Areas)).

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 801-004, Rev K, General Arrangement 01 Level

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

OTHER REFERENCES

MIL-PRF-24667C, March 2018, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

Naval Air Warfare Center (NAVAIR) Drawing 621055, Rev F, Visual Landing Aids Installation WMEC-270 Class Ships

NAVSEA Standard Item 009-32, FY-22 CH-1, Feb 2021, Cleaning and Painting Requirements; Accomplish

QPL-24667, April 2021, Qualified Product List (Military) of Products Qualified Under Detail Specification MIL-PRF-24667, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

The Society for Protective Coatings (SSPC)/NACE International (NACE), Joint Surface Preparation Standard SSPC-SP 10/NACE No. 2, 2007, Near-White Blast Cleaning

The Society for Protective Coatings (SSPC) Surface Preparation Specification No. 11 (SSPC-SP 11), 2020, Power Tool Cleaning to Bare Metal

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the inspections listed in the following paragraph:

- 3.6.2 Substrate inspection

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences). Known interferences include, but are not limited to the following:

- Flight deck safety net assemblies.
- Talon grid cover.
- Flight deck landing lights.
- Deck drain gratings.

NOTE

Hangar Bay must be in the retracted position prior to taking and recording any measurements for the Visual Landing Aids and safety markings on flight deck.

3.2 Visual Landing Aid (VLA) and safety marking sketch. Prior to commencing surface preparation tasks, the Contractor must develop and submit, to the COR, a sketch of all existing Flight Deck VLA and safety markings and their measured locations on the Flight Deck, using NAVAIR Drawing 621055 as guidance. Obtain Coast Guard Inspector approval of the sketch, prior to applying new marking paint (see 3.6.4 (VLA and safety markings)).

3.3 Containment and ambient condition control. For exterior surface preservation, the Contractor must provide suitable fully-enclosed tenting for the purpose of maintaining satisfactory environmental conditions and containing generated dust, paint chips, and spent abrasives. Additionally, the Contractor must provide any and all equipment necessary to control the ambient conditions, throughout the entire surface preparation and preservation processes, satisfying the requirements specified in SFLC Std Spec 6310, Section 3 (Requirements) to include the recommended conditions provided by the coating system's manufacturer. Equipment may include, but is not limited to:

- A/C system
- Heaters
- Blowers
- Dehumidifiers

3.4 Polyurethane coatings. The Contractor must be aware that two-part polyurethane primers, membranes, color toppings, and non-skid are not authorized for application on Coast Guard vessels, even if listed on QPL-24667.

NOTE
Coast Guard personnel will operate all shipboard machinery and equipment.

3.5 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.6 Preservation requirements. The Contractor must prepare and coat the deck surfaces designated in paragraph 1.1 (Intent), using the system specified in Table 1. Non-skid systems (primer, non-skid topcoat, and color topping) must be installed in accordance with NAVSEA Standard Item 009-32 for Flight Deck Certification. Ensure that the system is qualified as “UV/LSA”, as designated on QPL-24667.

TABLE 1 - FLIGHT DECK COATING SYSTEM

EXTERIOR SURFACES TO BE PRESERVED	SURFACE PREPARATION / (ANCHOR PROFILE IN MILS)	COATING SYSTEM	DFT (MILS)	NOTES
Flight Deck	SSPC-SP 10/NACE NO. 2 using grit conforming to MIL-A-22262 / (3.0-6.0)	1) One Full Coat Primer MIL-PRF-24667 Type I, Comp. G 2) Stripe Coat MIL-PRF-24667 Type I, Comp. G 3) One Full Coat Primer MIL-PRF-24667 Type I, Comp. G 4) One Coat Non-Skid MIL-PRF-24667 Type I, Comp. G	Follow Manuf. Instructions	1, 2, 3, 4,5

1. Color coating flight decks for other than required markings is not authorized. Non-skid material is rolled on over primer within 48 hours for best adhesion.
2. Power tool cleaning to bare metal (SSPC-SP 11) may be used in areas that cannot be accessed by abrasive blasting.
3. Waterjetting may be used only as a means of coating removal. Final surface preparation must be via abrasive blasting to the standard specified in Table 1.
4. Recyclable encapsulated abrasive media may not be used.
5. Flight decks are constructed of High Yield (HY) steel and must not be heated to remove the existing coating.

3.6.1 The Flight Deck coating system must be procured as a qualified system conforming to MIL-PRF-24667 containing the following:

- Anti-corrosive/primer coating.
- Dark grey color (36076) non-skid top coating.
- Dark grey color (36076) finish coating, for non-skid exempted areas.
- White finish color (37875) coating, for VLA and safety markings.

3.6.2 Substrate inspection. After completion surface preparation and before application of primer coat, the Contractor must perform a visual inspection of the prepared substrate; submit a CIR.

3.6.3 Non-skid exempted areas. Apply top/finish coating, in lieu of non-skid top-coating over the following non-skid-exempted areas:

- Deck fittings, including, but not limited to: pad eyes, label plates, net supports/foundation, helicopter tie-down fittings, and lifting handles for aircraft fuel filling station.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

- Areas within two inches of deck fittings and protrusions.
- Areas within six inches of adjacent bulkheads, deck coaming, and deck edges.
- Waterways.

3.6.4 VLA and safety markings. The Contractor must accomplish the following tasks:

3.6.4.1 Remove Flight Deck landing lights in way of work. Visually inspect light assemblies and submit CFR. Prepare and preserve light assemblies to match existing in accordance with SFLC Std Spec 6310. Reinstall light assemblies to original configuration.

3.6.4.2 Stripe the Flight Deck with the same pattern sketched prior to surface preparation.

3.6.4.3 Paint new VLA and safety markings with a White color (37875) finish coating.

3.7 Low temperature cure system. If a Change Request has been authorized and released, the Contractor may apply a legacy low temperature cure system, conforming to MIL-PRF-24667 Type VIII, Composition G.

NOTE

The low temperature system is only authorized for application at temperatures between 35-45 degrees F.

3.8 In-process quality control measures. The Contractor must abide by all the safety, preservation, and quality control requirements specified in SFLC Std Spec 0000, paragraph 3.2.4.2 (In-process QC measures for “critical-coated surfaces”).

NOTE

Surfaces being preserved are considered “critical-coated surfaces”.

3.9 Non-skid surface appearance and texture. The Contractor must ensure the non-skid surface shows a pattern of peaks and ridges. The ridge profile must be continuous and reasonably uniform. Peaks and ridges must be generally in the same direction (fore and aft), approximately 1/2 to 1 inch apart, and approximately 1/16 to 3/32 inches high. Aggregate must present a rough uniformly coarse appearance over the entire surface with no loosely bound clumps of particles. All weld seams must be cross-rolled from a minimum of 3 inches on either side of the weld.

3.10 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

4. NOTES

4.1 Definition of “HELO Ops Areas”/Flight Deck. “HELO Ops Areas” are defined as 01 Level deck surfaces, from Frame 103 aft, port and starboard, as shown on Coast Guard Drawing 901 WMEC 801-004, including 01 Deck inside hangar bay, boat decks, helicopter tie-down fittings, 01 Deck perimeter coaming, talon grid cover, raised “mushroom” type tie-down fittings, line-up light fixtures, flight deck net supports/foundations, and up to six inches on all adjacent vertical surfaces, where applicable.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

4.2 Certification hot line action desk. The Naval Air Warfare Center Aircraft Division Lakehurst has the responsibility for inspection and certification of all air capable aviation ships which support and operate with helicopters. A Shipboard Aviation Facility hot line action desk has been established at the Naval Air Warfare Center Aircraft Division Lakehurst, to provide a central point of contact for obtaining all information pertinent inspection and certification issues, including VLA and safety markings. The hot line action desk is in operation 24 hours a day and can be reached by contacting:

NAVAIRWARCENACDIVLKE
Lakehurst, N.J 08733-5000
Hot Line Action Desk (4.8.2.5)
Phone: (732) 323-2592

4.3 Unit's responsibilities. The ship's force will be responsible for the following:

- Removing and reinstalling all deck drain gratings.
- Plugging deck drains.
- Ensuring there is no engine operation and no stack emissions at any time during flight deck resurfacing.
- Restricting access to the Flight Deck work area to only authorized personnel.
- Contacting NAVAIR for inspection and certification of flight deck markings following work.

63121_0222_FLT
REC_63120_Dks_Exterior_FLT_270A WMEC (ALL) (0222)
S22_011_63100_BMG_1222_903
S22_012_63100_BMG_1222_903

WORK ITEM 8: Decks - Exterior, Preserve, Mil-Spec/Flight Deck System,

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to preserve the following exterior deck surfaces:

- Main Deck (Steel Surfaces): frame 207 to Stern.
- 01 Level (Steel Surfaces): Frame 53, port and starboard, to bow.
- 02 Level/Pilot House Level (Aluminum Surfaces): Frames 45 to 63
- 02 Level (Aluminum Surfaces): Frames 63 to 110.
- 03 Level (Aluminum Surfaces): Pilot House Top Frames 52 to 68
- 03 Level (Aluminum Surfaces): House Top Frames 46 to 103
- 03 Level (Aluminum Surfaces): Hangar Top Frames 106 to 119

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 801-003, Rev M, General Arrangement-02/Pilothouse & Above

Coast Guard Drawing 901 WMEC 801-004, Rev K, General Arrangement 01 Level

Coast Guard Drawing 901 WMEC 801-005, Rev L, General Arrangement Main Deck

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

OTHER REFERENCES

MIL-PRF-24667C, March 2018, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

QPL-24667, Qualified Product List (Military) of Products Qualified Under Detail Specification MIL-PRF-24667, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application
Commercial Item Description (CID) A-A-59316, 2016, Abrasive Materials; for Blasting

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

- Adjacent vertical (beyond what is specified in paragraph 3.3.2 (Surface preparation and coating application)).
- Ventilation intakes.
- Deck fittings.
- Deck equipment.

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences). Known interferences include, but are not limited to the following:

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.3 Preservation requirements particulars. The Contractor must accomplish the following tasks. Use Coast Guard Drawing 901 WMEC 801-003, 901 WMEC 801-004, and 901 WMEC 801-005 as guidance.

3.3.1 Pre-surface preparation wash. Prior to accomplishing surface preparation, accomplish low-pressure (less than 5,000 psi) fresh water wash of all affected surfaces, to remove soluble chlorides and other surface contaminants. Capture, contain, and dispose of wash water for proper disposal in accordance with all Federal, state and local regulations.

3.3.2 Surface preparation and coating application. Prepare and coat the deck surfaces designated in paragraph 1.1 (Intent), including bitt and chock foundations, machinery rack guards and machinery foundations, hatches and hatch guards, stanchion sockets, vent pipes, angle coaming area, and

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

approximately six inches up all adjacent vertical surfaces (as applicable); use the system specified for “Weather Decks, Non-Skid, MIL-SPEC Coating for Steel or Aluminum”, in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems).

3.3.2.1 Substrate inspection. After completion surface preparation and before coating application, perform a visual inspection of the prepared substrate, and submit a CFR.

3.3.2.2 Color selection. Select and use Dark Gray (36076) as the finish/top coat color.

3.3.2.3 Non-skid exempted areas. Apply top color coating only (do not apply non-skid topcoat) over vertical surfaces, and the following areas:

- Within two inches of deck fittings and protrusions.
- Within six inches of deck coamings, bulkheads, and deck edges.
- Within two inches of deck foundations (two inches measured from outermost portion of foundation, for example, foundation brackets on anchor windlass).
- Waterways.

3.3.2.4 Non-skid surface appearance and texture. The non-skid surface must show a pattern of peaks and ridges. The ridge profile must be continuous and reasonably uniform. Peaks and ridges must be generally in the same direction (fore and aft), approximately ½ to 1 inch apart, and approximately 1/16 to 3/32 inches high. All weld seams must be cross-rolled from a minimum of 3 inches on either side of the weld.

3.3.3 Surface preparation optional methods. The Contractor has the option of using either high/ultrahigh pressure water jetting or abrasive blasting to achieve the required surface preparation, prior to application of the coating system specified in 3.3 (Preservation requirements particulars). The Contractor may add abrasives to the waterjet stream, for one or both of the following reasons:

- Achieving greater productivity.
- Achieving the required surface profile.

CAUTION!

Waterjetting without abrasive addition does not provide any additional anchor profile to the surface, beyond what was present after the previous surface preparation. Abrasive may be introduced to the waterjet stream, to achieve required surface profile and/or greater productivity. Abrasive blast grit (if used for preparing the aluminum surfaces) must conform to CID-A-A59316, Type I or Type IV.

3.3.3.1 Surface preparation water quality. The Contractor must ensure that water in all surface preparation tasks, including pre-surface preparation wash and waterjetting is of sufficient purity and quality that it does not prevent the surface being cleaned from achieving the required degree of surface cleanliness or non-visible contamination criteria. Ensure that surface preparation water does not contain sediments or other impurities that are destructive to the proper functioning of the cleaning equipment.

3.3.3.2 Initial removal of the coating system around deck edges, fittings, and deck coaming may be by power tool cleaning in accordance with SSPC-SP-11.

3.3.4 Containment. The Contractor must provide suitable means to contain generated dust, waste water, paint chips, and spent abrasives. When net barriers are used, the mesh size of the netting material must be

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

small enough to ensure that the abrasives will be contained. In addition, net barriers, when used, must be overlapped where attached to stanchions, and anchored at the bottom for the entire net's length between stanchions, to limit the clean-up and localize the blast media.

3.3.4.1 If a containment system is not used for surface preparation dust and debris and coating application overspray during pier side/dockside preservation, the following must be adhered to:

- All surface preparation tools/equipment must be vacuum-shrouded.
- Coatings must be applied by brushing or rolling.

3.3.4.2 If ambient condition parameters cannot be met for the full duration of preservation work, the Contractor must provide suitable tenting and all equipment necessary to satisfy requirements in accordance with SFLC Std Spec 6310, Paragraph 3.1.5, at no additional cost to the Government.

3.3.5 Polyurethane coatings. The Contractor must be aware that two-part polyurethane primers, membranes, color toppings, and non-skid are not authorized for application on Coast Guard vessels, even if listed on QPL-24667.

3.4 Alternative non-skid coatings. If a Change Request has been authorized and released, the Contractor may select and apply one of the following:

- A low temperature cure system, conforming to MIL-PRF-24667, Type VIII, Composition G.
- A flexible membrane system, conforming to MIL-PRF-24667, Type III, Composition G, with the intermediate membrane.

NOTES

1. **The low temperature system is only authorized for application at temperatures between 35-45 degrees F.**
2. **The Type III non-skid system with the intermediate membrane should only be used over deck surfaces that undergo a great deal of flexing, or over uneven deck surfaces where flatness is required.**

3.5 In-process quality control measures. The Contractor must abide by all the safety, preservation, and quality control requirements specified in SFLC Std Spec 0000, paragraph 3.2.4.2 (In-process QC measures for "critical-coated surfaces").

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.6 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

4. NOTES

4.1 Definitions.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

4.1.1 Coaming. Vertical raised sections of deck plating around an opening that provide a frame and/or deflect water, such as around a hatch or gooseneck.

4.2 Unit responsibilities. The ship's force will be responsible for the following:

- Removing and reinstalling all deck drain gratings.
- Plugging deck drains.
- The Coast Guard Inspector will inspect Contractor furnished non-skid system (primer and non-skid) prior to application, ensuring that the system is qualified as "UV/LSA", as specified in QPL-24667.
- Ensuring no engine operation or stack emissions occur at any time during resurfacing.
- Restricting access to the work area to only essential personnel.

WORK ITEM 9: Interior Space and Compartment, Preserve**1. SCOPE**

1.1 Intent. This work item describes the requirements for the Contractor to preserve the spaces listed in Table 1 and Table 2.

TABLE 1 – BULKHEAD AND OVERHEAD PRESERVATION, PARTIAL

LOCATION	AREA (*SQFT)	SYSTEM COLOR
Pilothouse 02-48-0-C	750	See paragraph 3.4
Passageway 02-63-2-L	450	See paragraph 3.4
Passageway 01-52-0-L	450	See paragraph 3.4
Passageway 01-68-01-L	550	See paragraph 3.4
Passageway 01-93-0-L	400	See paragraph 3.4
Passageway 1-47-0-L	750	See paragraph 3.4
Passageway 1-58-1-L	400	See paragraph 3.4
Passageway 1-82-1-L	150	See paragraph 3.4
Passageway 1-103-1-L	250	See paragraph 3.4
Crews Mess 1-117-0-L	1100	See paragraph 3.4
Passageway 1-165-0-L	650	See paragraph 3.4
Passageway 1-186-0-L	650	See paragraph 3.4
Vestibule 1-207-1-L	250	See paragraph 3.4
Crews Lounge 2-72-2-L	450	See paragraph 3.4
Crews Lounge 2-186-1-L	300	See paragraph 3.4

*Approximated area.

TABLE 2 – BULKHEAD AND OVERHEAD PRESERVATION, TOUCH UP

LOCATION	AREA (*SQFT)	SYSTEM COLOR
Sanitary Space 02-72-2-L	30	See paragraph 3.5
Vestibule 01-47-0-L	20	See paragraph 3.5
Hangar Space (Fixed Section) 01-117-0-Q	550	See paragraph 3.5
Bosns Workshop 1-12-0-Q	20	See paragraph 3.5
Passageway 2-207-0-L	50	See paragraph 3.5
Passageway (Lower Lower Stores)** 3-30-0-L	100	See paragraph 3.5
Dry stores 3-165-0-A	350	See paragraph 3.5

*Approximated area.

** Note: These spaces include the associated locker spaces adjacent to the passageway.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST (\$/UNIT)
N	CCOL Holder	NSN: 9905-00-866-0334	40 ea.	7.99

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 801-003, Rev M, General Arrangement-02/Pilothouse & Above

Coast Guard Drawing 901 WMEC 801-004, Rev K, General Arrangement 01 Level

Coast Guard Drawing 901 WMEC 801-005, Rev L, General Arrangement Main Deck

Coast Guard Drawing 901 WMEC 801-006, Rev M, General Arrangement 1st Platform

Coast Guard Drawing 901 WMEC 801-007, Rev J, General Arrangement Hold

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences). Known interferences include, but are not limited to the following:

- Sheathing
- Bulkhead insulation
- Piping
- Electrical wiring
- DC markings
- CCOL holders
- Furniture
- Ventilation ducting
- Fans
- Foundations
- Electrical cables
- Wire ways
- Stuffing tubes

3.2 Original bulkhead markings & arrangement documentation. Prior to commencing surface preparation tasks, the Contractor must record the location and arrangement of all Compartment Check-off List placards, damage control decals, firehose station paint scheme (red), bullseyes, data plates and labels. This record may consist of a sketch, pictures, or other method. Obtain Coast Guard Inspector approval prior to commencing surface preparation.

3.2.1 Renew all Compartment Check-Off List (CCOL) card holders using the provide government furnished material.

3.2.2 Renew all Damage Control Decals and markings to include:

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

- Emergency egress decals
- Photoluminescent and retro-reflective materials
- DC systems, fire stations and portable damage control equipment photoluminescent decals
- Compartment bullseyes photoluminescent stickers
- Compartment fitting number/data plates

3.3 Substrate visual inspection. Upon completion of surface preparation and prior to application of primer coat, the Contractor must perform a visual inspection of the prepared surfaces; submit a CFR.

3.4 Surface preservation, partial. The Contractor must prepare and coat the bulkhead and overhead surfaces, listed in Table 1, to include doors, door frames, window sills, trim, brackets, and fire hose stations, using the system specified for “BULKHEADS” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Apply finish/top coat color to match existing adjacent surfaces. Top coat to be applied to 100% of the surfaces.

3.5 Surface preservation, touch up. The Contractor must prepare and coat the bulkhead and overhead surfaces, listed in Table 2, using the system specified for “BULKHEADS” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Apply finish/top coat color to match existing adjacent surfaces. Refer to paragraph 3.1.13 “Touch-ups and minor coating repairs” of SFLC Std Spec 6310 for guidance.

3.6 Stanchion preservation, 100%. The Contractor must prepare and coat the hatch and safety chain stanchions, see bulleted list below, using the system specified for “BULKHEADS” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Apply finish/top coat color to match existing adjacent surfaces.

- Passageway (1-47-0-L), 4 Stanchions
- Passageway (1-165-0-L), 2 Stanchions
- Passageway (1-186-01-L), 3 Stanchions
- Passageway (1-207-1-L), 3 Hatch Stanchions

4. NOTES

4.1 Damage control markings. The ship’s force will print and attach CCOL sheets to the renewed CCOL card holders.

WORK ITEM 10: Watertight Doors and Scuttles, External, Renew**1. SCOPE**

1.1 Intent. This work item describes the requirements for the Contractor to renew the external watertight doors and scuttles identified in Table 1.

TABLE 1 - WATERTIGHT DOORS AND SCUTTLES

DESCRIPTION	LOCATION	DRAWING
Quick action watertight door (QAWTD) 01-103-4, 26" x 66", Aluminum, 8 dog, LH Swing with window.	01 Level Weather decks / Decon Station 01-98-2-L	NAVSEA# 1677044215, Assembly #11
Watertight Door (WTD) 1-214-3 26" x 66", RH Swing, 10 Dog, Steel	Fantail Weather deck/ JP5 Fueling Station 1-207-3-J	
Quick action watertight door (QAWTD) 1-26-2, 26" x 66", Steel, RH Swing.	Anchor Windless Room 1-12-0-Q / Passageway 1-26-2-L	
Quick action watertight door (QAWTD) 1-27-1, 26" x 66", Steel, RH Swing.	Gun Control Room 1-26-1-C / Magazine 1-26-0-M	
Watertight Hatch, 1-216-2, Raised, Individually Dogged, 36" x 36", 10 Dog, 12" coaming height, with 18" Scuttle	Weather deck / 2-207-0-L	805-1624070

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST (\$/UNIT)
N	QAWTD 01-103-4	NAVSEA # 1677044215	1 ea.	8,000
N	WTD 1-214-3	Unknown	1 ea	8,000
N	QAWTD 1-26-2	NSN 2040-00-554-6216	1 ea	6,255
N	QAWTD 1-27-1	NSN 2040-00-542-0198	1 ea	6,000
N	WTH 1-216-2	Unknown	1 ea	8,000

2. REFERENCES**COAST GUARD DRAWINGS**

Coast Guard Drawing 901 WMEC 167-001, Rev W, List of Structural Closures

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

Coast Guard Drawing 901 WMEC 801-004, Rev K, General Arrangement 01 Level
NAVSEA Drawing 167-7379842, Rev A, Procedure & Welding Sequence for Non-Ballistic,
Watertight & Airtight Quick Acting or Individually Dogged Personnel Doors

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020,
General Requirements
Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020,
Welding and Allied Processes
Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020,
Requirements for Preservation of Ship Structures

OTHER REFERENCES

Commercial Item Description (CID) A-A-59316, 2016, Abrasive Materials; for Blasting
Military Specification MIL-A-22262B, March 1996, Abrasive Blasting Media Ship Hull Blast
Cleaning
The Society for Protective Coatings (SSPC)/NACE-International (NACE) Joint Surface
Preparation Standard SSPC-SP 10/NACE No. 2, 2007, Near-White Metal Blast Cleaning
The Society for Protective Coatings (SSPC) Surface Preparation Standard No. 11 (SSPC-SP 11),
2013, Power-Tool Cleaning to Bare Metal

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences). Known interferences include, but are not limited to, the following:

- Insulation
- Bulkhead

3.2 Renewal. The Contractor must crop, remove, and dispose of the doors and scuttles identified in Table 1 of this work item, including the associated coaming in accordance with SFLC Std Spec 0740 and using the Coast Guard drawing(s) listed under Section 2 (References) as guidance.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.2.1 For watertight door renewals, inspect adjacent bulkhead structure for straightness prior to installation. Submit CFR with repair plan for any warped or twisted bulkhead structure resulting in a gap greater than 1/16” between the bulkhead plating and new door frame.

3.2.2 Install GFP doors and scuttles in place of those removed. When GFP doors and scuttles are not provided, the Contractor must fabricate and install a new door or scuttle. Use NAVSEA Drawing 167-7379842 and manufacturer instructions as guidance for installation.

3.2.3 Perform all necessary modifications not limited to relocation, fabrication and installation of a new securing device, and modifications to ensure all renewed items properly fit and function. At the direction of the Coast Guard Inspector, perform all necessary relocation and modification of securing latches.

3.2.4 Provide and install new gaskets and fasteners for each new installation identified in Table 1.

NOTES

- 1. Testing fitup of new door frame in structural cutout and balanced welding operations are crucial to ensuring proper alignment. Satisfactory operation of closure should be checked prior to, during, and after welding. Welding should be staggered around frame perimeter and on both sides of the closure to minimize distortion.**
- 2. Where possible, the door should be closed and dogged during welding.**
- 3. Geometric dimensioning and tolerance variances and minor hardware differences are to be expected with the Government-furnished closures. These variances and differences are not limited to the following: location and physical size of the hinge assemblies; location, physical size, and number of flush mounted pockets; location, size, and orientation of securing devices.**

3.3 Boundary test. Upon complete renewal of each structural closure, the Contractor must perform the following boundary tests in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

- chalk test
- water hose test

NOTE

Do not paint knife-edges, gaskets, or any moving parts; including dogs, nuts, wedges, spindles, yokes, packing, connecting rods and hinge pins.

3.4 Preservation. The Contractor must prepare and coat the surfaces of all installed items identified in Table 1 of this work item in accordance with Table 2 and as determined by the material to be preserved.

TABLE 2 – SURFACE PREPARATION AND COATING

SURFACE	PREPARATION		COATING	
	STEEL	ALUMINUM	STEEL	ALUMINUM
DOOR EXTERIOR/ SCUTTLE TOP	SSPC-SP10/NACE No. 2, using grit conforming to MIL-A-22262 (1.5 to 2.5	Brush blast to bare metal with clean, fine aluminum oxide, garnet or equivalent inert	SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems)	SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems)

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

	mil anchor profile) -Or- SSPC-SP 11 (1.0 mil anchor profile)	material conforming to CID A-A-59316, Type I & IV (1.0-1.5 mil anchor profile). -Or- Power tool clean, using non-metallic abrasive padding, to remove all coatings and contamination.	“Freeboard/ Superstructure/Mast” Freeboard/Superstructure, Steel – Prone to Mechanical Damage or High Wear	“Freeboard/ Superstructure/Mast” Option I for Freeboard/Superstructure, Aluminum or Galvanized Steel
DOOR INTERIOR/ SCUTTLE BOTTOM	SSPC-SP 11 (1.0 mil anchor profile)	Power tool clean, using non-metallic abrasive padding, to remove all coatings and contamination.	SFLC Std Spec 6310 , Appendix B (Cutter and Boat Interior Painting Systems) “Door, Joiner, Option I”	

3.4.1 Touch-up preservation. The Contractor must prepare and coat all disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, paragraph 3.1.13 (Touch-ups and minor coating repairs.).

NOTE
Coast Guard personnel will operate all shipboard machinery and equipment.

3.5 Operational test, post repairs. After completion of work, the Contractor must thoroughly test (in the presence of the Coast Guard Inspector) and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR. The Contractor must demonstrate:

- Closures are properly secured to prevent accidental or unintentional movement.
- Securing latches adequately engage closures and positively lock into place without excessive force or manipulation by the operator.

3.6 Insulation, install. The Contractor must install new insulation material on the inside of the door panel to the same standard as the adjoining bulkhead, as specified on Coast Guard Drawing 905 WMEC 635-001. Coat the newly installed insulation using the system specified for “Insulation Surfaces, Fiberglass Sheet/Closed Cell PVC Foam” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems).

4. NOTES

4.1 Damage control decals. Ship’s force will apply damage control decals.

WORK ITEM 11: AC Units, Renew**1. SCOPE**

1.1 Intent. This work item describes the requirements for the Contractor to renew 2 AC units in Auxiliary Machinery Space 1.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST (\$/UNIT)
N	Flow switch	NSN: 5930-00-181-3868	2 ea.	
N	Gauge pressure dial indicating	NSN: 6685-01-472-4397	4 ea.	
N	High pressure switch	NSN: 5930-01-555-3811	4 ea.	
N	Oil psi switch	NSN: 5930-01-616-2012	4 ea.	
N	Cartridge filter drier	NSN: 4130-00-895-7967	4 ea.	
N	Pressure switch	NSN: 5930-01-555-3837	4 ea.	
N	Filter element fluid	NSN: 4330-00-957-5047	4 ea.	
N	TXV VALVE	NSN: 4820-01-532-9692	4 ea.	
N	Water regulating valve	NSN: 482-012831927	4 ea.	
N	Gasket flange wrv	NSN: 5330-01-644-4094	4 ea.	
N	Rupture disk assembly	NSN: 4820-01-420-4421	4 ea.	
N	Pressure relay	NSN: 4820-01-535-4011	4 ea.	
N	Flow control valve	NSN: 4820-01-168-2248	4 ea.	
N	Valve solenoid	NSN: 4810-01-122-0997	4 ea.	
N	Temperature control	NSN: 6685-00894-4098	4 ea.	
N	Differential gage	NSN: 6685-00-956-1383	4 ea.	
N	Regulating flow valve	NSN: 4820-01-164-7070	4 ea.	
N	Valve, calibrated flow	NSN: 4820-01-186-8687	4 ea.	
N	Valve, calibrated flow	NSN: 4820-00-913-44711	4 ea.	
N	Valve, calibrated flow	NSN: 4820-00-913-4713	4 ea.	
N	Right side condenser assembly	NSN: 4130-01-537-3527	2 ea.	
N	Gasket	NSN: 5330-00-905-5347	4 ea.	
N	Gage pressure dial	NSN: 6685-01-472-4397	4 ea.	
N	Anode, corrosion preventive	NSN: 5342-01-535-9098	4 ea.	
N	Head safety pressure	NSN: 4820-01-420-4421	4 ea.	
N	Valve safety relief	NSN: 4820-01-535-4011	4 ea.	
N	Gasket waterhead	NSN: 5330-01-535-3737	4 ea.	
N	Left side condenser assembly	NSN: 4130-01537-3507	2 ea.	

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

N	Compressor unit refrigeration	NSN: 4130-01-535-4882	4 ea.	
---	-------------------------------	-----------------------	-------	--

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 516-014, Rev B, Mods Incidental to the Carrier A/C Plant Install

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3910B, Apr 2020, Air Conditioning System, R-134A S/W Cooled Chilled – Model 90RMC050-D-610

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

Surface Forces Logistics Center Standard Specification 8636 (SFLC Std Spec 8636), 2020, Temporary Hull Accesses

OTHER REFERENCES

American Society of Mechanical Engineers (ASME) B31.5, 2013, Refrigeration Piping and Heat Transfer Components

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep. The Contractor must provide the services of a Qualified Technical Representative who is familiar with the Carrier equipment/system to accomplish the following on site:

- Advise on manufacturer’s proprietary system information, software, and tools pertinent to the equipment/system.
- Assist with proper installation and repair methods.
- Ensure compliance with manufacturer's procedures and standards during disassembly, inspection, repair, modification, calibration, and reassembly of the equipment/system as applicable.

3.1.2.1 Ensure the Tech Rep has experience with the system/equipment stated above and demonstrated on their resume.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.1.2.2 Submit the name and résumé of the Tech Rep to the COR at the Arrival Conference.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences).

3.1.5 Temporary access openings. With express permission of the KO via submission of a CFR and in accordance with SFLC Std Spec 8636, the Contractor may perform all work required to cut open and close temporary access openings to facilitate accomplishment of the work specified herein.

3.1.6 Personnel qualification. The Contractor must ensure that all personnel servicing Air Conditioning and Refrigeration (AC&R) equipment that uses CFC or HCFC refrigerant hold a current Environmental Protection Agency (EPA) Technician Certification, Type IV (Universal Certification), and meet all State and local regulations and licensing requirements.

3.1.7 Refrigerant draining and recovery. The Contractor must ensure all vessels' refrigeration system refrigerant is drained, recovered and disposed of into a container in accordance with all federal, state and local environmental regulations.

3.1.8 Temporary A/C. The Contractor must provide temporary cooling as follows. The Contractor must submit a detailed plan for providing this temporary cooling for approval to the COR 72 hours prior to Arrival Conference. The detailed plan must include strategy for minimizing disruption to A/C services and expected duration of any A/C shutdowns.

3.1.8.1 Provide temporary cooling for following spaces:

- CIC (02-63-0-C)
- IC Gyro (2-47-1-C)
- Radio (3-47-0-C)
- ECC (3-152-0-E)

NOTE

Doors to secure spaces cannot be left open to accommodate portable ducting.

3.1.8.2 Temporary cooling for each berthing space must be provided if A/C for that space will be off-line for more than 1 day. Temporary cooling in berthing spaces must maintain temperature between 65 and 75 degrees F. The following berthing spaces are expected to be impacted:

- Officer Stateroom (01-61-1-Q)
- Officer Stateroom (01-47-2-L)
- Officer Stateroom (01-58-2-L)
- Crew Berthing (2-47-0-L)
- Crew Berthing (2-165-3-L)
- CPO Berthing (1-165-0-L)

3.2 Renewal plan. The Contractor must supply a written plan of work for approval to the COR at least 24 hours in advance of beginning work.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.3 A/C unit renewal. The Contractor must renew the both port and starboard A/C units, using Coast Guard Drawing 901 WMEC 516-014 and 3910B for guidance. Ensure compliance with manufacturer's procedures and standards, to ensure proper system operation.

3.3.1 Evacuate all remaining refrigerant from the system, in accordance with all Federal, state and local environmental regulations.

3.3.2 Disconnect existing electrical cables to avoid interfering with equipment rigging.

3.3.3 Disconnect existing sea water and chill water piping, back to nearest valve, to avoid interfering with equipment rigging.

3.3.4 Rig in and bolt into place the new Government-furnished R-134A Chiller Units.

3.3.5 Electrically and mechanically connect the new R-134A Chiller Unit components to existing electrical cables and sea water and chill water piping, respectively.

3.3.6 Remove the compressors from the old units; package and turn over the removed compressors to the Government Property Administrator for final disposition. Dispose of the old A/C units in accordance with applicable Federal, state, and local regulations.

WARNING

Do not drain any fluids including fresh water, into any space, bilge, or exterior location.

3.4 Pipe flushing. The Contractor must flush all new and disturbed piping with clean fresh water until all debris is removed but no longer than five minutes. Ensure flushing fluid is directed to move scale and foreign debris away from installed machinery to prevent possible damage upon operational testing. Submit a CFR documenting date and time of flushing process and level of pipe cleanliness.

3.4.1 Dispose of flushing fluid in accordance with all applicable Federal, state, and local regulations.

3.5 Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all new and disturbed piping and components of the air conditioning and chill water system in accordance with SFLC Std Spec 0740, Appendix C, Hydrostatic Test. Ensure zero leakage from or permanent deformation of pressure-containing parts by repairing all leaks, deformations, and discrepancies. Submit a CFR.

3.6 Recharge refrigerant. The Contractor must recharge the system with refrigerant in accordance with TP 3910B.

3.7 Touch-up preservation. The Contractor must prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs.)

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.8 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate the A/C system to be satisfactory operating condition. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 12: Refrigeration Plants, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew 2 ship service refrigeration units located in the JP5 Machinery Space.

1.2 Government-furnished property.

None.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST (\$/UNIT)
N	Vibration isolator discharge	NSN: 4820-01-589-4921	2 ea.	
N	Vibration isolator suction	NSN: 4820-01-589-4917	2 ea.	
N	Strainer assembly compressor	NSN: 4935-008184793	2 ea.	
N	Suspension kit springs, studs, snubbers, retainers	NSN: 5342-01-397-8769	2 ea.	
N	Compressor unit	NSN: 4130-01-571-5391	2 ea.	
N	Gasket	NSN: 5330-00-812-2395	2 ea.	
N	Spring-rct oil	NSN: 5360-00-719-5463,	2 ea.	
N	Guide oil feed	NSN: 4130-00-719-4809	2 ea.	
N	Strainer assembly	NSN: 4130-00-733-1526	2 ea.	
N	Gasket	NSN: 5330-00801-1568	2 ea.	
N	Gauge oil psi	NSN: 6685-01-568-9594	2 ea.	
N	Gauge discharge pressure	NSN: 6685-01-568-9589	2 ea.	
N	Gauge suction	NSN: 6685-01-569-3172	2 ea.	
N	Valve air condition water regulating valve	NSN: 4130-00-015-3620	2 ea.	
N	Gauge pressure dial	NSN: 6685-01-472-4397	2 ea.	
N	Condenser	NSN: 4130-01-576-56801	2 ea.	
N	Brass pin tube plug	NSN: 5315-01-569-1052	4 ea.	
N	Anode corrosion	NSN: 5342-01-535-9098	2 ea.	
N	Brass ring tube plug	NSN: 5365-01-569-1051	4 ea.	
N	Strainer sediment 3/4" Y strainer	NSN: 4730-01-672-0550	2 ea.	
N	Valve pressure relief	NSN: 4820-01-569-8534	2 ea.	
N	Rupture disk	NSN: 4820-01-569-1931	2 ea.	
N	Gasket 3/4" Y strainer	NSN: 5330-01-672-0221	2 ea.	
N	Strainer element sediment	NSN: 4730-01-672-0541	2 ea.	

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

N	Rupture disk	NSN: 4820-01-577-5419	2 ea.	
N	Gasket set	NSN: 5330-01-540-7317	2 ea.	

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 516-017, Rev A, Mods Incidental to the Carrier Reefer Plant Install

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 4911, July 2008, R-134A Low Temperature Refrigeration Plat – Type 2 – Operating and Maintenance Manual

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

Surface Forces Logistics Center Standard Specification 8636 (SFLC Std Spec 8636), 2020, Temporary Hull Accesses

OTHER REFERENCES

American Society of Mechanical Engineers (ASME) B31.5, 2013, Refrigeration Piping and Heat Transfer Components

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep. The Contractor must provide the services of a Qualified Technical Representative who is familiar with the Carrier equipment/system to accomplish the following on site:

- Advise on manufacturer's proprietary system information, software, and tools pertinent to the equipment/system.
- Assist with proper installation and repair methods.
- Ensure compliance with manufacturer's procedures and standards during disassembly, inspection, repair, modification, calibration, and reassembly of the equipment/system as applicable.

3.1.2.1 Ensure the Tech Rep has experience with the system/equipment stated above and demonstrated on their resume.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.1.2.2 Submit the name and résumé of the Tech Rep to the COR at the Arrival Conference.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences).

3.1.5 Temporary access openings. With express permission of the KO via submission of a CFR and in accordance with SFLC Std Spec 8636, the Contractor may perform all work required to cut open and close temporary access openings to facilitate accomplishment of the work specified herein.

3.1.6 Personnel qualification. The Contractor must ensure that all personnel servicing Air Conditioning and Refrigeration (AC&R) equipment that uses CFC or HCFC refrigerant hold a current Environmental Protection Agency (EPA) Technician Certification, Type IV (Universal Certification), and meet all State and local regulations and licensing requirements.

3.1.7 Refrigerant draining and recovery. The Contractor must ensure all vessels' refrigeration system refrigerant is drained, recovered and disposed of into a container in accordance with all federal, state and local environmental regulations.

3.2 Renewal plan. The Contractor must supply a written plan of work for approval to the COR at least 24 hours in advance of beginning work.

3.3 A/C unit renewal. The Contractor must renew the port and starboard refrigeration units, using Coast Guard Drawing 901 WMEC 516-017 and 4911 for guidance. Ensure compliance with manufacturer's procedures and standards, to ensure proper system operation.

3.3.1 Evacuate all remaining refrigerant from the system, in accordance with all Federal, state and local environmental regulations.

3.3.2 Disconnect existing electrical cables to avoid interfering with equipment rigging.

3.3.3 Disconnect existing sea water and chill water piping, back to nearest valve, to avoid interfering with equipment rigging.

3.3.4 Rig in and bolt into place the new Government-furnished R-134A Refrigeration Units.

3.3.5 Electrically and mechanically connect the new R-134A Refrigeration Units components to existing electrical cables and sea water and chill water piping, respectively.

3.3.6 Remove the compressor from the old units; package and turn over the removed compressors to the Government Property Administrator for final disposition. Dispose of the old A/C unit in accordance with applicable Federal, state, and local regulations.

WARNING

Do not drain any fluids including fresh water, into any space, bilge, or exterior location.

3.4 Pipe flushing. The Contractor must flush all new and disturbed piping with clean fresh water until all debris is removed but no longer than five minutes. Ensure flushing fluid is directed to move scale and foreign debris away from installed machinery to prevent possible damage upon operational testing. Submit a CFR documenting date and time of flushing process and level of pipe cleanliness.

3.4.1 Dispose of flushing fluid in accordance with all applicable Federal, state, and local regulations.

3.5 Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all new and disturbed piping and components of the refrigeration system in accordance with SFLC Std Spec 0740, Appendix C, Hydrostatic Test. Ensure zero leakage from or permanent deformation of pressure-containing parts by repairing all leaks, deformations, and discrepancies. Submit a CFR.

3.6 Recharge refrigerant. The Contractor must recharge the system with refrigerant in accordance with TP 4911.

3.7 Touch-up preservation. The Contractor must prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs.)

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.8 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate the refrigeration system to be satisfactory operating condition. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

S_63500_ESD_0921_SWIT
 S17_0009_63500_BMG_1122_903
 S18_0018_63500_BMG_1122_903
 S22_015_63500_BMG_1122_903

WORK ITEM 13: Compartment Insulation, General, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew insulation as described in Table 1.

TABLE 1 - INSULATION RENEWAL

DESCRIPTION	LOCATION	APPROXIMATE AREA (SQFT)
Bulkhead Thermal Insulation	Small Arms Locker (02-96-0-M)	20
Bulkhead Thermal Insulation	Equipment Space (02-106-0-Q)	10
Bulkhead Sheathed Thermal Insulation	Winch Machinery Space (01-95-1-Q)	65
Overhead Acoustic Insulation	Winch Machinery Space (01-95-1-Q)	30 Linear Feet (1" X 2" X 0.08" Angle Buffer Plate)
Bulkhead and Overhead Thermal Insulation	Helo Hangar (01-117-0-Q) (Fixed Section)	2500
Overhead Thermal Insulation	Flammable Liquid Storeroom (1-J-0-K)	80
Bulkhead Thermal Insulation	Flammable Liquid Storeroom (1-J-0-K)	150
Overhead Thermal Insulation	Bosn Work Shop (1-12-0-Q)	50
Bulkhead Thermal Insulation	Passage Way (1-26-2-L)	15
Bulkhead Thermal Insulation	Forward Repair # 2 (1-82-2-A)	30
Bulkhead Thermal Insulation	Passageway (1-207-1-L) (On Watertight Door)	20
Bulkhead Thermal Insulation	Engineer's Stores (1-186-2-A)	10
Bulkhead Thermal Insulation	Fan Room (1-207-2-Q) (8 sqft On Watertight Door)	40
Overhead Thermal Insulation	Passageway (2-28-2-L)	10 Linear Feet (1" X 2" X USSG 14 Angle Buffer Plate)
Bulkhead Thermal Insulation	Passageway (2-28-2-L)	50
Overhead Thermal Insulation	Steering Gear Room (3-228-0-E)	10

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 635-001, Rev K, Hull Thermal & Acoustic Insulation A/D
NAVSEA Drawing 804-5773931, Rev A, Acoustic & Thermal Insulation For Compartments
Installation Details

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020,
General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020,
Requirements for Preservation of Ship Structures

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences). Known interferences include, but are not limited to the following:

- Overhead panels
- Wire ways
- Electrical cables
- Piping
- Bulkhead
- Machinery
- Hydraulic tanks
- Motor generator
- Anchor windlass
- Paint locker shelving

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.2 Renewal. The Contractor must renew all insulation identified in Table 1. Refer to the drawing listed in Section 2 for guidance.

3.2.1 Removal. Remove all existing insulation material.

3.2.2 Disposal. Dispose of all removed materials, in accordance with all applicable Federal, state, and local regulations.

3.2.3 Surface preservation. Prepare and coat all designated/exposed surfaces, including adjacent structural members, using the system specified for “Bulkheads and Overheads, Un-insulated Steel (Appearance not a factor, i.e., voids) and Insulated Steel, Option II”, in SFLC Std Spec 6310 in Appendix B (Cutter and Boat Interior Painting Systems).

NOTE

Power-tool cleaning to “Bare Metal”, in accordance with SSLC-SP 11, may be used as the surface preparation method, for the following situations:

- 1. Abrasive blasting is not permitted in location of work.**
- 2. Surfaces being preserved are considered too small to merit abrasive-blasting.**

3.2.4 Substrate inspection - visual inspection. Upon completion of surface preparation and prior to application of primer coat, the Contractor must visually inspect the prepared surfaces; submit a CFR.

3.2.5 New thermal insulation installation. Install new faced thermal insulation material, over plating surfaces and structural members identified in Table 1, as shown on NAVSEA Drawing 804-5773931. Coat the newly installed insulation using the system specified for “Insulation Surfaces, Fiberglass Sheet/Closed Cell PVC Foam” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems).

3.2.6 New thermal insulation and sheathing installation. Install new thermal acoustic insulation material over the coated surfaces identified in Table 1, as shown on NAVSEA Drawing 804-5773931.

3.3 Staging or scaffolding. The Contractor must erect suitable staging or scaffolding in accordance with 29 CFR 1915, Subpart E (Scaffolds, Ladders and Other Working Surfaces) to facilitate helo hangar insulation and preservation.

3.3.1 Protect the deck and distribute staging weight over at least a four square foot area by placing substantial wooden pads where each part of the staging contacts the vessel's decks.

3.3.2 Disassemble and remove the staging upon completion of work or when designated by the Coast Guard Inspector.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 14: Interior Spaces, Preserve**1. SCOPE**

1.1 Intent. This work item describes the requirements for the Contractor to preserve the spaces listed in Table 1, Table 2 and Table 3.

TABLE 1 – DECK PRESERVATION, PARTIAL

LOCATION	AREA (*SQFT)	DECK MTL (A/S**)	SYSTEM COLOR
Flammable Liquids Storeroom 1-J-0-K	220	S	See paragraph 3.5
Bosun's Workshop 1-12-0-Q	280	S	See paragraph 3.5
Magazine 1-26-0-M	500	S	See paragraph 3.5
Fan Room 1-117-1-Q	70	S	See paragraph 3.5
Bosun Stores 2-17-0-A	250	S	See paragraph 3.5
Passageway*** (Lower Stores) 2-28-2-L	340	S	See paragraph 3.5
Ordnance Workshop 2-40-1-Q	80	S	See paragraph 3.5
Aux. Machinery Space No. 1 2-82-0-E	740	S	See paragraph 3.5
Passageway 2-207-0-L	220	S	See paragraph 3.5
Engineer's Stores 2-214-4-A	120	S	See paragraph 3.5
Passageway*** (Lower Lower Stores) 3-30-0-L	300	S	See paragraph 3.5

*Approximated.

**Note: A = Aluminum; S = Steel.

***Note: These spaces include the associated locker spaces adjacent to the passageway.

TABLE 2 – DECK PRESERVATION, TOUCH UP

LOCATION	AREA (*SQFT)	DECK MTL (A/S**)	SYSTEM COLOR
Steering Gear Room 3-228-0-E	50	S	See paragraph 3.6
JP-5 Pump Room 4-186-0-J	100	S	See paragraph 3.6

*Approximated.

**Note: A = Aluminum; S = Steel.

TABLE 3 – BILGE PRESERVATION, TOUCH UP

LOCATION	AREA (*SQFT)	DECK MTL (A/S**)	SYSTEM COLOR
Engine Room 3-103-0-E	300	S	See paragraph 3.7
Steering Gear Room 3-228-0-E	50	S	See paragraph 3.7
JP-5 Pump Room 4-186-0-J	100	S	See paragraph 3.7

*Approximated.

**Note: A = Aluminum; S = Steel.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

- Coast Guard Drawing 901 WMEC 634-001, Rev G, Deck Covering Schedule
- Coast Guard Drawing 901 WMEC 801-005, Rev L, General Arrangement Main Deck
- Coast Guard Drawing 901 WMEC 801-006, Rev M, General Arrangement 1st Platform
- Coast Guard Drawing 901 WMEC 801-007, Rev J, General Arrangement Hold

COAST GUARD PUBLICATIONS

- Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements
- Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and Allied Processes
- Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures
- Surface Forces Logistics Center Standard Specification 6341 (SFLC Std Spec 6341), 2020, Install Interior Deck Covering Systems

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences). Known interferences include, but are not limited to the following:

- Furniture
- Shelving
- Ventilation duct
- Fans
- Foundations
- Electrical cables
- Stuffing tubes

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.3 Substrate visual inspection. Upon completion of surface preparation and prior to application of primer coat (see 3.3 (Surface preservation)), the Contractor must perform a visual inspection of the prepared surfaces; submit a CFR.

3.4 Ultrasonic thickness (UT) measurement. The Contractor must take a total of 300 UT measurements in accordance with SFLC Std Spec 0740, Appendix C in locations designated by the Coast Guard Inspector and using Coast Guard Drawings 901 WMEC 801-005, 901 WMEC 801-006, and 901 WMEC 801-007 as guidance. Submit a CFR.

3.5 Deck preservation, partial. The Contractor must prepare and coat the deck surfaces, listed in Table 1, using the system specified for “Metal Decks – No application of deck coverings” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Apply finish/top coat color to match existing adjacent surfaces. Top coat to be applied to 100% of the deck surfaces including 6 inches up all adjacent vertical surfaces.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.5.1 Select power tool cleaning to “bare metal” (SSPC-SP 11) with a minimum 1.0 mil anchor profile as the method of surface preparation for areas covered in heavy corrosion or lacking satisfactory profile, for up to 33% of the deck surface.

3.5.2 Select hand tool cleaning (SSPC-SP 3) as the method of surface preparation for 100% of any remaining coating system.

3.6 Deck preservation, touch up. The Contractor must prepare and coat the deck surfaces, listed in Table 2, using the system specified for “Metal Decks – No application of deck coverings” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Apply finish/top coat color to match existing adjacent surfaces.

3.6.1 Select power tool cleaning to “bare metal” (SSPC-SP 11) with a minimum 1.0 mil anchor profile as the method of surface preparation. Refer to paragraph 3.1.13 “Touch-ups and minor coating repairs” of SFLC Std Spec 6310 for guidance.

3.7 Bilge preservation, touch up. The Contractor must prepare and coat the deck surfaces, listed in Table 3, using the system specified for “Bilges, Cofferdams, and Forepeaks, Steel” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Apply finish/top coat color to match existing adjacent surfaces.

3.7.1 Select power tool cleaning to “bare metal” (SSPC-SP 11) with a minimum 1.0 mil anchor profile as the method of surface preparation. Refer to paragraph 3.1.13 “Touch-ups and minor coating repairs” of SFLC Std Spec 6310 for guidance.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.8 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

S18_0036_63400_BMG_1122_903
 S18_0037_63400_BMG_1122_903
 S18_0045_63400_BMG_1122_903
 S18_0046_63400_BMG_1122_903
 S22_019_63400_BMG_1122_903
 S22_024_63400_BMG_1122_903
 S22_028_63400_BMG_1122_903
 S22_036_63400_BMG_1122_903

WORK ITEM 15: Sanitary Space Equipment, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew various sanitary space equipment and furnishings in the spaces listed in Tables 1 through 3.

TABLE 1 – SANITARY SPACE EQUIPMENT LIST, CREW

LOCATION	SHOWER STALLS	SINKS	TOILETS
Sanitary Space (02-72-2-L)	NA	1	1
Sanitary Space (1-51-2-L)	2	2	2
Sanitary Space (2-58-1-L)	1	2	1
Sanitary Space (2-59-2-L)	1	2	1
Sanitary Space (2-165-0-L)	2	2	2
Sanitary Space (2-186-0-L)	2	2	2
Sanitary Space (3-160-2-L)	NA	NA	1

TABLE 2 – SANITARY SPACE EQUIPMENT LIST, CHIEFS

LOCATION	SHOWER STALLS	SINKS	TOILETS
Sanitary Space (1-174-2-L)	1	3	1
Sanitary Space (1-186-4-L)	1	2	1

TABLE 3 – SANITARY SPACE EQUIPMENT LIST, OFFICERS

LOCATION	SHOWER STALLS	SINKS	TOILETS
Sanitary Space (01-47-3-L)	1	1	1
Sanitary Space (01-47-4-L)	1	1	1
Sanitary Space (01-68-2-L)	1	NA	1
Sanitary Space (01-81-1-L)	1	NA	1
Sanitary Space (01-89-2-L)	NA	NA	1
Decon Station & Shower(01-95-2-L)	1	NA	NA

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 331-026, Rev F, Lighting System 01 Level
Coast Guard Drawing 901 WMEC 533-005, Rev H, H & C Potable Water System Mn Dk – A & D
Coast Guard Drawing 901 WMEC 533-006, Rev H, H & C Potable Water System, 01 Lvl & Abv A & D
Coast Guard Drawing 901 WMEC 533-007, Rev J, H & C Potable Water Blw Mn Dk
Coast Guard Drawing 901 WMEC 621-001, Rev M, Joiner Arr Hold & 1st Platf Frs 47-82
Coast Guard Drawing 901 WMEC 621-002, Rev K, Joiner Arr 1st Platf Frs 151-228
Coast Guard Drawing 901 WMEC 621-003, Rev M, Joiner Arr Main Deck Frames 47 – 103
Coast Guard Drawing 901 WMEC 621-004, Rev N, Joiner Arr Main Deck Fr 103 – 207
Coast Guard Drawing 901 WMEC 621-005, Rev L, Joiner Arr 01 Level
Coast Guard Drawing 901 WMEC 621-006, Rev G, Joiner Arr 02 Level & PH
Coast Guard Drawing 901 WMEC 634-001, Rev G, Deck Covering Schedule
Coast Guard Drawing 901 WMEC 801-003, Rev M, General Arrangement-02/Pilothouse & Above
Coast Guard Drawing 901 WMEC 801-004, Rev K, General Arrangement 01 Level
Coast Guard Drawing 901 WMEC 801-005, Rev L, General Arrangement Main Deck
Coast Guard Drawing 901 WMEC 801-006, Rev M, General Arrangement 1st Platform
Coast Guard Drawing 901 WMEC 801-007, Rev J, General Arrangement Hold
Coast Guard Drawing 901 WMEC 644-001, Rev E, Plumbing Fixtures List

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements
Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and Allied Processes
Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures
Surface Forces Logistics Center Standard Specification 6341 (SFLC Std Spec 6341), 2020, Install Interior Deck Covering Systems

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

None.

3.1.2 Tech Rep.

None.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences). Known interferences include, but are not limited to the following:

- Piping
- Mixing valve
- Lighting
- Electrical switches
- Hand dryers
- Mirrors
- Space heaters
- Toilets
- Flush buttons
- Deck drains

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.1.5 Service disruption. When sewage collection service is disrupted due to contractor repairs, the Contractor must refer to SFLC Standard Spec 0000 par 3.2.11 to provide required temporary facilities.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.3 Sanitary Space (02-72-2-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.3.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 50 square feet.

3.3.2 Water Faucet, Renew. Crop and renew 1 sink water faucets, including all fittings and hardware/software.

3.3.3 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.3.4 Bulkhead Preservation. Prepare and coat approximately 45 square feet of aluminum bulkhead to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs.).

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.4 Sanitary Space (1-51-2-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.4.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 150 square feet.

3.4.2 Toilet Privacy Dividers, Renew. Crop and renew 2 toilet privacy dividers, including all associated fittings and hardware.

3.4.3 Shower Stall, Renew. Crop and renew 2 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.4.4 Water Faucet, Renew. Crop and renew 2 sink water faucets, including all fittings and hardware/software.

3.4.5 Vacuum Toilet, Renew. Crop and renew 2 vacuum toilets, including all fittings and hardware/software.

3.4.6 Drop Ceiling, Renew. Install sanitary space drop ceiling, including all support structure and hardware, approximately 95 square feet.

3.5 Sanitary Space (2-58-1-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.5.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 135 square feet.

3.5.2 Toilet Privacy Dividers, Renew. Crop and renew 1 toilet privacy dividers, including all associated fittings and hardware.

3.5.3 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.5.4 Water Faucet, Renew. Crop and renew 2 sink water faucets, including all fittings and hardware/software.

3.5.5 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.5.6 Drop Ceiling, Renew. Install sanitary space drop ceiling, including all support structure and hardware, approximately 50 square feet.

3.6 Sanitary Space (2-59-2-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.6.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 150 square feet.

3.6.2 Toilet Privacy Curtain, Renew. Crop and renew 1 toilet privacy curtain, including all associated fittings and hardware.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.6.3 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.6.4 Water Faucet, Renew. Crop and renew 2 sink water faucets, including all fittings and hardware/software.

3.6.5 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.6.6 Drop Ceiling, Renew. Install sanitary space drop ceiling, including all support structure and hardware, approximately 45 square feet.

3.7 Sanitary Space (2-165-0-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.7.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 20 square feet.

3.7.2 Shower Stall, Renew. Crop and renew 2 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.7.3 Water Faucet, Renew. Crop and renew 2 sink water faucets, including all fittings and hardware/software.

3.7.4 Vacuum Toilet, Renew. Crop and renew 2 vacuum toilets, including all fittings and hardware/software.

3.7.5 Drop Ceiling, Renew. Install sanitary space drop ceiling, including all support structure and hardware, approximately 80 square feet.

3.7.6 Towel racks, renew. Install 2 towel racks, including all fittings and hardware.

3.8 Sanitary Space (2-186-0-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.8.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 230 square feet.

3.8.2 Toilet Privacy Dividers, Renew. Crop and renew 2 toilet privacy dividers, including all associated fittings and hardware.

3.8.3 Shower Stall, Renew. Crop and renew 2 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.8.4 Water Faucet, Renew. Crop and renew 2 sink water faucets, including all fittings and hardware/software.

3.8.5 Vacuum Toilet, Renew. Crop and renew 2 vacuum toilets, including all fittings and hardware/software.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.8.6 Drop Ceiling, Renew. Install sanitary space drop ceiling, including all support structure and hardware, approximately 90 square feet.

3.9 Sanitary Space (1-174-2-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.9.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 100 square feet.

3.9.2 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.9.3 Water Faucet, Renew. Crop and renew 3 sink water faucets, including all fittings and hardware/software.

3.9.4 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.9.5 Drop Ceiling, Renew. Crop and renew sanitary space drop ceiling, including all support structure and hardware, approximately 70 square feet.

3.10 Sanitary Space (1-186-4-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.10.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 50 square feet.

3.10.2 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.10.3 Water Faucet, Renew. Crop and renew 2 sink water faucets, including all fittings and hardware/software.

3.10.4 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.10.5 Drop Ceiling, Install. Crop and renew sanitary space drop ceiling, including all support structure and hardware, approximately 60 square feet.

3.11 Sanitary Space (01-47-3-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.11.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 20 square feet.

3.11.2 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.11.3 Water Faucet, Renew. Crop and renew 1 sink water faucets, including all fittings and hardware/software.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.11.4 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.12 Sanitary Space (01-47-4-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.12.1 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.12.2 Water Faucet, Renew. Crop and renew 1 sink water faucets, including all fittings and hardware/software.

3.12.3 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.13 Sanitary Space (01-68-2-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.13.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 85 square feet.

3.13.2 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.13.3 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.14 Sanitary Space (01-81-1-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.14.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 60 square feet.

3.14.2 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.14.3 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.15 Sanitary Space (01-89-2-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.15.1 False Bulkhead, Renew. Crop and renew sanitary space false bulkhead, approximately 75 square feet.

3.15.2 Vacuum Toilet, Renew. Crop and renew 1 vacuum toilets, including all fittings and hardware/software.

3.15.3 Drop Ceiling, Renew. Crop and renew sanitary space drop ceiling, including all support structure and hardware, approximately 10 square feet.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.15.4 Lighting Electrical Equipment, Renew. Crop and renew 1 junction box, 1 double light switch, and 6 linear feet of conduit, including all hardware and fittings.

3.16 Decon Station & Shower (01-95-2-L). The Contractor must perform the following, as designated by the Coast Guard Inspector and using Coast Guard Drawings listed in Section 2 as guidance.

3.16.1 Shower Stall, Renew. Crop and renew 1 shower enclosures, including all associated piping, shower controls/heads, and shower pan.

3.16.2 Stainless Ceiling, Renew. Crop and renew sanitary space stainless ceiling, including all support structure and hardware, approximately 10 square feet.

3.16.3 Electrical Components, Renew. Crop and renew the following electrical equipment:

- 6 linear feet of electrical conduit
- One double gang light switch
- One sound powered phone junction box

3.17 Pipe flushing. The Contractor must flush all new and disturbed piping with clean fresh water until all debris is removed but no longer than five minutes. Ensure flushing fluid is directed to move scale and foreign debris away from installed machinery to prevent possible damage upon operational testing. Submit a CFR documenting date and time of flushing process and level of pipe cleanliness.

3.17.1 Dispose of flushing fluid in accordance with all applicable Federal, state, and local regulations.

3.18 Pipe disinfecting. After all other work involving the potable water system has been completed, the Contractor must disinfect and treat the affected potable water piping, as necessary to meet or exceed the requirements of AWWA C652. After disinfecting, remove and dispose of all treated water in accordance with all Federal, state, and local regulations.

3.19 Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all new and disturbed piping and components of the potable water system in accordance with SFLC Std Spec 0740, Appendix C, Hydrostatic Test. Ensure zero leakage from or permanent deformation of pressure-containing parts by repairing all leaks, deformations, and discrepancies. Submit a CFR.

3.20 Leak test. After completing all authorized mechanical (i.e. threaded, bolted, etc.) joint repairs, the Contractor must test the potable water system's operation using the system fluid at normal operating pressure. Ensure zero visible leakage from or deformation of mechanical parts by repairing all leaks and discrepancies. Submit a CFR.

3.21 Boundary test, generic. The Contractor must verify the integrity of all boundaries affected by this work item using one of the methods described in SFLC Std Spec 0740, Appendix C. Submit a CFR.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.22 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 16: Watertight Sliding Door, Overhaul

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to overhaul the watertight hydraulic door to Auxiliary Machinery Space No. 1 (2-82-0-E)

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST (\$/UNIT)
N	Hydraulic Cylinder	NSN: 3040-01-115-3242	1 ea.	2,452.03
N	Hydraulic Pump	NSN: 4320-01-115-3476	1 ea.	1,103.49

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 584-001, Rev C, Sliding Watertight Door Piping A&D

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 2722, Feb 2019, Door, Sliding Watertight
 Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements
 Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and Allied Processes
 Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2020, Auxiliary Machine Systems
 Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

None.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, (Interferences). Known interferences include, but are not limited to the following:

- Hydraulic door
- Piping
- Electrical cables

WARNING

Do not drain ANY fluids, including fresh water, into any space, bilge, or exterior location.

3.2 Fluid handling. The Contractor must remove and dispose of removed fluids from the affected piping system, in accordance with all applicable Federal, state, and local regulations.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.3 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.4 Renewal particulars. The Contractor must crop and renew the following hydraulic door equipment, including all associated hardware and seals, using Coast Guard Drawing 901 WMEC 584-001 and Coast Guard Tech Pub 2722 as guidance.

- Hydraulic cylinder
- Rollers, tracks, and guide plates
- Top and bottom guide rails and guide plates
- Top and bottom wedge plates
- Brass strips
- Brass side strips
- Teleflex indicator arm
- Control valve block, hydraulic
- Directional control valve
- Hydraulic pump and motor
- Electrical limit switches

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

- Local control switch

3.5 Overhaul particulars. The Contractor must overhaul the following hydraulic door equipment using Coast Guard Drawing 901 WMEC 584-001 and Coast Guard Tech Pub 2722 as guidance.

3.5.1 Local and remote hand pumps. Remove and disassemble the local and remote hand pumps; clean and visually inspect the pump assembly for any wear and defects. Reassemble each pump with new seals and reinstall.

3.5.2 Oil reservoir. Open and clean the interior surfaces of the reservoir. Perform a visual inspection of the tank interior surfaces. Renew the cover gaskets and reinstall tank clean-out covers.

3.5.3 Hydraulic hoses. Renew all hose assemblies in accordance with Std Spec 5000.

3.6 Door restoration. The Contractor must refill the system with hydraulic fluid and adjust the door using Coast Guard Drawing 901 WMEC 584-001 and Coast Guard Tech Pub 2722 as guidance.

3.7 Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all new and disturbed piping and components of the potable water system in accordance with SFLC Std Spec 0740, Appendix C, Hydrostatic Test. Ensure zero leakage from or permanent deformation of pressure-containing parts by repairing all leaks, deformations, and discrepancies. Submit a CFR.

3.8 Leak test. After completing all authorized mechanical (i.e. threaded, bolted, etc.) joint repairs, the Contractor must test the potable water system's operation using the system fluid at normal operating pressure. Ensure zero visible leakage from or deformation of mechanical parts by repairing all leaks and discrepancies. Submit a CFR.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.9 Operational test, post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

3.10 Touch-up preservation. The Contractor must prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs.)

4. NOTES

This section is not applicable to this work item.

WORK ITEM 17: Temporary Services, Provide - Cutter

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to provide temporary services to the Cutter, during the performance of this availability.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020,
General Requirements

Surface Forces Logistics Center Standard Specification 8635 (SFLC Std Spec 8635), 2020,
Temporary Services

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences).

3.2 Temporary service particulars. The Contractor must provide the below listed temporary services, in accordance with SFLC Std Spec 8635.

TABLE 1 - SERVICE SELECTION

*SUB-PARAGRAPH	TITLE	Y/N
3.3.1	Office space	N
3.3.2	Telephone and internet access	N
3.3.3	Parking	N
3.3.4	Duty section berthing: __ male, __ female. Duty section berthing must be provided for	N
3.3.5	Electrical power (including all requirements in associated sub-paragraphs)	N
3.3.6	Hull grounding straps (not applicable when cutter is waterborne)	N
3.3.7	Compressed air (including all requirements in associated sub-paragraphs)	N
3.3.8	Hazardous material/hazardous waste disposal (see Tables 2 and 3 below)	N
3.3.9	Heavy lift equipment:	N
3.3.10	Water supply	
3.3.10.1	Potable water:	N
3.3.10.2	Hot-circulating water	N
3.3.10.3	Cooling water	Y
3.3.10.4	Firemain system (including all requirements in associated sub-paragraphs)	N
3.3.11	Steam (including all requirements in associated sub-paragraphs)	N
3.3.12	Refuse disposal	N
3.3.13	Sewage and grey water disposal (including all requirements in associated sub-paragraphs)	N
3.3.14	Storage – General (including all requirements in associated sub-paragraphs):	
3.3.14	Dry stores.	N
3.3.14	Paint and flammable stores.	N
3.3.14	Refrigerated stores.	Y
3.3.15	Small boat storage (including all requirements in associated sub-paragraphs)	N

*Each sub-paragraph number relates directly to the identical sub-paragraph number in SFLC Std Spec 8635.

TABLE 2 - HAZARDOUS WASTE DISPOSAL – LIQUIDS (GALLONS)

PAINT THINNERS	ENGINE COOLANT	BILGE WATER
0	0	0

TABLE 3 - HAZARDOUS WASTE DISPOSAL – SOLIDS

OILY FILTERS	OILY RAGS (LBS)	EMPTY 1-GAL CONTAINER*	EMPTY 5-GAL CONTAINER*	EMPTY 55-GAL CONTAINER*
0	0	0	0	0

*Previously housed hazardous materials.

3.2 Extended temporary services. If the performance period of the contract is extended by the KO, the contractor must continue to provide all temporary services as specified herein for the extension period.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 18: Auxiliary Salt Water Pump, Replace

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to remove the existing auxiliary salt water pumps and motors (located in the Auxiliary Machinery Space Number 2 (3-82-0-E) and replace with new centrifugal pumps and motors, including all associated system interfaces and piping modifications.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST (\$/UNIT)
N	***Auxiliary Salt Water Pump	PN: Durco MK3 Pump 2K6X4V-13	2 ea	\$42,000.00

***Government-furnished property, which is to be supplied by the vessel.

2. REFERENCES

COAST GUARD DRAWINGS

- Coast Guard Drawing 901 WMEC 185-015, Rev J, Aux Mchry Space No2 Fnds
- Coast Guard Drawing 901 WMEC 256-002, Rev T, Mn And Aux SW Cooling Sys A&D
- Coast Guard Drawing 901 WMEC 256-004, Rev A, Aux. Salt Water Mods.
- Coast Guard Drawing 901 WMEC 256-013, Rev A, Mn and Aux SW Cooling Sys Diag
- Coast Guard Drawing 901 WMEC 320-002, Rev T, Power System Feeders IWD
- Coast Guard Drawing 901 WMEC 320-003, Rev U, Power System Hold
- Coast Guard Drawing 901 WMEC 320-035, Rev AR, As-Built Electrical One-Line Diagram
- Coast Guard Drawing 905 WMEC 185-015, Rev F, Aux Mchry Space No2 Fdn
- Coast Guard Drawing 905 WMEC 256-004, Rev E, AMS SW Cooling Sys A&D
- Coast Guard Drawing 905 WMEC 256-011, Rev A, Mn and Aux SW Cooling Sys Diag
- Coast Guard Drawing 905 WMEC 320-002, Rev H, Power System Feeders IWD
- Coast Guard Drawing 905 WMEC 320-003, Rev K, Power System Hold
- Coast Guard Drawing 905 WMEC 320-014, Rev AN, Electrical One-Line Diagram

COAST GUARD PUBLICATIONS

- Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2020, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 0850 (SFLC Std Spec 0850), 2020, General Requirements for Drawing Preparation

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2020, General Requirements

Surface Forces Logistics Center Standard Specification 3042 (SFLC Std Spec 3042), 2020, Shipboard Electrical Cable Removal, Relocation, Splice, Repair, and Installation

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

OTHER REFERENCES

ASTM International (ASTM) D1330, 2010, Standard Specification for Rubber Sheet Gaskets
Flow Serve User Instructions Manual, 71569102

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS), SP-58, 2018, Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application and Installation

Naval Sea Systems Command (NAVSEA) Underwater Ship Husbandry Manuals (UWSH) S0600-AA-PRO-160, Jan 2011, Chapter 16, Cofferdams

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the inspections listed in the following paragraph(s):

- 3.3.2 Cleaning and inspection

3.1.2 Tech Rep.

None.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection).

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences). Known interferences include, but are not limited to the following:

- Deck plates and grating
- Gauge lines
- Piping and hoses
- Fire pump
- Gate valves
- Structural supports
- Electrical Cables
- Cable Racks

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

- Wire ways
- Fuel Tanks

3.1.5 Cofferdam repairs. The Contractor must fabricate and install a cofferdam in accordance with UWSH S0600-AA-PRO-160, and as follows:

3.1.5.1 Prior to cofferdam installation, provide the KO with individual diver certification documentation that each diver is trained and experienced in accordance with UWSH S0600-AA-PRO-160, Appendix E.

3.1.5.2 Maintain double-valve protection (two boundaries) using two of the following:

- Sea chest valve
- Internal blank-off
- External cofferdam, patch or plug

3.1.5.3 For sea valve maintenance, notify the COR at least 24 hours prior to removing the sea valve. Install an external patch and an internal gasketed blank immediately after the sea valve is removed.

3.1.5.4 After all work is complete, turn over fabricated cofferdam(s) to the Coast Guard Property Administrator for disposition.

NOTE

A cofferdam is any device preventing water intrusion during maintenance and/ or repairs; including a plug, patch or containment structure.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness an operational pre-test (by Coast Guard personnel) of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.3 Requirements. The Contractor must remove existing Auxiliary Salt Water Pumps (see paragraph 1.1 (Intent)), shown on Coast Guard Drawing 901 WMEC 256-002 or 905 WMEC 256-004.

3.3.1 Removal. Secure, isolate, and remove Auxiliary Salt Water Pumps. Install blank flanges and gaskets, in accordance with (ASTM) D1330, over the piping system openings and valves using Coast Guard Drawing 901 WMEC 256-013 or 905 WMEC 256-011 as guidance, then secure with at least two bolts 180-degrees apart to provide a watertight seal. Ensure blank flanges are installed immediately after the auxiliary salt water pumps are removed.

3.3.2 Cleaning and inspection. After removing the ASW pumps, visually inspect foundation. Submit a CIR for any repairs required.

3.3.3 Installation. The Contractor must install the new Government Furnished auxiliary salt water pumps, using Coast Guard Drawings 901 WMEC 256-002 and 901 WMEC 256-013, or 905 WMEC 256-004 and 905 WMEC 256-011 as guidance.

NOTE

Coast Guard Personnel will operate all vessel equipment and machinery.

3.3.4 Foundation modification. The Contractor must furnish and install all material necessary to modify and lower the former auxiliary salt water pumps foundation by approximately 10” to accept the

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

installation of the new auxiliary salt water pumps to align with suction and discharge piping using Coast Guard Drawing 901 WMEC 185-015 or 905 WMEC 185-015 as guidance

3.3.4.1 The above modifications serve as a general guideline for location of the new auxiliary salt water pumps for bidding purposes. Due to variations in configuration among the vessels in the class, the Contractor must perform a shipcheck to verify and refine the necessary modifications.

3.3.5 Piping modification. The Contractor must furnish and install all material necessary to modify suction and discharge piping to fit the new auxiliary salt water pumps using Coast Guard Drawing 901 WMEC 256-002 or 905 WMEC 256-004 as guidance.

3.3.6 Fastener renewal. Contractor must upgrade and renew fastener hardware to 316 Stainless steel cap screws and hex nuts during assembly.

3.4 Electrical wiring renewal. The Contractor must renew electrical power cable from auxiliary salt water pumps to auxiliary salt water pump controllers in accordance with SFLC Std Spec 3041 using Coast Guard Drawings 901 WMEC 320-002, 901 WMEC 320-003 and 901 WMEC 320-035 or 905 WMEC 320-002, 905 WMEC 320-003 and 905 WMEC 320-014 as guidance. Existing wireways must be utilized for new cable runs as much as possible.

3.5 Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all new and disturbed piping and components of the auxiliary salt water pumps system in accordance with SFLC Std Spec 0740, Appendix C, Hydrostatic Test. Ensure zero leakage from or permanent deformation of pressure-containing parts by repairing all leaks, deformations, and discrepancies. Submit a CFR.

3.6 Leak test. After completing all authorized mechanical (i.e. threaded, bolted, etc.) joint repairs, the Contractor must test the seawater system's operation using the system fluid at normal operating pressure. Ensure zero visible leakage from or deformation of mechanical parts by repairing all leaks and discrepancies. Submit a CFR.

3.7 Operational test, post repairs. After completion of work, the Contractor must witness an operational test (by Coast Guard personnel) of all other items or shipboard devices (besides the new auxiliary saltwater pumps) that have been disturbed, used, repaired, altered, or installed, to prove that they are in satisfactory operating condition. Submit a CFR.

3.8 Pipe flushing. The Contractor must flush all new and disturbed piping with clean fresh water until all debris is removed but no longer than five minutes. Ensure flushing fluid is directed to move scale and foreign debris away from installed machinery to prevent possible damage upon operational testing. Submit a CFR documenting date and time of flushing process and level of pipe cleanliness.

3.8.1 Dispose of flushing fluid in accordance with all applicable Federal, state, and local regulations.

3.9 Redlined drawing deliverable(s). The Contractor must “red-line” the below listed Coast Guard drawings to reflect the work or deviations specified in this work item in accordance SFLC Std Spec 0850.

901 WMEC 185-015, Aux Mchry Space No2 Fnds

901 WMEC 256-002, Mn and Aux SW Cooling Sys A&D

901 WMEC 256-013, Mn and Aux SW Cooling Sys Diag

-OR-

905 WMEC 185-015, Aux Mchry Space No2 Fdn

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

905 WMEC 256-004, AMS SW Cooling Sys A&D

905 WMEC 256-011, Mn and Aux SW Cooling Sys Diag

3.9.1 Preliminary/draft submission. No later than 24 hours after completion of this work item, submit a draft copy of the "red-lined" drawing(s) to the COR for review and approval.

3.9.2 Final submission. No later than 10 calendar days after receiving Coast Guard comments or completion of the availability, whichever occurs first, incorporate all comments and deliver one set of the final red-lined drawing(s) to the COR.

3.10 Operational test, post installation. After completion of work, the Contractor must thoroughly test both auxiliary salt water pumps in the presence of the Coast Guard Inspector and demonstrate each pump can provide required pressure and motor is within limits.

NOTE

This test must be performed while vessel is waterborne.

Coast Guard personnel will operate all shipboard machinery and equipment including valve line-ups.

3.10.1 Pump performance test.

3.10.1.1 Clean ASW pump suction strainers prior to accomplishing test.

3.10.1.2 Temporarily install compound gauges on suction side of ASW pumps at test connections (see Detail 31-A of 901 WMEC 256-013 or Detail 36-A of 905 WMEC 256-011).

3.10.1.3 Ensure all auxiliary systems served by the ASW system including pump bleed lines are isolated (ASW-3-90-6 and ASW-3-92-2 (A-Class) or ASW-3-93-8 and ASW-3-92-8 (B-Class) closed) and 8" overboard discharge valve ASW-3-95-6 (A-Class) or ASW-3-95-8 (B-Class) is fully open.

3.10.1.4 Energize No.1 ASW Pump and ensure No.2 ASW Pump is isolated and secured.

3.10.1.5 Measure overboard discharge flow rate using a calibrated flowmeter (should be approximately 900 GPM with valve fully open) and record in Pump Performance Data Sheet.

3.10.1.6 Record pump suction (temporary gauge installed in 3.10.1.2) and discharge (gauge G10) pressures.

3.10.1.7 Measure and record electric motor voltages, amperage and motor shaft RPM.

3.10.1.8 Throttle ASW-3-95-6 (A-Class) or ASW-3-95-8 (B-Class) in 10% increments and repeat data collection steps 3.10.1.5 through 3.10.1.7 until pump is dead headed.

3.10.1.9 Repeat with No.1 ASW Pump isolated and secured and No.2 ASW Pump energized.

3.10.2 System operational test.

3.10.2.1 With ASW system aligned for normal operations, operate each ASW pump separately and verify satisfactory cooling capacity to all connected systems.

USCGC HARRIET LANE (WMEC-270A) DOCKSIDE AVAILABILITY FY2023

3.11 Touch-up preservation. The Contractor must prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs.)

- Auxiliary salt water pumps foundation
- Auxiliary salt water pumps piping
- Any and all other disturbed areas

3.12 Pipe labeling. The Contractor must accomplish the following:

3.12.1 Stencil the following onto the pipe surfaces:

- Name of the piping system service.
- Destination, where feasible.
- Direction of flow, indicated by an arrow three inches long pointing away from the lettering (for reversible flow, point an arrow away from each end of the lettering).

3.12.2 Ensure all lettering and arrow(s) are as follows:

- In general, black color except white for dark-colored piping.
- Applied in conspicuous locations and preferably near control valves.

4. NOTES

4.1 OEM Drawings. The Coast Guard upon request will provide the Flow Serve drawings, and User Instructions Manual.

PUMP PERFORMANCE TEST DATA SHEET (SHEET 1 OF 2)

NO.1 ASW PUMP (AUXILIARY MACHINERY SPACE NO.2 3-82-0-E)								
Valve Position	Flow Rate (GPM)	Suction (psi)	Discharge (psi)	Motor Data				
				Voltage			Amperage	RPM
				AB	BC	CA		
Fully Open								
10% Closed								
20% Closed								
30% Closed								
40% Closed								
50% Closed								
60% Closed								
70% Closed								
80% Closed								
90% Closed								
Fully Closed								
Test Equipment	Test Instrument				Calibration Due Date			
	Pump Discharge Gauge							
	Pump Suction Gauge							
	Flowmeter							
	Voltmeter							
	Ammeter							
Tachometer								
Certification of Test Results	Contractor Signature			Date		COR		Date

PUMP PERFORMANCE TEST DATA SHEET (SHEET 2 OF 2)

NO.2 ASW PUMP (AUXILIARY MACHINERY SPACE NO.2 3-82-0-E)								
Valve Position	Flow Rate (GPM)	Suction (psi)	Discharge (psi)	Motor Data				
				Voltage			Amperage	RPM
				AB	BC	CA		
Fully Open								
10% Closed								
20% Closed								
30% Closed								
40% Closed								
50% Closed								
60% Closed								
70% Closed								
80% Closed								
90% Closed								
Fully Closed								
Test Equipment	Test Instrument				Calibration Due Date			
	Pump Discharge Gauge							
	Pump Suction Gauge							
	Flowmeter							
	Voltmeter							
	Ammeter							
	Tachometer							
Certification of Test Results	Contractor Signature			Date		COR		Date