USCGC BERTHOLF (WMSL 750)

SPECIFICATION FOR DOCKSIDE REPAIRS

FY2027

(Rev-0, 02 June 2026)

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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

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-100-006, Rev A, Inboard and Outboard Profiles

Coast Guard Drawing 418A-WMSL-185-001, Rev B, Air Compressor and Receiver Foundation Installation

Coast Guard Drawing 418A-WMSL-202-001, Rev D, Elex Dry Air Compressor Control Installation

Coast Guard Drawing 418A-WMSL-320-013, Rev C, Elex Dry Air Compressor Power Installation

Coast Guard Drawing 418A-WMSL-528-001, Rev A, Plumbing & Interior Deck Drain Diagram

Coast Guard Drawing 418A-WMSL-551-001, Rev A, Compressed Air Diagram

Coast Guard Drawing 418A-WMSL-551-003, Rev C, Elex Dry Air Compressor and Equipment Installation

Coast Guard Drawing 418A-WMSL-588-001, Rev A, Aviation Facilities General Arrangements

Coast Guard Drawing 418A-WMSL-588-005, Rev E, sUAS Combined Arrangement Modifications

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-100-017, Rev L, Unit 1310 Structure – Inner Bottom to 1st Platform – Fr 22 to Fr 35 (ASC100131)

Coast Guard Drawing 750-WMSL-100-530, Rev G, Modifications incidental to the installation of Allied Dual Pont Davit

Coast Guard Drawing 750-WMSL-100-516, Rev B, Topside Configuration (NSC 1 SRD)

Coast Guard Drawing 750-WMSL-085-025, Rev -, Compartment Areas & Volumes NSC 3 & Follow (AS3085012) (UNSIGNED)

Coast Guard Drawing 750-WMSL-085-003, Rev A, Compartment Areas & Volumes NSC 1 & NSC 2 Only (ASC085012)

Coast Guard Drawing 750-WMSL-167-001, Rev J, Manhole List Installation and Fabrication Details Ship Wide (ASC167001)

Coast Guard Drawing 750-WMSL-180-43, Rev G, FDN ARR DWG Design UNIT 4420 BKLT NO. 1 (ASC180442) (UNSIGNED)

Coast Guard Drawing 750-WMSL-191-001, Rev G, Ballast/Emergency Dewatering System

Coast Guard Drawing 750-WMSL-191-024, Rev C, Ballast/Emergency Dewatering Unit 2210

Coast Guard Drawing 750-WMSL-191-040-1, Rev B, Ballast/Emergency Dewatering Unit 3220 (ASC191322-BA) (UNSIGNED)

Coast Guard Drawing 750-WMSL-528-052, Rev _, Plumbing & Interior Dk Drains and Vent. Sys - Unit 3220 (AS6528322-PD) (UNSIGNED)

Coast Guard Drawing 750-WMSL_551_1, Rev J, Compressed Air Diagram

Coast Guard Drawing 750-WMSL-100-035, Rev M, Unit 2340 Structure Main Deck to 01 Level - Fr 52 to Fr 64 (ASC100234)

Coast Guard Drawing 750-WMSL-100-039, Rev N, Unit 3140 Structure Mn Dk to 01 Lvl - Fr 64 to Fr 76 (ASC100314)

Coast Guard Drawing 750-WMSL-100-043, Rev L, Unit 3240 - Main Deck to 01 Level - Fr 76 to Fr 82 (ASC100324)

Coast Guard Drawing 750-WMSL-100-051, Rev J, Unit 4310 Structure – 01 Level to 02 Level – Frame 44 to Frame 52

Coast Guard Drawing 750-WMSL-100-052, Rev J, Unit 4320 Structure – 02 Level and Above – Frame 48 to Frame 53

Coast Guard Drawing 750-WMSL-100-053, Rev J, Unit 4420 Structure – 01 Level and above – Frame 52 to Frame 67

Coast Guard Drawing 750-WMSL-100-059, Rev E, Topside Configuration (NSC 1 SRD) (AS1100004)

Coast Guard Drawing 750-WMSL-136-500, Rev C, Centerline Talon Grid & Deck Socket Installation

Coast Guard Drawing 750-WMSL-300-002, Rev C, Electrical Standard Details (ASC300003)

Coast Guard Drawing 750-WMSL-300-002, Rev C, Electrical Standard Details

Coast Guard Drawing 750-WMSL-300-024, Rev C, Unit 2240 - Main Dk Fr 44 to Fr 52 Arr of Elect Eqpt (ASC300224)

Coast Guard Drawing 750-WMSL-320-042, Rev C, Electrical One Line Diagram (NSC 6 SRD)

Coast Guard Drawing 750-WMSL-505-006, Rev D, List of Hoses (ASC505006)

Coast Guard Drawing 750-WMSL-506-001, Rev F, Overflow/Air Escapes Sounding Tubes Diagram

Coast Guard Drawing 750-WMSL-506-037, Rev B, OVFL/AE & SNDG Tubes system Unit 4110

Coast Guard Drawing 750-WMSL-506-515, Rev -, Vent Modifications IWO Scuttle 02-29-1 Install

Coast Guard Drawing 750-WMSL-512-536, Rev -, HVAC Mods for POU Compressor Install

Coast Guard Drawing 750-WMSL-516-002, Rev K, Chilled Water System Diagram (ASC516002)

Coast Guard Drawing 750-WMSL-520-504, Rev D, Seawater Cooling Piping Mods IWO Dual Point Davit Installation

Coast Guard Drawing 750-WMSL-528-015, Rev E, Plumbing & Interior Deck drains and Vent Unit 2110

Coast Guard Drawing 750-WMSL-556-015, Rev E, Bow Thruster HPU Diagram (ASC556009)

Coast Guard Drawing 750-WMSL-572-002, Rev D, Elevator Arr & Instl (ASC572002)

Coast Guard Drawing 750-WMSL-583-002, Rev D, Small Boat Starboard Handling System Arrangement & Details

Coast Guard Drawing 750-WMSL-583-518, Rev D, Hydraulic Piping Mods IWO Dual Point Davit Installation

Coast Guard Drawing 750-WMSL-588-001, Rev J, Aviation Facilities General Arrangements (ASC588001)

Coast Guard Drawing 750-WMSL-588-006, Rev E, Helo Capture/Handling Arrangement & Instl Dets (ASC588005)

Coast Guard Drawing 750-WMSL-588-503, Rev E, Tiedown Installation for Navy H60S/H60R Helo (Waesche Only)

Coast Guard Drawing 750-WMSL-588-504, Rev B, Tiedown Installation for Navy H60S/H60R Helo (Stratton)

Coast Guard Drawing 750-WMSL-593-011, Rev B, Solid Waste System Schematic (ASC593026)

Coast Guard Drawing 750-WMSL-625-001, Rev C, Window Arrangement and Details

Coast Guard Drawing 750-WMSL-631-002, Rev M, Paint Schedule (ASC631002)

Coast Guard Drawing 750-WMSL-634-001, Rev H, Deck Covering Schedule (ASC634001)

Coast Guard Drawing 750-WMSL-635-002, Rev K, Insulation Arr & Details Thermal, Acoustic, & Fire (ASC635002)

Coast Guard Drawing FL-1204-3, Rev A, Fleet Welded Padeyes and Links

NAVAIR Drawing 627927, Rev C, Visual Landing Aids Installation and Clearance Requirements

NAVSEA Drawing 803-1385828, Rev P, Nozzles AFFF and Washdown Systems

NAVSEA Drawing 804-5773931, Rev A, Acoustic & Thermal Insulation for Compartments Installation Details

NAVSEA Drawing 804-5959308, Rev -, Lifeline Systems

WMSL MH-60R/S Hangar Painting Guidance, 2018, Schlemmer G.W., AIR 4.8.1.5

COAST GUARD PUBLICATIONS

BOAT DAVIT - MODELS DDP11000CTS & SP2200 (S/N: 2328-753, 2329-751, 2332-750) - TECHNICAL MANUAL

Coast Guard Commandant Instruction (COMDTINST) M10360.3, Jun 2006, Coatings and Colors Manual

Coast Guard Commandant Instruction (COMDTINST) M10360.3 (Series), Coatings and Color Manual

Coast Guard Technical Publication (TP) 7108A, SWBS 573, Jan 2022, Stores Elevator – Model 20833 – Operation & Maintenance Manual

Coast Guard Technical Publication (TP) 7170, SWBS 593, July 2023, Incinerator, Type Atlas 600 S WS & Diesel Oil Tank Type 600

Coast Guard Technical Publication (TP) 7902, “Preliminary’ Dual Point Davit – Models DDP11000CTS & SP2200 (S/N – 2313 & 2315) We need the serial number of the new Davit

Coast Guard Technical Publication (TP) 7946, SWBS 593, May 2021, Incineration Plant - Installation, Operation, Maintenance & Spare Parts

Coast Guard Technical Publication (TP) 7999, SWBS 588, 2015, Talon Helicopter Landing Grid - Type 18-08

Coast Guard Technical Publication 7115A (TP 7115A), July 2025, Electronic Actuator Model Limitorque MX-05

Coast Guard Technical Publication 7431 (TP 7431), March 2021, Bow Thruster – Model TT1100 DPN CP – Mechanical & Hydraulic System – Installation Manual

Fire Prevention and Response

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 0850 (SFLC Std Spec 0850), 2022, General Requirements for Drawing Preparation

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2022, Shipboard Electrical Cable Test

Surface Forces Logistics Center Standard Specification 3042 (SFLC Std Spec 3042), 2022, Shipboard Electrical Cable Removal, Relocation, Splice, Repair, and Installation

Surface Forces Logistics Center Standard Specification 3100 (SFLC Std Spec 3100), 2022, Inspect, Test and Recondition AC Synchronous Machines In-Place

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2022, Auxiliary Machine 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), 2022, Requirements for Preservation of Ship Structures

Surface Forces Logistics Center Standard Specification 6341 (SFLC Std Spec 6341), 2022, Install Interior Deck Covering Systems

Talon Strength and Load Test, No 58817-3-200A, Rev A, 2011, Northrop Grumman Ship Systems, Inc.

OTHER REFERENCES

Allied Systems Drawing Number 68992, 2013, General Arrangement

Allied Systems Drawing Number 70082, 2013, Installation Drawing

American National Standard Institute/American Water Works Association ANSI/AWWA C217, 2017, Petrolatum and Petroleum Wax Tape Coatings for the Exterior of Connections and Fittings for Steel Water Pipeline

American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2024, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2024, 2024, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

American Society of Mechanical Engineers (ASME) A17.2, Guide for the Inspection of Elevators, Escalators and Moving Walks

American Society of Mechanical Engineers (ASME) B16.34, 2020, Valves-Flanged, Threaded, and Welding End

American Welding Society (AWS) B1.10M/ B1.10, 2016, Guide for Nondestructive Examination of Welds

American Welding Society (AWS) B1.11M/B1.11, 2015, Guide for the Visual Examination of Welds

American Welding Society (AWS) D1.1/D1.1M, 2025, Structural Welding Code – Steel

American Welding Society, AWS D1.2-96, 1996, Structural Welding Code, Steel

ASTM International (ASTM) D3359-23, 2023, Standard Test Methods for Measuring Adhesion by Tape Test

ASTM International (ASTM) D5363-16, 2016, Standard Specification for Anaerobic Single-Component Adhesives (AN)

ASTM International (ASTM) F1836M, Reapproved 2007, Standard Specification for Stuffing Tubes, Nylon and Packing Assemblies (Metric)

ASTM International (ASTM) F992, 2017, Standard Specification for Valve Label Plates

ASTM Internationals (ASTM) G46, 2018, Standard Guide for Examination and Evaluation of Pitting Corrosion

ASTM Internationals (ASTM) G46-21, 2021, Standard Guide for Examination and Evaluation of Pitting Corrosion

Code of Federal Regulations (CFR) Title 29, Part 1910, 2017, Occupational Safety and Health Standards

Code of Federal Regulations (CFR) Title 29, Part 1915, 2013, Occupational Safety and Health Standards for Shipyard Employment

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

Code of Federal Regulations (CFR) Title 29, Part 1915, Subpart E, Sep 2015, Scaffolds, Ladders and Other Working Surfaces

Code of Federal Regulations (CFR) Title 40, 2013, Protection of the Environment

DCN Drawing MEGAHRDE82100, Rev C, Landing Grid Type 18-08 Characteristics and Interfaces

International Standards Organization (ISO) 4406, 1996, Hydraulic Fluid Power – Fluids – Method for Coding the Level of Contamination by Solid Particles

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

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-67, 2022 Edition, Butterfly Valves

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-72A, 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

MIL-C-24757, Nov 1990, Cloth, Fiberglass, Coated

MIL-D-16791, Jan 1993, Detergents, General Purpose (Liquid, Nonionic)

MIL-DTL-15024, Nov 1997, Plates, Tags and Bands for Identification of Equipment

MIL-DTL-24643, Oct 2009, Cables, Electric, Low Smoke Halogen-Free, For Shipboard Use, General Specification for

MIL-PRF-16173E w/Interim Amendment 2, 2017, Corrosion Prevention Compound, Solvent Cut Back, Cold Application

MIL-PRF-24176C, 2020, Cement, Epoxy, Metal Repair and Hull Smoothing

MIL-PRF-24176C, Oct 2004, Cement, Epoxy, Metal Repair and Hull Smoothing

MIL-PRF-24613, Dec 1990, Deck Covering Materials, Interior, Cosmetic Polymeric

MIL-PRF-24667C, May 2008, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

MIL-PRF-24667D, 2021, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

MIL-STD-1310, Sep 2009, Shipboard Bonding, Grounding, and Other Techniques for Electromagnetic Compatibility and Safety

MIL-STD-1689A, 1990, Fabrication, Welding, and Inspection of Ships Structure

MIL-STD-2003-2, Sep 2009, Electric Plant Installation, Standard Methods for Surface Ships & Submarines (Equipment)

MIL-STD-2003-3, Sep 2009, Electric Plant Installation, Standard Methods for Surface Ships & Submarines (Penetrations)

NAVAIR ENGCEN Bulletin 1, Rev J; Air Capable Ship Aviation Facilities Resume

NAVAIR SI-ACS-AFB-1P, 2020, Air Capable Ship Aviation Facility Certification No. 1P

Society of Automotive Engineers (SAE) J1273, 2009, Recommended Practices for Hydraulic Hose Assemblies

Society of Automotive Engineers (SAE) J1475, 2009, Hydraulic Hose Fittings for Marine Applications

Society of Automotive Engineers (SAE) J1942/1, 2010, Qualified Hoses for Marine Applications

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2016, Bare Metal Power Tool Cleaning

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

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

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.3 (SSPC-SP 3), 2024, Power Tool Cleaning

The Society for Protective Coatings (SSPC)/NACE International (NACE) Joint Surface Preparation Standard SSPC-SP 10 (WAB)/NACE WAB-2, 2015, Near-White Metal Wet Abrasive 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)
2	N	Allied Systems Dual Point Davit with Control Console	NSN: 2030-01-630-6123 PN: DDP11000CTS & SP2200	1 ea.	$480,000
2	Y	CB-OTH Mark V (Coast Guard Drawing 26B-CB-V-801-001)	NSN: PN:	1 ea.	
5	N	Stanchion Bolts, (ST STL, ~NF EN ISO 4270, CHc M14x2)	NSN : 5307-14-534-8081 (DCN MEGAHRDE82100, Item 3)	15 ea.	$120.00
5	N	Stanchion Lock Nuts, (ST STL, ~NF EN ISO 4270, CHc M14x2)	NSN : 5310-14-534-8082 (DCN MEGAHRDE82100, Item 4)	129 ea.	$24.00
5	N	Fixation Bolts, (ST STL, NF EN ISO 4270, CHc M16x2-60/44)	NSN 5305-14-537-6930 (DCN MEGAHRDE82100, Item 5)	24 ea.	$40.00
5	Y	Jacking Bolts, (ST STL, NF EN 24017, HM16x2-100/100)	NSN 5305-14-463-7787 (DCN MEGAHRDE82100, Item 7)	6 ea.	$24.00
6	N	Atlas Copco SF6 + AP 7.5 HP, Oil Free Scroll Air Compressor, 30 Inch X 26 Inch X 33 Inch, Approximate Weight 350 Lbs.	PN: 8153611358	2 ea.	$8,770.85
6	N	AtlasCopco,CD+10,21.SCFM@100psi,160 psi(g) Heatless Regenerative Desiccant Air Dryer,40 Deg. F Dew Point, 115/1/60, 1/2" Connection Size (NPT), with Timer Control	PN 8102320184	2.ea.	$2,688.00
6	N	Atlas Copco LV120-200,120 Gallon, Receiver 25 Inch X 24 Inch X 74 Inch, Approximate Weight 275 Lbs.	PN: A10033	1 ea.	$900.00
6	N	Atlas Copco Electronic Water Drain Valve, 230 PSI, 138 CFM, 6.7 Inch X 2.8 Inch X 4.5 Inch	PN: 8102048012	2 ea.	203.50
6	N	Atlas Copco Gauge Kit for receiver	PN: 1280585377	1 ea.	900.00
6	N	Window, Heated, Fixed, Pilot House with Wiper Assembly Wynn type C by Cornell-Car*	PN: CC-10082-1	1 ea.	2500.00
6	N	IDEC Corporation, Emergency Stop	PN: FB1W-HW1B-V411R	2 ea	76.74

6	N	Kit PDP Sensor CD5-30+	PN: 8092266823	1 ea.	1,696.30

***Government-loaned property, which shall be returned to the vessel upon completion of the availability.**
****New or refurbished equipment that the Government may provide for installation in place of existing equipment.**
*****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
2	Side Boat Davit, Renew
5	Talon Grid (Type 18-08), Inspect and Test
7	Fantail Deck, Slip-Resistant, Partial Preservation and repair
8	Tenting (Stern Deck), Provide
9	Deck Covering (Slip-Resistant) Hangars, Renew
11	Main Drainage Valves, Overhaul
12	Fwd Grey Water Pump Discharge Check Valve, Renew
15	Wave Guide Dryer Flexible Hoses, Renew
16	Gas Turbine Moisture Separator Flexible Hoses, Renew
17	Bow Thruster Flexible Hoses, Renew
18	Anchor Windlass Flexible Hoses, Renew
19	Tanks (MP Fuel Storage and Overflow), Clean and Inspect

PRINCIPAL CHARACTERISTICS

418' WMSL	
PHYSICAL	
Length overall	418' 0"
Length between perpendiculars	390' 0"
Maximum beam	54' 0"
Beam @ 01 level	47' 9-1/8"
Depth (01 level @ side to baseline)	39' 2-3/4"
01 deck camber foredeck	1/4" in 1'-0"
Minimum berth depth	20' 0"
Height of highest projection	Approximately 119'
Draft, design	14.40'
Design displacement	3925 long tons
MACHINERY	
Two diesel engines	MTU 20V, 20-cylinder 9,730 SHP each
One gas turbine	General Electric LM2500; 29,500 SHP
Type of propulsion	CODAG
Electrical system	24 Volt DC
Two controllable pitch propellers	Rolls-Royce 5 blade, 14' 0" diameter; 229 RPM max
Two reduction gears	RENK
One cross connect gear	RENK
HULL	
Hull material	5086 Aluminum
	HSLA-80 Steel
	ABS EH 36 Steel
	ABS AH 36
Frame spacing	
FWD of FR 9	2' 3"
FR 9 to FR 10	6' 9"
FR 10 to FR 98	4' 1"
FR 98 to FR 99	3'-8"
ELECTRICAL	
Power	Three 1360 kW, 450 V, 60 Hz, 3 Phase, 1800 RPM Caterpillar 3512B diesel engines with Baylor ship service generators
Shore tie cable	Seven MIL-C-24368/2 (NATO) shore power receptacles, 400 A each
TANK CAPACITIES	
Diesel oil	220,359 gal
Fresh water	12,454 gal
JP-5 Fuel	35,182 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), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

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

Fire Prevention and Response

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, 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

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 in 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.

3.1.1.1 Fire Safety Plan submission. The Contractor must submit a copy of the CFR 1915, Subpart P, Fire Safety Plan with the Contractor's bid when work will be conducted in a Contractor–owned facility. Include any MOA(s) with local firefighting facilities.

3.1.1.2 Fire Plan submission. The Contractor must submit a copy of the developed availability specific fire plan, as requested in the Fire Protection and Response work item, seven (7) days before the Arrival Conference.

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 Contractor-provided fire watch personnel. The Contractor must provide fire watch personnel and equipment.

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 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 "measurement" 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.

3.5 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.

3.5.1.1 USCG Generator status. The activity Generator Status for the Coast Guard Facility is 7690390037.

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.

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. Approved updates to the 2022 SFLC Standard Specifications will appear here.

3.7.1 SFLC Standard Specification 5550: Replace paragraph 3.11.3 to state, "Material supporting imminent work shall be brought on the cutter and stored where the work is being performed. Material that appreciably contributes to fire load shall be removed at the end of each work shift when personnel are not present. Trash, debris, and packaging materials shall be promptly removed from the vessel at the end of each work shift and not allowed to accumulate." Advance the paragraph numbering of the Fire Prevention and Safety Inspection form to 3.11.4.

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.

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/AMPP INSPECTOR	SIGNATURE	CERT. #	DATE / TIME
NAME OF CG REPRESENTATIVE	**SIGNATURE**	**UNIT**	**DATE/TIME**

QA-2 - QUALITY ASSURANCE INSPECTION FORM
(ENVIRONMENTAL READINGS)

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE

Use one sheet for each activity. Record conditions every four hours from before surface preparation to application of final coating system coat.

DATE & TIME	ACTIVITY (SURFACE PREPARATION, PRIMER COAT, BARRIER COAT, TOP COAT, ETC…)	LOCATION (FRAME & DECK, RELATION TO EQUIPMENT, ETC.)	TEMPERATURE				% REL. HUMID-ITY
			DEW PT.	SURFACE	AMBIENT	ΔT | DP - SURFACE |	

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

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/AMPP No. 2	☐			
SSPC-SP WJ-2/AMPP WJ-2	☐			
SSPC-SP-3	☐			
SSPC-SP-11	☐			
SSPC-SP-11 (inaccessible area)	☐			
Brush-blasting (non-metallic substrate)	☐			
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/AMPP INSPECTOR	SIGNATURE	CERT. #	DATE / TIME
NAME OF CG REPRESENTATIVE	**SIGNATURE**	**UNIT**	**DATE/TIME**

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/AMPP No. 2	☐			
SSPC-SP WJ-2/AMPP WJ-2	☐			
SSPC-SP-3	☐			
SSPC-SP-11	☐			
SSPC-SP-11 (inaccessible area)	☐			
Brush-blasting (non-metallic substrate)	☐			
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/AMPP INSPECTOR	SIGNATURE	CERT. #	DATE / TIME
NAME OF CG REPRESENTATIVE	**SIGNATURE**	**UNIT**	**DATE/TIME**

QA-4 - QUALITY ASSURANCE INSPECTION FORM
(SURFACE SOLUBLE SALT CONDUCTIVITY LOG)

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

SOLUBLE SALT CONDUCTIVITY MEASUREMENTS IAW SSPC-GUIDE 15.		
DATE	TEST LOCATIONS	CONDUCTIVITY (MICROSIEMENS/CM)

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

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/AMPP 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
PRINT 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: ◯Yes ◯ No	Check Valve Installed:◯Yes ◯No	Check Valve Operates Properly:◯Yes ◯No

LADDER DATA		
NR of Ladder(s) Present: ◯Yes ◯No	Ladder Damaged:◯Yes ◯No	Ladder Material:

TANK LEVEL INDICATOR (TLI) DATA		
TLI Present in Tank: ◯Yes ◯No	TLI Damaged: ◯Yes ◯No	TLI Type:

SOUNDING TUBE DATA	
Sounding Tube Present in Tank: ◯Yes ◯No	Sounding Tube Damaged: ◯Yes ◯No
Striker Plate Damaged (>50%): ◯Yes ◯No	

CATHODIC PROTECTION DATA		
Cathodic Protection in Tank:◯Yes ◯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)	

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SFLC-ESD-25	TANK AND VOID ASSESSMENT SHEET
PRINT	

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

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WORK ITEM 1: Fire Prevention, Provide

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to provide a fire plan, discuss fire safety procedures, maintain fire boundaries and fittings, conduct inspections and keep firefighting systems in a ready condition to address fires.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

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

OTHER REFERENCES

MIL-C-24757, Nov 1990, Cloth, Fiberglass, Coated

3. REQUIREMENTS

3.1 Fire Plan. The Contractor must develop and implement a written fire plan in accordance with Paragraph 3.1 of SFLC Std Spec 5550, including Paragraph 3.1.3.

3. 1.1 Fire Prevention Responsible Party. The Contractor must appoint a Fire Prevention Responsible Party (FPRP) in accordance with Paragraph 3.1.4 of SFLC Std Spec 5550.

3.1.1.1. Any item in SFLC Std Spec 5550 that requires FPRP approval, also requires COR approval.

3.1.1.2. In addition to responsibilities listed in SFLC Std Spec 5550, the FPRP is responsible for the following tasks:

- Conduct all inspections per paragraph 3.7 of this work item. The FPRP may designate a representative to conduct these inspections on their behalf.

- Ensuring that contractor employees and sub-contractors understand the Fire Plan and all other requirements of this work item. This includes (but is not limited to) informing contractor/subcontractor employees of danger signals and egress procedures aboard the ship.

3.2 Fire Prevention and Response Conference. The Contractor must participate in the Fire Prevention and Response Conference as detailed in Paragraph 3.12 of SFLC Std Spec 5550.

3.2.1 At a minimum, the following personnel from the Contractor must attend the Fire Prevention and Response conference, the Fire Familiarization Tour and the Initial Inspection:

- Ship availability superintendent
- FPRP

3.2.2 The Fire Prevention and Response Conference, the Fire Responsibility Familiarization tour and the Initial Inspection must occur before the start of industrial work. Coordinate schedule with the COR.

NOTE

Requirements for the Initial Inspection are covered in Paragraph 3.7 of this work item

3.3 Fire Zones. The Contractor must comply with the fire zone requirements from Paragraph 3.2 of SFLC Std Spec 5550.

3.3.1 Paragraph 3.2.3 of SFLC Std Spec 5550 is only applicable if the requirements of Paragraph 3.2.2 of SFLC Std Spec 5550 cannot be accomplished.

3.3.2 All material boundaries must be treated as fire boundaries.

3.3.3 All fire curtains must meet the requirements of MIL-C-24757. Disregard the NFPA 105 requirement in Paragraph 3.2.2 of SFLC Std Spec 5550.

3.4 Inoperable Fittings Log. The Contractor must inform the COR via CFR of fittings that are blocked or made inoperable per Paragraph 3.3 of SFLC Std Spec 5550. The Contractor does not need to maintain a separate Inoperable Fittings Log.

3.5. Firefighting systems. The Contractor must maintain fire protection systems per Paragraph 3.4 of SFLC Std Spec 5550.

3.5.1 Contractor personnel are NOT authorized to operate fixed firefighting systems per Paragraph 3.4.6.6.1 of SFLC Std Spec 5550

3.5.2 The existing arrangement of AFFF equipment meets the requirements of Paragraph 3.4.11 of SFLC Std. Spec 5550. This paragraph is only applicable if the Contractor blocks or moves AFFF material or equipment.

3.5.3 The existing arrangement of portable fire extinguishers meets the 50-foot requirement of Paragraph 3.4.12.1 of SFLC Std Spec 5550. This paragraph is only applicable if the Contractor blocks or moves fire extinguishers.

3.6. Fire Alarm. The Contractor must comply with the requirements of Paragraph 3.7 of SFLC Std Spec 5550 if the fire alarm system will be manipulated. The "additional personnel" mentioned in Paragraph 3.7.1 of SFLC Std Spec 5550 must be provided by the Contractor.

3.7 Fire Prevention Inspections. The Contractor must conduct inspections in accordance with SFLC Std Spec 5550 Paragraph 3.11.

3.7.1 All inspections in paragraph 3.11 of SFLC Standard Spec 5550 must be conducted in the presence of a Coast Guard Inspector.

3.7.2 Disregard paragraph 3.11.1 of SFLC Std Spec 5550 and replace with the following:

Initial Inspection. The FPRP, along with the COR (or a designated representative), must conduct an initial inspection to evaluate potential fire hazards in all areas with scheduled work. This inspection must note the existing status of all items in Paragraph 3.11.2 of SFLC Standard Spec 5550. Submit the results of the initial inspection to the COR via a CFR. This inspection must occur before commencing industrial work.

4. NOTES

None

WORK ITEM 2: Side Boat Davit, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew the side boat davit and to start-up and test the side boat davit (i.e. Allied Systems Dual Point Davit Model No. DDP 11000 CTS & SP 2200).

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Allied Systems Dual Point Davit with Control Console	NSN: 2030-01-630-6123 PN: DDP11000CTS & SP2200	1 ea.	$480,000
Y	CB-OTH Mark V (Coast Guard Drawing 26B-CB-IV-801-001)	NSN: PN:	1 ea.	

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-100-006, Rev A, Inboard and Outboard Profiles

Coast Guard Drawing 750-WMSL-100-051, Rev J, Unit 4310 Structure – 01 Level to 02 Level – Frame 44 to Frame 52

Coast Guard Drawing 750-WMSL-100-052, Rev J, Unit 4320 Structure – 02 Level and Above – Frame 48 to Frame 53

Coast Guard Drawing 750-WMSL-100-053, Rev J, Unit 4420 Structure – 01 Level and above – Frame 52 to Frame 67

Coast Guard Drawing 750-WMSL-100-530, Rev G, Modifications incidental to the installation of Allied Dual Pont Davit

Coast Guard Drawing 750-WMSL-300-002, Rev C, Electrical Standard Details (ASC300003)

Coast Guard Drawing 750-WMSL-320-042, Rev C, Electrical One Line Diagram (NSC 6 SRD)

Coast Guard Drawing 750-WMSL-520-504, Rev D, Seawater Cooling Piping Mods IWO Dual Point Davit Installation

Coast Guard Drawing 750-WMSL-583-002, Rev D, Small Boat Starboard Handling System Arrangement & Details

Coast Guard Drawing 750-WMSL-583-518, Rev D, Hydraulic Piping Mods IWO Dual Point Davit Installation

Coast Guard Drawing 750-WMSL-631-002, Rev M, Paint Schedule (ASC631002)

Coast Guard Drawing 750-WMSL-634-001, Rev H, Deck Covering Schedule (ASC634001)

Coast Guard Drawing 750-WMSL-635-002, Rev K, Insulation Arr & Details Thermal, Acoustic, & Fire (ASC635002)

NAVSEA Drawing 804-5773931, Rev A, Acoustic & Thermal Insulation for Compartments Installation Details

NAVSEA Drawing 804-5959308, Rev -, Lifeline Systems

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

BOAT DAVIT - MODELS DDP11000CTS & SP2200 (S/N: 2328-753, 2329-751, 2332-750) - TECHNICAL MANUAL

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2022, Shipboard Electrical Cable Test

Surface Forces Logistics Center Standard Specification 3042 (SFLC Std Spec 3042), 2022, Shipboard Electrical Cable Removal, Relocation, Splice, Repair, and Installation

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2022, Auxiliary Machine Systems

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

Coast Guard Technical Publication (TP) 9618 Boat Davit – Models DDP11000CTS & SP2200 (S/N – 2313 & 2315)

OTHER REFERENCES

MIL-DTL-15024, Nov 1997, Plates, Tags and Bands for Identification of Equipment

Allied Systems Drawing Number 68992, 2013, General Arrangement

Allied Systems Drawing Number 70082, 2013, Installation Drawing

International Standards Organization (ISO) 4406, 1996, Hydraulic Fluid Power – Fluids – Method for Coding the Level of Contamination by Solid Particles

Society of Automotive Engineers (SAE) J1273, 2009, Recommended Practices for Hydraulic Hose Assemblies

Society of Automotive Engineers (SAE) J1475, 2009, Hydraulic Hose Fittings for Marine Applications

Society of Automotive Engineers (SAE) J1942/1, 2010, Qualified Hoses for Marine Applications

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

3.4.1 Deck Inspection

3.1.2 Tech Rep.

3.1.2.1 The Contractor must provide the services of a Original Equipment Manufacturer (OEM) Tech Rep who is familiar with the Allied Dual Point Davit to do the following, on site:

- Provide Technical Support during installation.
- Advise on OEM manufacturer's proprietary information pertinent to the system.
- Ensure compliance with OEM manufacturer's procedures and standards during installation.
- Provide Technical Support for safety circuit and control circuit verification.
- Provide Technical Support during load test and sea trail acceptance test.
- Install latest Operating Software.
- Provide training to ship's crew on Davit Operation

3.1.2.2 Ensure the Tech Rep has a resume of demonstrated experience with the system/equipment stated above.

3.1.2.3 Submit a copy of the Tech Rep's résumé and a list of references to the to the COR at the Arrival Conference.

3.1.3 Protective measures - general. The Contractor must furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces in the vicinity of the work area against contamination during the performance of work. Upon completion of work, the Contractor must remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

3.1.3.1 Protective measures - hydraulic system(s). The Contractor must maintain existing hydraulic system cleanliness and take all necessary precautions to prevent the introduction of contaminants into the hydraulic system. Immediately after disconnecting or removing components from the hydraulic system, the Contractor must completely 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

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, paragraph 3.3.5 (Interferences). Known interferences include, but are not limited to the below-listed:

- Piping

- Electrical Cables
- Vent
- Ladders
- 02 Level Catwalk Support foundation
- Speaker
- CCTV Camera
- Overhead Lights
- Heat exchanger
- Hydraulic oil

3.1.6 Welding requirements. In case welding is necessary, the Contractor must accomplish all welding in accordance with SFLC Std Spec 0740.

3.1.7 NDI. The Contractor must perform NDI of all Contractor welding in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

3.1.8 Electrical requirements. The Contractor must accomplish all electrical work in accordance with SFLC Std Spec 3042, and test cables in accordance with SFLC Std Spec 3041. Existing wireways must be utilized for new cable runs as much as possible.

3.1.9 Crane, rigging and GFP transport services. The contractor must provide crane, rigging, and transport services needed to renew the Allied Dual Point Davit.

3.1.10 Hose tags. The Contractor must verify/provide hose tags in accordance with MIL-DTL-15024. Ensure tag color coding of black on natural or black on white. Ensure that tags must be attached using materials that will not damage hose assembly in any way or interfere with the normal flexing motion of the hose.

3.1.10.1 Hose tag information. Ensure the following is placed on each hose tag:

- Hose Log Item Number (Serial Number)
- Hydro Test Pressure and Test Date [DD/MM/YY]
- Service Life (Replacement Date) Date [QTR "Q"/FY]
- The Contractor must stamp information on each tag. Hand written information on Tags is NOT acceptable.

NOTE

Hydro Test Pressure and Test Date may be provided by the assembly manufacturer on an independent tag. Where a hydro test is not required, insert the annotation "NA".

3.1.11 Work location. See the Coast Guard Drawings referenced in the Section 2 for locations, details, material requirements, and guidance.

3.1.12 Work Coordination. This work item must be coordinated with the work item for tenting to ensure that tenting does not interfere with crane operations for remove/install/testing of the davit.

3.1.13 The GFP includes but is not limited to the following: one (1) self-contained "palletized" Allied Systems Dual Point Davit complete with control console.

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 to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.3 Renew Dual Point Davit (DPD). The Contrator must follow guidance from Tech rep, Coast Guard Tech Pub and referenced drawings to renew the Dual Point Davit.

NOTE

Davit hydraulic fluid heat exchanger is located in the Rescue Station (Compartment 2-48-1-Q).

3.3.1 Fluid disposal. The Contractor must drain the hydraulic fluid from the Davit HPU system (approximately 200 gallons) in accordance with Tech Rep guidance. Dispose of the fluid in accordance with all Federal, state and local regulations. Do not drain fluid into any space, bilge or exterior location.

3.3.2 All isolation valves must be closed and tagged out and blanking plates must be in place prior to removal of davit.

3.3.3 All disconnect and isolation switches must be placed in the "off" position and tagged out and all wiring to motor controllers, electrical and control panels, local control stations and from various sensors must be tagged out and disconnected prior to rip out of any electrical devices and piping.

3.3.4 After removal of existing DPD, the Contractor must partially disassemble the old davit to same configuration as the new davit was received. Wrap and crate the removed and disassembled Dual Point Davit and associated components. Contractor may reuse crating materials from the new boat davit. Turn over crated davit and components to Coast Guard Inspector. See figure 1B in section 4 if this work item.

3.4 Partial preservation. The Contractor must prepare and preserve up to 33% of the davit foundation and support structure not normally accessible while the davit is removed, in accordance with SFLC Std Spec 6310, Appendix A, using the system specified for "Freeboard/Superstructure/Mast (Freeboard/Superstructure, Steel)" Option II. Power tool clean all affected surfaces to "bare metal" in accordance with SSPC-SP 11, in lieu of using abrasive blasting; and feather edges of existing intact coating to the prepared areas, in order to provide a smooth transition with the new paint. Conduct inspections and SSPC SP-1 (solvent cleaning) on the structure prior to conducting surface preservation.

3.4.1 Deck Inspection. In presence of the Coast Guard Inspector, the Contractor must inspect the deck surface normally covered by DPD. Conduct inspections after cleaning surfaces/removing coating and prior to priming substrates in accordance with SFLC Std Spec 0740. Submit a CIR.

3.4.2 Visual inspection (VT). The Contractor must visually inspect all exposed substrates for any pitting, corrosion, and erosion.

NOTE

Depending on level of corrosion and condition of deck the quantity of pit measurements and UT shots required may be less than those indicated. If more are necessary (severely corroded decks), the Contractor must submit CFR.

3.4.3 Pit measurement. The Contractor must measure all observed pits on exposed substrates (after removing/cleaning surface covering/coatings and prior to priming substrates) in accordance with SFLC Std Spec 0740, Paragraph 3.13 (Evaluation of pitting corrosion). For bidding purposes, the Contractor must use estimate 20 pit measurements are required.

- Mark up a copy of Coast Guard Drawings to show all locations selected for measurement.
- Report the measurements including results (the depth of the pits), locations, and illustrations/marked up drawings.

3.4.4 Ultrasonic measurement (UT. The Contractor must take UT measurements in the surrounding area of any pit measuring greater than 25% of plate thickness. UT measurements must be taken in the four quadrants at an equal-distant radius from the pit center until full plate thickness is measured. For bidding purposes, the Contractor must estimate 80 UT measurements. All UT measurements must be taken on cleaned surfaces in accordance with SFLC Std Spec 0740 Appendix C.

- Mark up a copy of Coast Guard Drawings. Show all locations selected for measurement.
- Report the measurements including results (thicknesses, and cracks), locations, and illustrations/marked up drawings.

3.4.5 Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). As designated by the COR, the Contractor must repair small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), after removing insulation, coating, or deck covering using Epoxy Fairing Material in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), "Metal Repair and Hull Smoothing", MIL-PRF-24176, and manufacturers' instructions. For estimating purposes the Contractor must estimate 1 kit epoxy fairing compound will be required.

NOTE

"Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%)" is a supplement barrier intending to help delay penetration.

3.5 Installation of new DPD. Davit structure must be assembled off-ship and in accordance with davit manufacturer's drawings and assembly instructions. Rigging of the davit for lifting aboard the cutter must be in accordance with manufacturer's instructions. Electrical and hydraulic interconnection of davit major assembles must be in accordance with manufacturer's instructions. Allied System Tech Rep must be present to provide guidance in the installation of davit arms and davit skid on the Cutter.

3.5.1 All bolted connections must be torqued in accordance with the davit manufacturer's drawings and assembly instructions. Fastening hardware must be free of corrosion, burrs, or other defects that will inhibit clamping forces and fastener performance. Fasteners must be evenly and lightly lubricated prior to assembly.

3.5.2 The foundation platform for the davit must be installed such that the davit base is parallel to the centerline of the ship.

3.5.3 Winch and sheaves must be lubricated in accordance with the davit manufacturer's recommendations prior to operation of the davit.

3.5.4 The davit must be reeved in accordance with the davit manufacturer's drawings and reeving instructions. In the presence of the Coast Guard Inspector and the Tech Rep, the Contractor must follow OEM requirements to redress wire ropes with manufacturer recommended wire rope lubricant.

3.5.5 Installed floodlights, terminal boxes, circuit breaker, nameplates and associated cables as shown on Coast Guard Drawing 750-WMSL-320-580. The Contractor must verify that all electrical installation is performed in accordance with " INSTALLATION NOTES" of the Coast Guard Drawing 750-WMSL-320-580.

3.5.6 Mount motor controller enclosures and emergency stop stations, install power feeders, and install interconnect wiring between davit subassemblies as shown Coast Guard Drawing 750-WMSL-320-580.

3.6 Heat exchanger installation. The Contractor must remove the heat exchanger from the davit machinery skid and relocate to the Rescue Station. Connect piping and hoses in accordance with Coast Guard Drawings 750-WMSL-583-518 and 750-WMSL-520-004.

3.6.1 Maintaining the cleanliness of the hydraulic system throughout the work cycle is of utmost importance. All Contractors provided and installed hoses and piping must be handled, cleaned, flushed, preserved, tested, and protected in accordance with MIL-STD-419. startup and testing of the new piping and equipment modifications. Hydraulic piping cleanness must be in accordance with ISO 4406 (i.e. 17/15/12). Where GFE components become contaminated, the Contractor must flush the entire system as required. Flushing fluid must be disposed of in accordance with all applicable federal, state, and local regulations.

3.6.2 When installing hydraulic hoses, the Contractor must install adjustable position chaffing material on the hoses in way of potential chaffing points. The material must be removable to permit hose inspection.

3.6.3 Cleanliness levels within the new hydraulic system must, as a minimum, be maintained at ISO 4406 cleanliness 17/15/12 after the initial flushing of the system, prior to, and during operation and testing of any parts of the system.

3.6.4 The Contractor must be responsible for the supply of all cleaning and flushing related materials including but not limited to bypass hoses, blanking plates/caps, cleaning compounds, filtering cart, filter elements, pipe vibrator, etc.

3.6.5 Upon completion of cleaning and flushing, the new portion of the hydraulic system must be filled with hydraulic fluid per the crane manufacturer's instructions.

3.6.5.1 The Contractor must supply and install 200 gallons of the hydraulic oil to hydraulic tank conforming to Mobil DTE 10 Excel 46.

3.6.6 Connect seawater piping, including fittings and valves, in accordance with Coast Guard Drawing 750-WMSL-520-504. Cooler fittings are ANSI titanium flanges. Titanium must be isolated from seawater piping, in accordance with the drawings.

3.7 Acceptance testing. The contractor must conduct installation acceptance testing in accordance with Chapter 5 of Tech Pub. All acceptance tests must be performed in the presence of the Coast Guard Inspector and OEM Tech Rep, unless otherwise noted by the COR. The Contractor must provide weight plan, calibrated dynamometer, weight bags and spreader bar. Submit a CFR.

3.7.1 Test performance. The Contractor must provide OEM Tech Representative during all acceptance tests for the government furnished equipment.

3.7.2 Direction of rotation test. Perform a direction of rotation test on each new and disturbed three-phase or direct current motor circuit.

- Check multi-speed motors in each speed by directly starting from OFF. Do not switch from one speed to another until proper direction of rotation has been confirmed in all speeds.
- Correct any improperly phased or polarized wiring and repeat the test.

3.7.3 Operational test. Verify proper operation of the components or systems affected by this work. During this testing, run the equipment through its full range of capabilities in all configurations and operating modes. Verify that check, globe, flow control, and relief valves are installed in the proper flow orientation.

3.7.3.1 The Contractor and the Tech Rep must coordinate with COR to provide crew training on operation of the boat Davit for normal and emergency operations including the constant tensioning winch. Contractor must submit CFR listing names of crew members that attended the training for boat davit operation.

3.7.4 No Load test. This test must be to verify proper operation and full range of motion for all machinery and controls for the davit. Operation of the Anti-2-Blocking system must be included in this test. Back-up emergency manual operation (non-hydraulic) of the winch must be included in this test. The Contractor must provide Tech Support during all check out of safety systems and control circuits. Submit a CFR.

3.7.5 Static Load test. Davit frame must be static load tested to 200% of the Working Load Limit to prove the structural installation on the cutter. Davit arms must be static load tested together, at full extension, with a test load added vertically. The test weights or test force for all Static Load Tests must be externally applied.

NOTE

Static Load Tests are for structure only, and do not include the rigging or crane winches.

3.7.6 Brake test / modified static load test. The davit brake must be tested to 150% of the Working Load Limit to demonstrate the brake holds and releases correctly.

NOTE

The Brake Test / Modified Static Load Test is conducted by externally applying the test load to the davit rigging.

3.7.7 Marine rated load operational test. An operational load test of 125% of the Working Load Limit must be performed. Hydraulic relief valves and pressure compensation valves must not be adjusted to conduct this test and must not be readjusted after this test.

3.7.8 Emergency operation test. The Contractor must test the emergency operation of the boat davit as indicated in Tech Pub 9618 Paragraph 5.4.6 and subparagraphs. Submit CFR. using pressure from the hydraulic accumulators.

3.7.9 Rated load test. An operational load test must be conducted at 100% of Working Load Limit to confirm the operating speeds in both the raise and lower directions.

3.8 Sea trial demonstration. The Contractor must, in conjunction with the Coast Guard, conduct Sea Trial Demonstration of the installed system using the Test Plan prepared by the boat davit manufacturer. This test must comprise a series of launches and retrievals with the cutter underway under varying conditions. During sea trials of the side boat testing, the Contractor must provide Tech Support from Allied System. Submit CFR.

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

3.8.1 Small boat listed in Table 1 will be provided by the Government for testing.

NOTE

Contractor must anticipate getting underway with cutter for a period up to two (2) days; coordinated during Arrival Conference. These dates are based on cutter availability schedule, which will be monitored/tracked during weekly progress meetings

TABLE 1 – SMALL BOAT INFORMATION

BOAT TYPE	VOLUME OF FUEL TANK (GAL)	TYPE OF FUEL	TOTAL weight of the outfit & CARGO	APPROXIMATE HOIST WEIGHT W/O CREW
CB-OTH Mark V	100 (Twin 50 gal tanks)	Diesel Oil	183 lb	7,400 lbs (includes boat with complete outfit, full fuel, & 150 lbs of cargo)

NOTE

Sea trial acceptance test will take time at sea up to two (2) days. Trial dates are based on cutter availability schedule, which can be obtained during weekly progress meetings

3.9 Surface preservation. The Contractor must prepare and coat the disturbed surfaces including all adjacent structural members, using the system specified for in SFLC Std Spec 6310. Abide by all touch-up requirements outlined in paragraph 3.11.9 (Touch ups and minor coating repair) of SFLC Std Spec 0000.

3.9.1 Deck covering. The Contractor must repair damaged deck coverings on new and disturbed deck areas in accordance with SFLC Std Spec 6341 and Coast Guard Drawing 750-WMSL-634-001.

3.9.2 Slip-resistant deck covering damage repair. The Contractor must prepare and coat damaged deck surfaces, using the system specified in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems).

3.10 Label plate. The Contractor must provide and install a label plate on each component tested to document satisfactory test completion in accordance with SFLC Std Spec 5000, Appendix B, Paragraph

B2.9 (Label Plates). Engrave or stamped each label plate with the following information specific to each component tested:

- Working load
- Test load
- Test date
- Test facility

3.11 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 Figure 1.

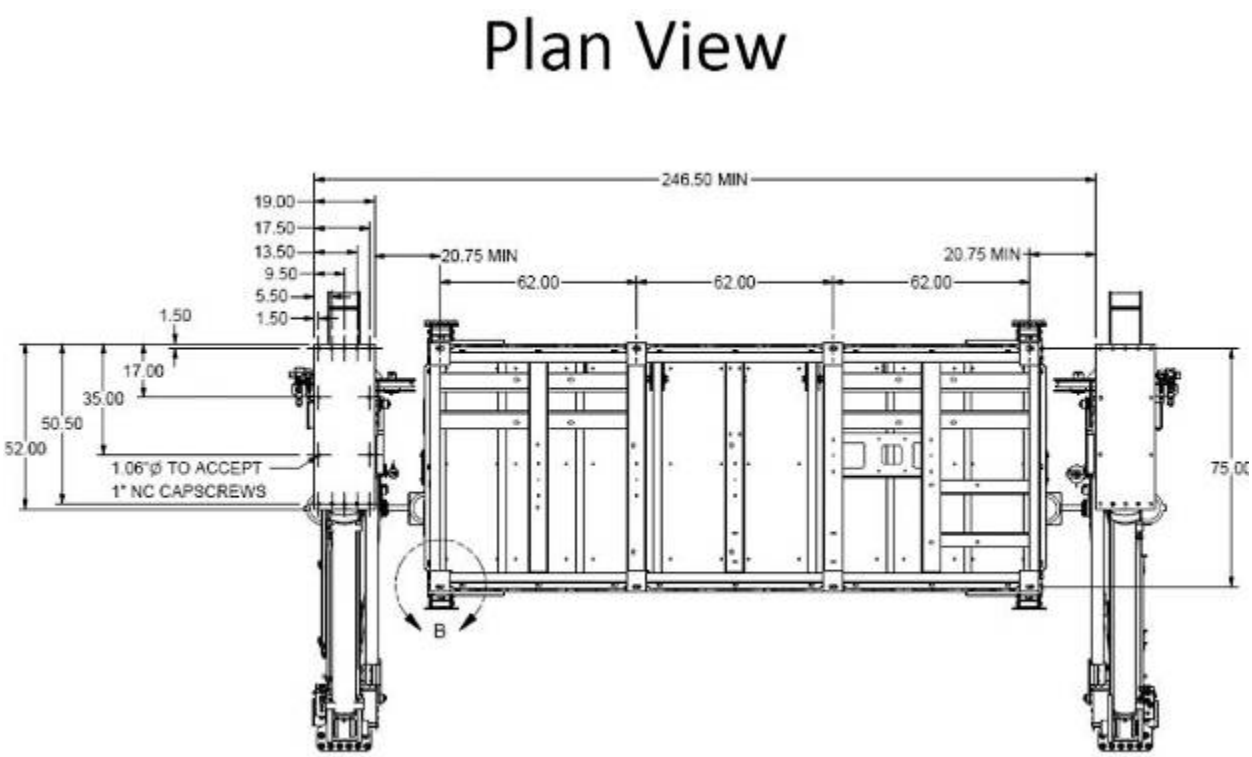

FIGURE 1A: ALLIED SYSTEMS DUAL POINT DAVIT

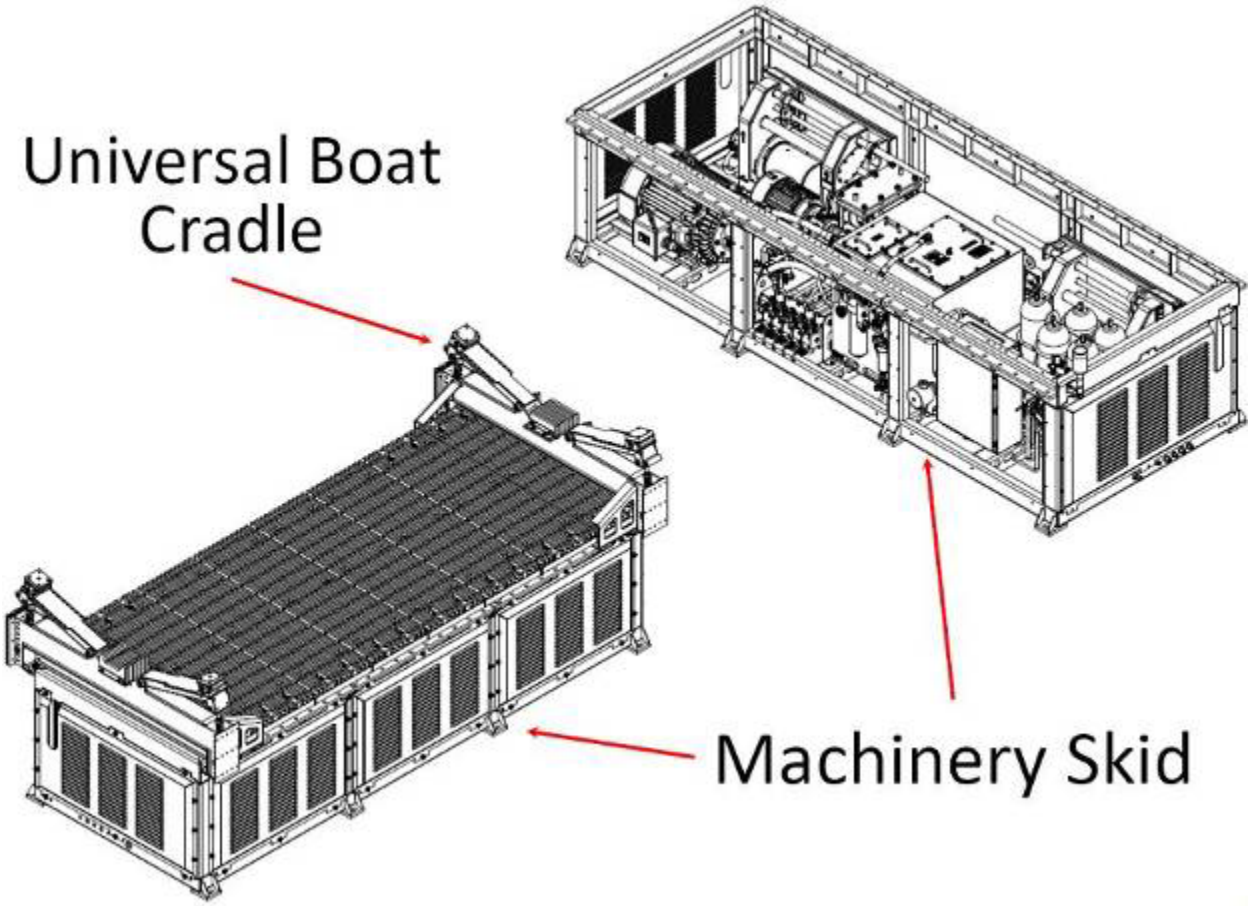

FIGURE 1B: ALLIED SYSTEMS DUAL POINT DAVIT

FIGURE 1B: ALLIED SYSTEMS DUAL POINT DAVIT AT OEM FACILITY

FIGURE 3: CGC STRATTON DUAL POINT DAVITPHOTOGRAPHS FOR REFERENCE ONLY

WORK ITEM 3: Cargo Handling Elevator, Level 2

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to perform preventive maintenance, inspect components, wire ropes and to perform operational and load testing of the Cargo Handling Elevator.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 750-WMSL-572-002, Rev D, Elevator Arr & Instl (ASC572002)

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 7108A, SWBS 573, Jan 2022, Stores Elevator – Model 20833 – Operation & Maintenance Manual

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 3042 (SFLC Std Spec 3042), 2022, Shipboard Electrical Cable Removal, Relocation, Splice, Repair, and Installation

Surface Forces Logistics Center Standard Specification 3100 (SFLC Std Spec 3100), 2022, Inspect, Test and Recondition AC Synchronous Machines In-Place

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2022, Auxiliary Machine Systems

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

American Society of Mechanical Engineers (ASME) A17.2, Guide for the Inspection of Elevators, Escalators and Moving Walks

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep. The Contractor must provide the services of a qualified Tech Rep, who is familiar with the Jered Industries Cargo Elevator (i.e. Model 20833) to accomplish the following, on site:

- Advise on manufacturer's proprietary information pertinent to the system.
- Assist with repair and renewing the Cargo Elevator parts.
- Ensure compliance with manufacturer's procedures and standards during disassembly, inspection, and reassembly of the system.

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, 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:

- Electrical wiring

CAUTION

See Coast Guard Technical Publication 7108A Safety summary for specific warnings and caution notes to ensure safety of personnel and equipment.

WARNING

The work and inspections specified require that the elevator doors be opened and that the inspector examine items located within the trunk. Failure to observe/implement safety precautions could result in personnel injury/death.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment

3.2 Operational test, initial. Prior to commencement of work and in the presence of a Coast Guard Inspector, 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.

3.2.1 The Contractor must witness Coast Guard personnel operate the elevator in normal mode (no-load test), and verify safety devices, emergency stop, and interlocks are properly installed and operational.

3.2.2 As the car travels, observe the equipment to detect any unusual noise or vibration. The motor should start immediately when the power is applied, and the drum should stop within 0.5 seconds after power is removed. Carefully observe the hoist motor, bearing, and brake for any signs of overheating.

3.3 Scaffolding, safety, and protection. The Contractor must comply with all required and applicable safety and protection specified in SFLC Std Spec 0000, Paragraph 3.3.1 (Personnel safety and property protection - general), and all OSHA safety and health regulations, and any other applicable federal, state, and local laws, and regulations, for the protection of both personnel and property.

- Suitable Scaffolding and/or lifelines are required for working above five feet (29 CFR 1910 and 1915)
- Temporary lines or rails must be installed in place of all removed lifelines or life rails, and be retained until replacement tasks have been completed.
- Adequate illumination is required in walkways, work areas, and access to provide a safe work environment (29 CFR 1915.92(a))

3.4 Inspection. The Contractor must inspect the elevator mechanical and electrical components for proper condition. See Coast Guard Drawing 750-WMSL-572-002 and Coast Guard TP 7108A for elevator details, and follow the guidance in the applicable sections of ASME A17.2, Guide for the Inspection of Elevators, Escalators and Moving Walks. If components are damaged or exhibit abnormal wear, document condition and submit a CFR. The Contractor must inspect following items:

- Hoist machinery
- Doors and interlocks
- Platform assembly including rails and guides
- Sheave Assembly
- Limit switches
- Level and Master control stations
- Overspeed governor and wire rope assembly
- Slack Rope assemblies
- Brakes
- 90-Degree gear Reducer

3.5 Elevator wire ropes Renewal. The Contractor must renew the elevator wire ropes in accordance with Paragraph 6.2.1. of Coast Guard Tech Pub 7108A.

3.6 Overspeed governor maintenance. The Contractor must inspect the overspeed governor for damage or wear in accordance with Appendix C of Coast Guard Tech Pub 7108A. Submit a CFR.

3.6.1 Perform Governor testing in accordance with paragraph 4.5 of Coast Guard Tech Pub 7108A.

3.7 Gear box oil and component lubrication. The Contractor must perform all Semi-Annual Maintenance Requirements in accordance with Coast Guard TP 7108A, paragraph 4.2.2.

3.8 Electric motor inspection. The Contractor must take insulation resistance readings on the motor in accordance with SFLC Std Spec 3100. Disconnect and reinstall cables in accordance with SFLC Std

Spec 3042. Readings must be taken with power removed from the motors. Readings must be above 2 Megaohms for continued operation. Submit a CFR.

3.9 Brake inspection. The Contractor must inspect the friction brake discs and verify proper settings of the electric brake in accordance with Appendix B of Coast Guard Tech Pub 7108A. Submit a CFR with inspection results and any recommendations for required repairs.

3.10 Hoist controller maintenance. The Contractor must open, clean, and inspect the motor controller. Verify all wires are secured, and all switches and lights are functioning properly. Submit a CFR if abnormal conditions requiring repair are observed.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.11 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.

3.11.1 No-load test. The Contractor must witness Coast Guard personnel operate the elevator in normal mode (no-load test), and verify safety devices, emergency stop, and interlocks are properly installed and operational.

3.11.2 Weight test. In the presence of the Coast Guard Inspector, the Contractor must perform the following weight test in accordance with American Society of Mechanical Engineers (ASME) A17.2. The test weights must be within a tolerance of plus 5 percent or 200 pounds, whichever is smaller.

- Modified Static Weight Test: 150% of rated capacity (rated capacity: 4,000 lbs) held for 10 minutes.
- Dynamic Weight Test: 125% of rated capacity with elevator raised and lowered for (2) complete cycles.
- Rated Load Test: 100% of rated capacity with elevator ran through all cycles of operation.

3.11.3 As the car travels during all testing, observe the equipment to detect any unusual noise or vibration. The motor should start immediately when the power is applied, and the drum should stop within 0.5 seconds after power is removed. Carefully observe the hoist motor, bearing, and brake for any signs of overheating.

3.12 Label installation; label plate. The Contractor must install a label plate to the below listed systems to document satisfactory test completion in accordance with SFLC Std Spec 5000, Appendix B, Paragraph B2.9 (Label Plates):

- Cargo Handling Elevator

3.16 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, paragraph 3.1.13 (Touch-ups and minor coating repairs).

4. NOTES

This section is not applicable to this work item.

WORK ITEM 4: Incinerator, Inspect and Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean, inspect, and test the Ship's Incinerator listed in Table 1.

TABLE 1 – INCINERATOR

LOCATION	ATLAS MODEL NUMBER / SERIAL NUMBER	COAST GUARD TECHNICAL PUBLICATION
Incinerator Room (1-47-1-Q)	600 S WS	7946

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 750-WMSL-300-024, Rev C, Unit 2240 - Main Dk Fr 44 to Fr 52 Arr of Elect Eqpt (ASC300224)

Coast Guard Drawing 750-WMSL-593-011, Rev B, Solid Waste System Schematic (ASC593026)

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 7946, SWBS 593, May 2021, Incineration Plant - Installation, Operation, Maintenance & Spare Parts

Coast Guard Technical Publication (TP) 7170, SWBS 593, July 2023, Incinerator, Type Atlas 600 S WS & Diesel Oil Tank Type 600

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 3042 (SFLC Std Spec 3042), 2022, Shipboard Electrical Cable Removal, Relocation, Splice, Repair, and Installation

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None

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 has documented experience working on the Incinerator (Atlas Model No. 600 S WS) to accomplish the following on site:

- Advise on manufacturer's proprietary system information.
- Assist with the following installation and repair method(s).
- 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, 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).

3.2 Electrical work. The Contractor must accomplish all electrical work in accordance with SFLC Std Spec 3042. See Coast Guard Drawing 750-WMSL-300-024 for arrangement of electrical equipment in the incinerator room.

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 the equipment listed below to demonstrate existing operational condition. Submit a CFR.

- Incinerator, Atlas 600 S WS

3.3.1 Note all alarms existing or in the stored history on the control panel prior to testing, and those that occur during testing.

3.4 Inspection. The Contractor with Tech Rep support must clean and inspect the following components in accordance with Coast Guard TP 7946, section 3.2 and 3.5. See Coast Guard Drawing 750-WMSL-593-011 for location and schematic of the incienator. Submit a CFR.

- Thermal relay wiring, verify settings
- Wiring and terminals
- Electrodes
- Pressure switches
- Solenoid valves and electrical connections
- Door gasket for possible leaks
- Air strainer & remove deposit
- Flame detector photo cells
- Thermocouples, remove deposits
- Primary & secondary burner
- Refractory lining
- Hoses
- Control system interlocks controlling movement of the door and flue
- Operation of pneumatic system including actuators, control valves, and regulators
- Control panel relays
- Control panel indicator lights
- Operation of motor contactors and overload settings
- Verify power supply voltage for control power input

3.4.1 Test operation of alarms listed in TP 7946, section 3.4.1. Calibrate or replace sensors which lead to inaccurate alarm operation.

3.4.2 Verify control setpoints in accordance with TP 7170 and manufacturer's guidance. If the setpoint for secondary combustion chamber temperature for primary combustion temperature ignition must be set below 700 deg C for reduction in warm up process time, submit a CFR which includes changed setpoints and the required warm-up time. The primary chamber should ignite after 50 minutes of heating. Warming times significantly lower or higher than this are undesirable.

3.5 Refractory lining. The Contractor must clean refractory lining in accordance with Coast Guard TP 7946. The Contractor must install temporary catchment devices (i.e. bags, tarps, etc.) as needed to contain debris. Take all precautions necessary to prevent the spread of dust and soot. Do not damage the liner during cleaning.

3.5.1 Dispose of waste in accordance with all federal, state and local laws and regulations.

3.5.2 Upon completion of satisfactory cleaning, inspect the refractory lining for cracks/wear as specified in the Coast Guard TP listed in Table 1. Submit a CFR. Refractory repairs or renewal will be subject to a CR.

3.6 Primary and secondary burners. The Contractor with Tech Rep support must renew primary burner oil nozzle and secondary burner oil nozzle in accordance with the Coast Guard TP listed in Table 1, using the parts listed in Table 2.

TABLE 2 – LIST OF PARTS

QUANTITY	PART NUMBER	DESCRIPTION	SUGGESTED SOURCE OF SUPPLY
1	64F4003	Primary Burner Oil Nozzle	Atlas Incinerator, dw@atlasinc.dk www.atlasinc.dk.
1	64F4007	Secondary Burner Oil Nozzle	

3.6.1 Clean fuel filter on the fuel oil pump.

3.6.2 Check electrodes in accordance with the Coast Guard TP listed in Table 1. Observe and record original adjustment settings for electrodes and air quantity into burner. Submit CFR.

3.7 Flame detector. The Contractor must clean photocells with a clean lint free cloth.

3.8 Thermocouple. The Contractor must clean thermocouples with a soft bristle brush and damp cloth. Inspect for cracks, and replace thermocouple if any are found. Submit a CFR.

3.9 Air strainer. The Contractor must clean and remove deposits from the air strainer.

3.10 Blower and flue gas fan. Inspect and clean the primary blower and flue gas fan. Submit a CFR.

3.10.1 Clean the blower impeller in accordance with TP 7946, section 3.5.6. Do not run the incinerator again until the impeller is completely clean.

3.10.2 Clean the flue gas fan impeller in accordance with TP 7946, section 3.5.7.

3.10.3 Observe operation of the flue gas fan and primary blower. In the event of unbalanced operation or indication of bearing failure, replace the bearings on the flue gas fan or primary blower.

3.11 Diesel oil tank. Inspect operation of the diesel oil tank system. Submit a CFR.

3.11.1 Verify operation of the level switches, level indicator, and quick closing valve in accordance with TP 7946, section 4.1.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

- Incinerator, Atlas 600 S WS

3.13 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 5: Talon Grid (Type 18-08), Inspect and Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and test-the helicopter talon grid system (Talon Helicopter Landing Grid, Type 18-08), and renew fasteners (i.e. Fixation Bolts, Stanchion Bolts and Lock Nuts) provided in Table 2 Government-furnished property.

1.2 Government-furnished property.

TABLE 2 GOVERNMENT FURNISHED PROPERTY (TALON GRID, TYPE 18-08)

MTI	ITEM DESCRIPTION	NSN/PN	QTY	PRICE ($/UNIT)
N	Stanchion Bolts, (ST STL, ~NF EN ISO 4270, CHc M14x2)	NSN: 5307-14-534-8081 PN: MEGAHRDE82100REP3	15 ea.	$120.00
N	Stanchion Lock Nuts, (ST STL, ~NF EN ISO 4270, CHc M14x2)	NSN: 5310-14-534-8082 PN: MEGAHRDE82100REP4	129 ea.	$24.00
N	Fixation Bolts, (ST STL, NF EN ISO 4270, CHc M16x2-60/44)	NSN: 5305-14-537-6930 PN: MEGAHRDE82100REP5 PN: STF33.02/VER003M16X60X4 4A4L80	24 ea.	$40.00
Y	Jacking Bolts, (ST STL, NF EN 24017, HM16x2-100/100)	NSN: 5305-14-463-7787 PN: MEGAHRDE65200REP6	6 ea.	$24.00

Note : *New or refurbished equipment that the Government may provide for installation in place of existing equipment.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 750-WMSL-100-043, Rev L, Unit 3240 - Main Deck to 01 Level - Fr 76 to Fr 82 (ASC100324)

Coast Guard Drawing 750-WMSL-136-500, Rev C, Centerline Talon Grid & Deck Socket Installation

Coast Guard Drawing 750-WMSL-588-006, Rev E, Helo Capture/Handling Arrangement & Instl Dets (ASC588005)

NAVAIR Drawing 627927, Rev C, Visual Landing Aids Installation and Clearance Requirements

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 7999, SWBS 588, 2015, Talon Helicopter Landing Grid - Type 18-08

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

Talon Strength and Load Test, No 58817-3-200A, Rev A, 2011, Northrop Grumman Ship Systems, Inc.

OTHER REFERENCES

American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2024, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2024, 2024, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

ASTM International (ASTM) D5363-16, 2016, Standard Specification for Anaerobic Single-Component Adhesives (AN)

ASTM Internationals (ASTM) G46-21, 2021, Standard Guide for Examination and Evaluation of Pitting Corrosion

American Welding Society (AWS) B1.10M/ B1.10, 2016, Guide for Nondestructive Examination of Welds

American Welding Society (AWS) B1.11M/B1.11, 2015, Guide for the Visual Examination of Welds

American Welding Society (AWS) D1.1/D1.1M, 2025, Structural Welding Code – Steel

DCN Drawing MEGAHRDE82100, Rev C, Landing Grid Type 18-08 Characteristics and Interfaces

MIL-PRF-16173E w/Interim Amendment 2, 2017, Corrosion Prevention Compound, Solvent Cut Back, Cold Application

MIL-STD-1689A, 1990, Fabrication, Welding, and Inspection of Ships Structure

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.3 (SSPC-SP 3), 2024, Power Tool 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(s) :

- 3.5 Inspections.

3.1.2 Tech Rep. The Contractor must provide the services of Tech Reps and personnels as follows :

- NDE Tech Rep: NDE Operator/Level 1

3.1.2.1 NDE Tech Rep. The Contractor must provide the services of a qualified and certified NDE Operator/Level 1 as follows:

- Perform NDE Operations.

3.1.2.1.1 Qualifications/certifications. NDE Operator/Level 1 certified and qualified in accordance with ASNT No. SNT-TC-1A (or ACCP). Submit the Tech Rep's qualifications/certifications to the COR at the Arrival Conference.

3.1.2.1.2 Dates of services. Include the dates of services in which Tech Reps must be on site as per their subcontract documentation.

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).

3.1.5 Work location. The concerned work area is Flight Deck. See the applicable drawings in Section 2 References for guidance, locations, and details.

3.1.6 Materials, tools, and services. The Contractor must provide service, tools, and materials to accomplish the requirements in this work item. New components, parts, materials, and paints with the same color, comparable and matching material properties as the existing components/parts. Use references in Sections 1, 2 and SFLC Std Specs for guidance, required materials, and details.

3.1.6.1 Tools. Provide calibrated tools for inspection test and pull test and load test as follows :

- Dynamometer (1 ea.) : Capacity 14,612 lbs +/- 5%
- Test weight (1 ea.) : Capacity 22,480 lbs –0%/ + 5%

3.1.7 Removal plan. The Contractor must develop a plan to remove Tolan Grid Assemblies from Talon Grid Supporting Ring Assembly using DCN Drawing MEGAHRDE82100, Coast Guard Drawing 750-WMSL-136-500, and Tech Pub 7999 as guidance.

- Ensure that no force more than 15,000 pounds is applied to Talon Grid Assemblies and Talon Grid Support Ring Assembly during removal.
- Submit the plan to COR for acceptance within 72 hours before commencing grid work.

3.1.8 Work coordination. The Contractor must coordinate the accomplishment of this work item with the following work items :

- Aircraft Securing Fitting (Type XIV), Inspect and Test
- Deck Covering (Slip-Resistant) Flight Deck, Renew
- Tenting (Flight Deck), Provide

3.2 Clearance measurement (pre-removal). In presence of the Coast Guard Inspector, the Contractor must measure the clearances between Talon Grid Assemblies and Talon Grid Supporting Ring Assembly as follows :

- Extend a straight metal edge across the grid from edge to edge.
- Measure and record the grid clearance to the straight edge at the center of the grid.
- Submit a CFR.

3.3 Talon grid removal. The Contractor must remove Talon Grid Assemblies and retain fasteners for restorations as follows :

3.3.1 Filler resin material. The Contractor must remove and dispose of the existing filler resin material between the Talon Grid Assembly and Talon Grid Supporting Ring on flight deck.

3.3.2 Fixation bolts. The Contractor must remove and dispose all 24 existing Fixation Bolts which secure Talon Grid Assemblies to Talon Grid Supporting Ring Assembly.

3.3.3 Top plate (Honeycomb plate). The Contractor must separate Talon Grid Top Plate as the following successive steps/orders :

- Separate Talon Grid Top Plate together with Stanchion Bolts, from Talon Supporting Plate.

3.4 Cleaning. The Contractor must remove all traces of grease or oil from Talon Grid Top Plate and Stanchion Bolts using SSPC-SP3 and SSPC-SP1, or equivalent.

- Thoroughly clean Talon Grid Top Plate/Honeycomb Plate (incl. the honeycomb holes) using a piece of abrasive cloth (grain size 100 to150), and clean the upper and lower faces, and peripheral areas of Talon Grid Top Plate/Honeycomb Plate using flexible fiber rotary discs.
- Completely clean all Stanchion Bolts using a rotary wire brush.

NOTE

The Talon Grid Top Plate/Honeycomb Plate must not be painted, but it must be protected and stored during grit-blasting and painting of the supporting structure.

3.5 Inspections. In the presence of a Coast Guard Inspector, the Contractor must accomplish the following inspections, using DCN Drawing MEGAHRDE82100, Coast Guard Drawing 750-WMSL-136-500, and Tech Pub 7999. Submit a CIR.

3.5.1 Visual inspection. The Contractor must visually inspect any defects on components as follows :

- Stanchion Bolts
- Talon Grid Cover
- Talon Grid Top Plate/Honeycomb Plate
- Talon Grid Supporting Plate
- Talon Grid Supporting Ring Assembly (incl. recess and foundation)

3.5.2 NDE. The Contractor must perform NDE of Welds, Stanchion Bolts, and Talon Grid Supporting Ring Assembly (incl. recess and foundation) to examine any cracks or defects in accordance with SFLC Std Spec 0740, Appendix C, and Coast Guard Drawings 750-WMSL-100-043, and 750-WMSL-136-500.

3.6 Preservation. The Contractor must prepare and coat the surfaces of Talon Grid Assemblies as follows:

3.6.1 Talon Grid Assemblies (excepts Talon Grid Top Plate/Honeycomb Plate). The Contractor must prepare and coat all interior and exterior surface areas of Talon Grid Cover, Talon Grid Supporting Plate, and Talon Grid Supporting Ring Assembly including all recess, foundation, and any limited access areas (excepts Bearing Flange surfaces), using the method specified in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), and Tech Pub 7999, Chapter 7 Maintenance and Protection, Paragraph 7.2.2.2 Painting. Select option(s) as follows :

- Machinery, Deck, Option IV
- Finish/final top coat color : Gray 36076
- Bare Metal Power Tool Cleaning (SSPC-SP 11) for all coating defects, outfits/fittings, and limited access areas

3.6.1.1 Bearing flange surfaces (Talon Grid Supporting Ring Assembly facing Talon Grid Top Plate/Honeycomb Plate)

- Thoroughly wire-brush the bearing flange surfaces to remove all traces of the existing anticorrosion coating.
- Restore the bearing surfaces to its proper condition using a rotary grinder with a flexible fiber disk with grain size of 60 to 100.
- Thoroughly protect the surfaces of the bearing flanges of Talon Grid Skirt Assembly and Talon Grid Supporting Ring Assembly facing Talon Grid Top Plate/Honeycomb Plate.

3.6.2 Talon Grid Top Plate/Honeycomb Plate. The Contractor must prepare and coat all surfaces of Talon Grid Top Plate/Honeycomb Plate, using a rust preventive compound conforming to MIL-PRF-16173, Class II, Grade 3 and manufacturer's instructions.

3.6.3 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, paragraph 3.1.13 (Touch-ups and minor coating repairs).

3.7 Preventive maintenance. The Contractor must accomplish preventative maintenance requirements in accordance with Tech Pub 7999, Chapter 7 Maintenance and Protection Paragraphs 7.1 Preventive Maintenance on Board, Paragraph 7.2 Preventive Maintenance in Workshop, and all its related sub-paragraphs.

3.8 Reassembly and reinstallation. Upon completion of all authorized repairs, the Contractor must reassemble and reinstall Talon Grid Assemblies in accordance with Tech Pub 7999. Ensure that the Talon Grid Top Plate is flush with adjacent flight deck.

3.8.1 Filler resin material The Contractor must renew filler resin material and pour the new ones in accordance with Tech Pub 7999, Appendix 2 Pouring of the Resin Filling.

3.8.2 Fasteners. The Contractor must renew fasteners (i.e. Fixation Bolts, Stanchion Bolts and Lock Nuts) during assembly and reinstallation. Apply sealing, locking and retaining compound conforming to ASTM D5363 to each thread. Tighten each fasteners with torques as follows :

- Stanchion Bolts (into Top Plate/Honeycomb Plate), M14 : 22 ft-lb. (30 N.m.)
- Stanchion Lock Nuts (over Stanchion Bolts through Supporting Plate), M14 : 44 ft-lb. (60

N.m.)

- Fixation Bolts (into Supporting Ring Assembly), M16 : 66 ft-lb. (90 N.m.)

3.9 Static tests (Talon Grid Type 18-08). In presence of the Coast Guard Inspector and after talon grid installation, the Contractor must conduct the following Static Tests in accordance with Talon Strength and Load Test, No. 58817-3-200A. Submit a CFR.

- Tensile Test at Center (Pull Test at Center of Talon Grid) : 14,612 lbs +/- 5%
- Tensile Test at Edge (Pull Test at Edge of Talon Grid) : 14,612 lbs +/- 5%
- Compression Test at Center (Load Test at Center of Talon Grid) : 22,480 lbs –0%/ + 5%
- Compression Test at Edge (Load Test at Edge of Talon Grid) : 22,480 lbs –0%/ + 5%

3.10 Clearance measurement (post-static tests). In presence of the Coast Guard Inspector and after Static Tests, the Contractor must repeat the Clearance Measurement specified in Paragraph 3.2 Clearance measurement (pre-removal).

- Record and compare the measurements to the previous readings in Paragraph 3.2 Clearance measurement (pre-removal).
- Submit a CFR. Any permanent deformation must be cause for rejection.

3.11 NDE (post-static tests). In presence of the Coast Guard Inspector and after Static Tests, the Contractor must repeat/re-perform NDE of Talon Grid Assemblies to examine any cracks or defects in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

3.12 Label Plate. The Contractor must fabricate and install a label plate for the system in accordance with SFLC Std Spec 5000, Appendix B, Paragraph B2.9 Label plates.

3.13 CFR. The Contractor must summarize and submit a CFR to the COR if additional repair is necessary or required.

4. NOTES

4.1 Talon Grid Assemblies particulars. The Talon Grid Assemblies consist of Talon Grid Cover, Talon Grid Top Plate/Honeycomb Plate, Talon Grid Supporting Plate, and Talon Grid Supporting Ring Assembly (incl. recess and foundation).

- Talon Grid Top Plate/Honeycomb Plate, and Talon Grid Supporting Plate are secured by Stanchion Bolts and Lock Nuts 129 sets.
- Upper Assemblies (i.e. Talon Grid Top Plate/Honeycomb Plate, and Talon Grid Supporting Plate) and Lower Assembly (i.e. Talon Grid Supporting Ring Assembly) are secured by Fixation Bolts 24 sets

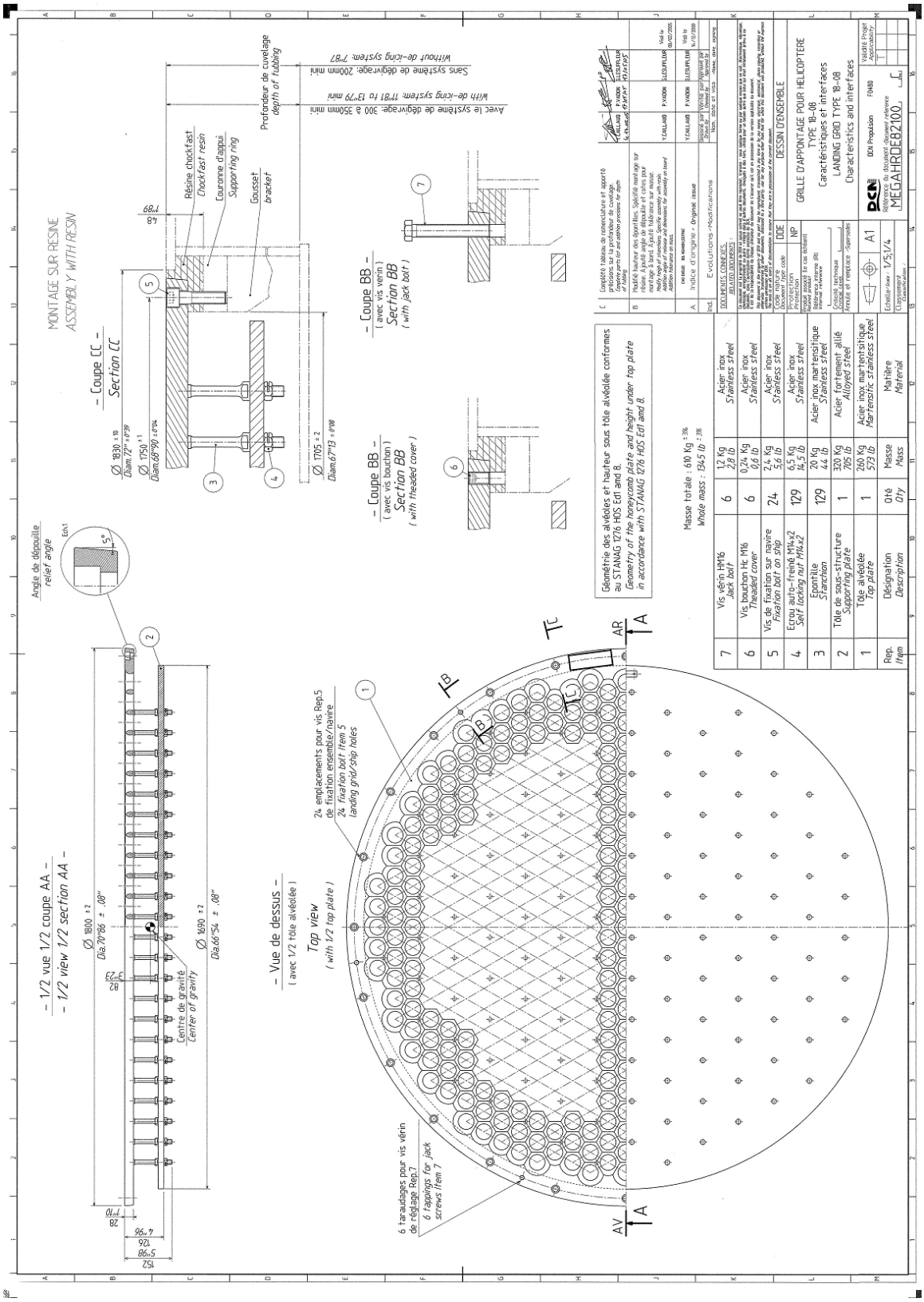
MONTAGE SUR RESINE
ASSEMBLY WITH RESIN
- Coupe CC -
Section CC
Résine chockfast
Chockfast resin
Couronne d'appui
Supporting ring
Gousset
bracket
Profondeur de cuvelage
depth of tubbing
Avec le système de dégivrage: 300 à 350mm mini
With de-icing system: 11"81 to 13"79 mini
Sans système de dégivrage: 200mm mini
Without de-icing system: 7"87
- Coupe BB -
(avec vis verin)
Section BB
(with jack bolt)
- Coupe BB -
(avec vis bouchon)
Section BB
(with theaded cover)
Angle de dépouille
relief angle
- 1/2 vue 1/2 coupe AA -
- 1/2 view 1/2 section AA -
Centre de gravité
Center of gravity
- Vue de dessus -
(avec 1/2 tôle alvéolée)
Top view
(with 1/2 top plate)
24 emplacements pour vis Rep.5
de fixation ensemble/navire
24 fixation bolt Item 5
landing grid/ship holes
6 taraudages pour vis vérin
de réglage Rep.7
6 tappings for jack
screws Item 7
Géométrie des alvéoles et hauteur sous tôle alvéolée conformes au STANAG 1276 HOS Edi and 8.
Geometry of the honeycomb plate and height under top plate in accordance with STANAG 1276 HOS Edi and 8.
Masse totale : 610 Kg ±3%
Whole mass : 134.5 lb ±3%
7 Vis vérin HM16 / Jack bolt 6 1,2 Kg / 2,8 lb Acier inox / Stainless steel
6 Vis bouchon Hc M16 / Theaded cover 6 0,24 Kg / 0,6 lb Acier inox / Stainless steel
5 Vis de fixation sur navire / Fixation bolt on ship 24 2,4 Kg / 5,6 lb Acier inox / Stainless steel
4 Ecrou auto-freiné M14x2 / Self locking nut M14x2 129 6,5 Kg / 14,5 lb Acier inox / Stainless steel
3 Eponille / Stanchion 129 20 Kg / 44 lb Acier inox martensitique / Stainless steel
2 Tôle de sous-structure / Supporting plate 1 320 Kg / 705 lb Acier fortement allié / Alloyed steel
1 Tôle alvéolée / Top plate 1 260 Kg / 573 lb Acier inox martensitique / Martensitic stainless steel
Rep. / Item Désignation / Description Qté / Qty Masse / Mass Matière / Material
Echelle/scale : 1/5,174
Classement / Classification :
A1
DCN Propulsion
F0498
Référence du document/dossier/référence
MEGAHRDE62100
GRILLE D'APPONTAGE POUR HELICOPTERE
TYPE 18-08
Caractéristiques et interfaces
LANDING GRID TYPE 18-08
Characteristics and interfaces
DESSIN D'ENSEMBLE
Code nature / Code nature
Projection / Projection
DDE
NP
Validité Projet / Validity project
Indice / Revision
Classification / Classification
Analyse d'invariance / Invariance analysis
Matière / Material
Masse / Mass
Référence / Reference
Evolutions / Modifications
DOCUMENTS CONNEXES
RELATED DOCUMENTS
Complétés tableau de nomenclature et apportés précisions sur la profondeur de cuvelage.
Complete parts list and addition precisions for depth of tubbing.
Modifié hauteur des éporilles. Spécifié montage sur résine. A prévu angle de dépouille et cotes pour montage à sec. A précisé tolérance sur masse.
Modified height of the stanchions. Specified mounting with resin. Addition angle of release and dimensions for assembly on dry. Addition tolerance on mass.
Version de référence.
Initial version.
Indice d'origine - Original issue
Ind.
A
B
C
Dessiné par / Drawn by
Vérifié par / Verified by
Approuvé par / Approved by
Date / Date
Nom / Name
Visa / Sign
Validité / Validity
Valide le / Valid on
Valide le / Valid on
Valide le / Valid on

FIGURE 1 TALON GRID TYPE 18-08 (IN WMSL)
(DCN DRAWING MEGAHRDE82100)

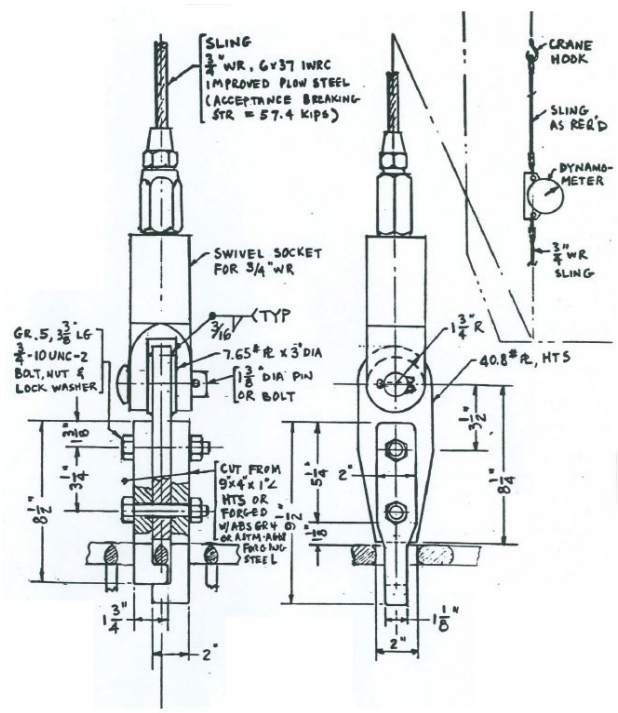

FIGURE 2 TEST RIG

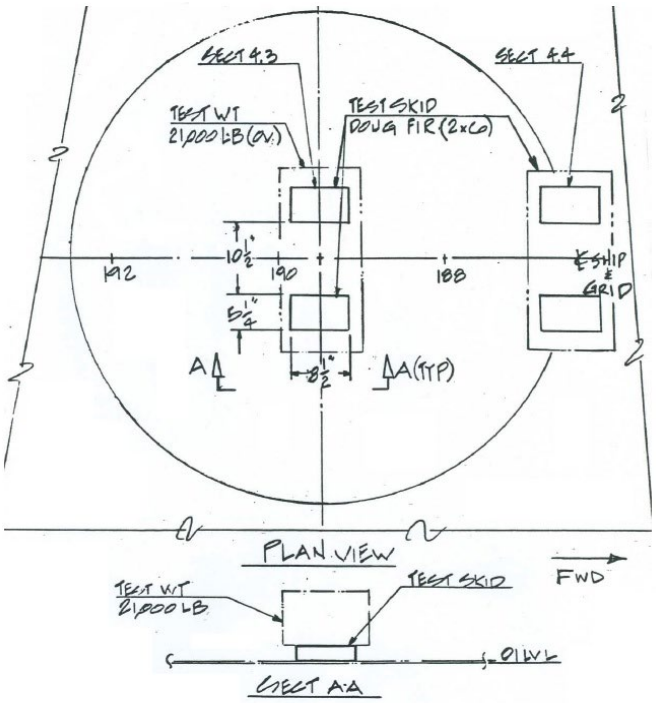

FIGURE 3 SKID POSITION

FIGURE 4 SAMPLE TENSILE TEST 14,612 LBS +/- 5% AT CENTER

FIGURE 5 SAMPLE COMPRESSION TEST 22,480 LBS –0%/ + 5% AT CENTER

WORK ITEM 6: Elex Dry Air Compressor Equipment, Install

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to install Government Furnished Equipment (i.e. GFE) for Elex Dry Air Compressor equipment on the Cutter.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Atlas Copco SF6 + P 7.5 HP, Oil Free Scroll Air Compressor, 30 Inch X 26 Inch X 33 Inch, Approximate Weight 350 Lbs.	NSN: 01F236704 PN: 8153611358	2 ea.	$12,391.00
N	AtlasCopco,CD+10,21.SCFM@100psi,160 psi(g) Heatless Regenerative Desiccant Air Dryer,-40 Deg. F Dew Point, 115/1/60, 1/2" Connection Size (NPT), 16 inch L x 14 inch W x 43 inch H, 82 lbs	NSN: PN: 8102368843	2.ea.	$4,086.00
N	Atlas Copco LV120-200, A120 Gallon, Receiver, Approximate Weight 316 Lbs.	NSN: PN: A10033	1 ea.	$400.00
N	Atlas Copco Electronic Water Drain Valve (IWD) 105, 230 PSI, 138 CFM, 6.7 Inch X 2.8 Inch X 4.5 Inch, 115 V	NSN: PN: 8102048012	2 ea.	$411.00
N	Atlas Copco Gauge Kit for receiver, T: SRV-GAG	NSN: 01F236708 PN: 1280585377	1 ea.	$107.50
N	Window, Heated, Fixed, Pilot House with Wiper Assembly Wynn type C by Cornell-Car	NSN: 01-616-1869 PN: CC-10082-1	1 ea.	$2,500.00
N	IDEC Corporation, Emergency Stop	NSN: PN: FB1W-HW1B-V411R	2 ea.	$76.74
N	Kit PDP Sensor CD5-30+	NSN: PN: 8092266823	1 ea.	$1,696.30

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-185-001, Rev B, Air Compressor and Receiver Foundation Installation

Coast Guard Drawing 418A-WMSL-551-001, Rev A, Compressed Air Diagram

Coast Guard Drawing 418A-WMSL-551-003, Rev C, Elex Dry Air Compressor and Equipment Installation

Coast Guard Drawing 418A-WMSL-202-001, Rev D, Elex Dry Air Compressor Control Installation

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 418A-WMSL-320-013, Rev C, Elex Dry Air Compressor Power Installation

Coast Guard Drawing 750-WMSL-300-002, Rev C, Electrical Standard Details

Coast Guard Drawing 750-WMSL-506-001, Rev F, Overflow/Air Escapes Sounding Tubes Diagram

Coast Guard Drawing 750-WMSL-506-037, Rev B, OVFL/AE & SNDG Tubes system Unit 4110

Coast Guard Drawing 750-WMSL-506-515, Rev -, Vent Modifications IWO Scuttle 02-29-1 Install

Coast Guard Drawing 750-WMSL-512-536, Rev -, HVAC Mods for POU Compressor Install

Coast Guard Drawing 750-WMSL-625-001, Rev C, Window Arrangement and Details

Coast Guard Drawing FL-1204-3, Rev A, Fleet Welded Padeyes and Links

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 0850 (SFLC Std Spec 0850), 2022, General Requirements for Drawing Preparation

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2022, Shipboard Electrical Cable Test

Surface Forces Logistics Center Standard Specification 3042 (SFLC Std Spec 3042), 2022, Shipboard Electrical Cable Removal, Relocation, Splice, Repair, and Installation

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

Surface Forces Logistics Center Standard Specification 6341 (SFLC Std Spec 6341), 2022, Install Interior Deck Covering Systems

Surface Forces Logistics Center Standard Specification 8636 (SFLC Std Spec 8636), 2022, Temporary Hull Accesses

OTHER REFERENCES

Code of Federal Regulations (CFR) Title 29, Part 1915, Subpart E, Sep 2015, Scaffolds, Ladders and Other Working Surfaces

MIL-STD-2003-2, Sep 2009, Electric Plant Installation, Standard Methods for Surface Ships & Submarines (Equipment)

MIL-STD-2003-3, Sep 2009, Electric Plant Installation, Standard Methods for Surface Ships & Submarines (Penetrations)

MIL-STD-1310, Sep 2009, Shipboard Bonding, Grounding, and Other Techniques for Electromagnetic Compatibility and Safety

MIL-DTL-24643, Oct 2009, Cables, Electric, Low Smoke Halogen-Free, For Shipboard Use, General Specification for

ASTM International (ASTM) F1836M, Reapproved 2007, Standard Specification for Stuffing Tubes, Nylon and Packing Assemblies (Metric)

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep. The Contractor must provide the services of an OEM authorized / licensed Tech Rep for the Atlas Copco Oil Free Scroll Air Compressor to accomplish the following on site:

- Provide manufacturer's proprietary system/ equipment information, software, and tools.
- Assist with and ensure compliance with manufacturer's procedures and standards during disassembly, inspection, repair, modification, calibration, and reassembly of the equipment/system.
- Program spare relays

3.1.2.1 Ensure the Tech Rep is an OEM Certified Representative for the system/equipment stated above and demonstrated on their résumé.

3.1.2.2 Submit the name and the certification of the Tech Rep to the COR at the Arrival Conference. Include the dates of services the Qualified Tech Reps will be on site as per their subcontract documentation.

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). Interferences include but are not limited to.

- Sheathing
- Bulkhead insulation
- Piping

- Ladders
- Electric Cables and Junction Boxes
- Ventilation Ducts
- Overhead Lights
- Pilot House Windows
- Pilot House Electrical Matting
- Pilot House Hatch (03-31-1)
- Pilot House Equipment, Devices, Ventilation Ducts and Furniture

NOTE

A VERIFICATION SHIP CHECK BY THE CONTRACTOR PRIOR TO BIDDING IS RECOMMENDED TO DETERMINE RIGGING OF GOVERNMENT FURNISHED EQUIPMENT.

3.1.5 Rigging plan. The Contractor must submit a plan for rigging the compressors from the pier to the Fan Room (02-29-3-Q). Submit the plan to the Contract Officer Representative (COR) for approval at the arrival conference. No rigging work can commence before approval. The plan must cover the following topics:

- Route for installation
- Locations for rigging supports/pad eyes
- Temporary access cuts requirements in SFLC Standard Spec 8636
- Interference removals
- Crane positioning on pier or crane barge positioning alongside the ship.

NOTE

If the Contractor chooses to rig the compressor through the bridge window, then they may use the GFP window as a replacement. Details about the window are in 750-WMSL-625-001

3.1.6 Rigging. The Contractor is responsible for all rigging and crane operations with the following considerations:

3.1.6.1 All existing padeyes that will be used for a lift must be pull tested to 1.5 times their Working Load Limit in accordance with SFLC Standard Spec 5000 Paragraph 3.2.7. All testing must occur in the presence of a Coast Guard Inspector. Submit a CFR documenting the testing.

3.1.6.2. If new padeyes are required, fabricate them in accordance with Coast Guard Drawing FL-1204-3 and SFLC Standard Spec 0740. Newly fabricated padeys must be pull tested to 2 times their Working Load Limit in accordance with SFLC Standard Spec 5000 Paragraph 3.2.7. All testing must occur in the presence of a Coast Guard Inspector. Submit a CFR documenting the testing.

3.1.7 Electrical work. The Contractor must accomplish all electrical work in accordance with SFLC Std Spec 3042.

3.1.8 Advance notice. Notify the Coast Guard Inspector at least 24 hours before performing work on this work item.

3.1.9 Welding. Conduct all welding and NDE in accordance with SFLC Std Spec 0740.

3.1.10 Materials. All materials required to complete this work must be provided by the Contractor, with the exception of items provided as GFE. The bill of materials provided provides estimates for stock quantities (piping, plate, cable, etc), but the Contractor is responsible for providing the necessary materials for fitting up the equipment.

NOTE

Coast Guard personnel will operate all shipboard equipment and machinery.

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. If the bridge window is removed for rigging, then the contractor must perform watertight hose test in accordance with SFLC Std Spec 0740 Submit a CFR.

3.2.1. The new compressors do NOT need to be operationally tested prior to installation, but other disturbed items do need to undergo an op test.

3.3 Structural Installation. The Contractor must accomplish the removals and installations shown on CG Dwg 418A-WMSL-185-001.

3.3.1. Not used.

3.3.2. All items in this drawing may be moved up to 2 inches in any direction at the convenience of the Contractor. For movements beyond 2 inches, submit a CFR and wait for COR approval prior to movement.

3.3.3. The Contractor must paint new foundations in accordance with SFLC Std Spec 6310, Appendix B,

3.3.4. The Contractor must move Fuel Oil Air Escape piping TV119-028 in accordance with 418A-WMSL-506-515 and 750-WMSL-506-001 to install the ladder for the scuttle. This pipe is shown on 750-WMSL-506-037 and in Figure 3. The Contractor is responsible for all necessary cleaning to achieve gas-free certificates for hot work.

NOTE

TV119-028 is associated with Fuel Storage Tank 5-28-0. This tank is being cleaned in Work Item 19: Fuel Storage Tank, Clean and Inspect

3.3.5. The hangars for the cables shown in Figure 1 will need to be repositioned 12-inches outboard to make room for the scuttle in accordance with 750-WMSL-300-002.

3.4 Piping and Equipment Installation. The Contractor must accomplish the removals and installations shown on CG Dwg 418A-WMSL-551-003.

3.4.1. Not used

3.4.2 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.

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

3.4.2.2. The Contractor must NOT drain any fluids into any space, bilge or exterior location.

3.4.3. Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all newly welded components and new hoses in accordance with SFLC Std Spec 0740, Appendix C. Use testing pressure and times shown in the General Notes section of CG Dwg 418A-WMSL-551-03. Ensure zero leakage from or permanent deformation of pressure-containing parts by repairing all leaks, deformations, and discrepancies. Submit a CFR.

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

3.4.5 Pipe labeling. The Contractor must label affected piping as follows:

3.4.5.1. Disregard the painting and marking statements in the General Notes section of CG Dwg 418A-WMSL-551-003

3.4.5.2 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).

3.4.5.3 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.

3.4.5.4 The contractor must paint the piping in accordance with SFLC Std Spec 3610, Appendix B "Piping, Insulated and Uninsulated, Under 200ºF."

3.4.6. Utilize CG Dwg 418A-WMSL-551-001 for guidance about the proper material for seals (o-rings, gaskets, etc).

3.4.7. Repair any damaged deck coating in accordance with SFLC Std Spec 6341. Disregard deck coating renewal instructions in the General Notes section of CG Dwg 418A-WMSL-551-003.

3.5 Electrical and Controls. The Contractor must accomplish the removals and installations shown on CG Dwg 418A-WMSL-202-001 and CG Dwg 418A-WMSL-320-013.

3.5.1 Utilize the existing wire ways for new cable runs as much as possible. Methods used for passing cable through bulkhead and deck penetration must be in accordance with MIL-STD-2003.

3.5.2. Reference CG Dwg 750-WMSL-300-062 for miscellaneous electrical cable details.

3.5.3 The Contractor must supply and install grounding strap to each Air Compressor in accordance with MIL STD-1310.

3.5.4 Electrical verification. All acceptance tests below must be performed in the presence of the Coast Guard Inspector. Submit a CFR:

- Verification that each new and disturbed electrical connection is tight and properly terminated.
- Certification that no foreign material was found in the panel sections affected by the work.
- Certification that all new/rerouted wiring is properly labeled and that all new/rerouted cables are properly marked.
- Ensure that the wiring is appropriate for 460 VAV and not the European 230 VAC wiring.
- Enclosure ground test. Perform enclosure ground tests on new equipment. The resistance of the ground path between the equipment and ship structure must not exceed 0.1 ohm.
- Direction of rotation test. Perform a direction of rotation test on each new and disturbed three-phase or direct current motor circuit.
    - Check multi-speed motors in each speed by directly starting from OFF. Do not switch from one speed to another until proper direction of rotation has been confirmed in all speeds.
    - Correct any improperly phased or polarized wiring and repeat the test.

3.6 HVAC. The Contractor must accomplish the removals and installations shown on CG Dwg 750-WMSL-512-536.

3.6.1. Disregard welding requirements in the General Notes of CG Dwg 750-WMSL-512-536. Conduct welding in accordance with SFLC Std Spec 0740.

3.7 Air compressor commissioning test. In the presence of the Coast Guard Inspector, the Contractor with Tech Rep support must perform commissioning of the Air Compressors in accordance with manufacturer' instruction. The Tech Rep must program the spare relays on the Atlas Copco compressor to output "Run or Not Running" and "Remote or Not Remote. Operate each compressor for four hours. Submit a CFR.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.8 Operational test, post repairs. After completion of work, the Contractor must witness Coast Guard personnel perform an operational test of all items or shipboard devices that were disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. If the bridge window is removed for rigging, then the contractor must perform watertight hose test in accordance with SFLC Std Spec 0740. Submit a CFR.

3.9 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, Paragraph 3.1.13 (Touch-ups and minor coating repairs.). The Contractor must repair damaged nonskid in accordance with SFLC Std Spec 6341.

4. NOTES

FIGURE 1. THE HIGHLIGHTED PIPE WILL NEED TO BE MOVED TO INSTALL THE LADDER FOR THE SCUTTLE. THE CABLES SHOWN IN THE OVERHEAD WILL ALSO NEED TO BE MOVED. THIS IS THE VIEW FROM THE STARBOARD PASSAGEWAY FACING FORWARD

WORK ITEM 7: Fantail Deck, Slip-Resistant, Preservation and Repair

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to repair the coating system and to fair it the repairs in with the rest of the coating system. Apply slip-resistant deck covering system (MIL-PRF-24667 Type V Comp. G/D/L Non-skid) for areas as listed in Table 1.

TABLE 1 SLIP-RESISTANT DECK COVERING

LOCATION	COMPO	AREA (SQFT)*	SYSTEM/APPENDIX (SFLC STD 6310)	TOPCOAT COLOR	PRESERVE LEVEL	NUMBER OF PIT AND ULTASONIC READINGS **
Stern Deck, Port or Starboard side of Fantail	Decks, Tops, Foundation, Fittings	1050	Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel)	Dark Gray 36076 Match existing adjacent surfaces	Partial preservation	Pits 20 UT shots 80 Fairing compound ½ kit

***Approximated total deck area**
****For estimating purposes**

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements
Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans
Coast Guard Drawing 750-WMSL-100-516, Rev B, Topside Configuration (NSC 1 SRD)
NAVSEA Drawing 803-1385828, Rev P, Nozzles AFFF and Washdown Systems

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), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2024, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2024, 2024, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

ASTM Internationals (ASTM) G46, 2018, Standard Guide for Examination and Evaluation of Pitting Corrosion

MIL-PRF-24176C, 2020, Cement, Epoxy, Metal Repair and Hull Smoothing

MIL-PRF-24667D, 2021, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

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

The Society for Protective Coatings (SSPC)/NACE International (NACE) Joint Surface Preparation Standard SSPC-SP 10 (WAB)/NACE WAB-2, 2015, Near-White Metal Wet Abrasive Blast Cleaning

3. REQUIREMENTS

3.1 General.

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

- 3.4 Inspection

3.1.2 Tech Rep. The Contractor must provide the services of Tech Reps and personnel as follows:

- NDE Tech Rep: NDE Operator/Level 1
- Preservation Tech Rep: AMPP Senior Certified Coatings Inspector (NACE CIP Level 3/SSPC PCI Level 3) with Marine Coatings Inspection Specialty

3.1.2.1 NDE Tech Rep. The Contractor must provide the services of a qualified and certified NDE Operator/Level 1 as follows:

- Perform NDE Operations.

3.1.2.1.1 Qualifications/certifications. NDE Operator/Level 1 certified and qualified in accordance with ASNT No. SNT-TC-1A. Submit the Tech Rep's qualifications/certifications to the COR at the Arrival Conference.

3.1.2.1.2 Dates of services. Include the dates of services in which Tech Reps must be on site as per their subcontract documentation.

3.1.2.2 Preservation Tech Rep. The Contractor must provide the services of a Certified Coating Inspector having successfully completed relevant AMPP (NACE/SSPC) Programs and Trainings to:

- Serve as an Independent Coating Tech Rep.
- Accomplish applicable requirements in SFLC Std Spec 0000, Paragraph 3.2.4.2.2 (Coating Tech Rep).
- Oversee the Preservation Plan requirements in SFLC Std Spec 6310, Paragraph 3.2 (Preservation Plan).
- Review and sign daily reports summarizing work. See forms QA-1 thru QA-5 provided in the General Requirements.
- Submit reports to the COR within 24 hours of each inspection.

3.1.2.2.2 Submit the name and the certification of the Tech Rep to the COR at the Arrival Conference. Include the dates of services the Qualified Tech Reps will be on site as per their subcontract documentation.

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).

3.1.3.1 Specific protections. Specific areas/equipment/components to be protected include, but are not limited to:

- Machinery, equipment, and components
- Ventilation systems, and components (e.g. ventilation inlets/outlets, and trunks)
- Wash down counter measure fittings
- Drains, covers, and plugs
- Wiring

3.1.3.2 Protection plan. Protection plan must be included in preservation plan. Equipment protection needs to be inspected by Coast Guard inspector prior to commencing of any preservation work.

3.1.3.3 Inspection of integrity. Inspect the integrity of the protective covering at the beginning of each shift where surface preparation and/or painting will be accomplished. Ensure that equipment and machinery have not been infiltrated by contamination. Clean any contamination and repair any defects in the protective covering prior to continuing work.

3.1.3.4 Watertight closures. Close all weather tight closures in the vicinity of the work area or install double curtain baffles at the entrance of each access door where airborne contamination could occur during surface preparation and painting. Double curtain baffles are necessary at all closures that will be in use during the preservation process. Install a dirt collection mat on the deck directly inside each closure.

3.1.3.5 Deck drains. Plug or cover all deck drains, weather deck supply and discharge to prevent entry of blast grit or debris.

3.1.3.6 Counter Measure Wash Down (CMWD). Cover CMWD nozzles (i.e. NAVSEA Dwg 803-1385828) to prevent entry of blast grit or debris using the following:

- Fender Washer (i.e. Carbon Steel, SAE J403H (1008-1020), UNS G10080-G10200, Zinc Plated)
- Machine Screw (Stainless, Type 18-8, must comply with ANSI-B18.6.3 Slotted, Trusshead. Full form threads are to extend to within 0.050 inch of the head bearing surface).

NOTE

The CMWD nozzle coverings are Parts 4 and 5 in NAVSEA Drawing No 803-1385828.

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:

- Machinery, equipment, and components
- Weapons, controls, and components
- Wash down counter measure fittings
- Drains, covers, and plugs
- Closures (e.g. doors, hatches and scuttles)
- Ladders and supports
- Outfits, foundations, and fittings (e.g. chocks, cleats, cat paws)
- Switches, controls, and terminals
- Lights, alarms, cameras, speakers, sensors, switches, and supports
- Piping, hoses, and supports
- Cables, wires, and supports

3.1.5 Work locations. Weather Deck, Fantail

3.5.1 Known coating defect is located at edge of fantail weather deck, 4 feet forward of the stern. Next to Guard rails and gun mount as shown on Figure 1 of section 4. See the applicable drawings in Section 2 for guidance, locations, and details.

3.1.6 Materials, tools, and services. The Contractor must provide materials, tools, and services to accomplish the requirements in this work item. New components, parts, materials, and paints with the same color, comparable and matching material properties as the existing components/parts. Use references in Sections 1, 2 and SFLC Std Specs for guidance, required materials, and details.

- Have all materials in the Contractor's physical possession at the work location needed to accomplish the work item prior to proceeding with deck surface preparation.
- Verify inventory with the Coast Guard Inspector (QA)

3.1.7 Water used for washing and surface preparation procedures. The Contractor must ensure that water used in all washing and surface preparation tasks (including pre-surface preparation wash, and wet abrasive blasting) is in accordance with SSPC/NACE Standards regarding to WJs or WABs. The water

used must be sufficient purity and quality, and must 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.
- Ensure that all water used in any surface preparation or cleaning procedures is captured, contained, and all spent water disposed of in accordance with all federal, state and local regulations.
- The COR must be notified within 5 days prior to the removal of accumulated water storage from the Coast Guard Base where work is being conducted.

3.1.8 Surface preparation optional methods. The Contractor has the option of using either "Wet Abrasive Blasting", "Dry Abrasive Blasting" or "Water Jetting" to achieve the required surface preparation, prior to application of the coating system specified in preservation requirements.

- Achieving greater productivity
- Achieving the required surface profile

NOTES

WABs and DABs are requested and preferred respectively, while WJs are still listed and approved under SFLC Std Spec 6310. WJs are acceptable only when remaining surface profiles still meet standards and requirements. Any surface prep areas failed to meet standards and requirements must be corrected/implemented by DABs, WABs or equivalent.

3.1.9 Work plan. The Contractor must provide a work plan (preservation plan including protection plan) for the Deck Covering (Slip-Resistant) Star Deck, Renew listed in Tables 1 in accordance with SFLC Std 6310, Paragraph 3.2 (Preservation Plan) to the COR at Pre-Work Conference.

3.2 Quality assurances and controls. 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"), and the quality controls specified in SFLC Std Spec 6310, Paragraph 3.1.10 (Coating inspection) and 3.1.15 (Coating system tests).

3.3 Operational test – initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of the equipment listed below to demonstrate existing operational condition. Submit a CFR.

- Deck machinery and equipment
- Drain systems and piping

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.4 Inspection. In the presence of the Coast Guard Inspector and as designated by the COR, the Contractor must inspect all cleaned surfaces and exposed substrates of areas in Table 1 (after removing/cleaning surface covering/coatings and prior to priming substrates) in accordance with SFLC

Std Spec 0740. Documenting inspection results. Include sketches with approximate location of defects, pit depth and UT results. Submit CIR.

3.4.1 Visual inspection (VT). The Contractor must visually inspect all exposed deck areas for any pitting, corrosion, erosion, defects, and damages.

NOTE

Decks below lockers and equipment may have high levels of corrosion. Ensure all interferences are removed for inspection and preservation.

3.4.1.1 Initial deck condition. Include the description of the initial deck condition as outlined below.

- Written, Visual or Pictorial Representation including measurements and locations of intended differentiating surface preparation levels and coating systems (i.e. stripe coating application (SFLC Std Spec 6310, 3.1.1 Stripe coat application)) over the original coating system using chalk or chalk based marking instrument

3.4.1.2 Sketching and marking. Prior to removal of any coatings, use photography, drawings and sketches as needed to document markings and lettering on affected areas. After application of deck covering, the markings and lettering must be restored as indicated on paragraph 3.8 Deck weapon, safety, and other markings.

- Visual or Pictorial Representation including measurements and locations of slip-resistant exempt surfaces (a.k.a. exempted areas/waterways) and Deck weapon, safety, and other markings (paragraph 3.8 Deck weapon, safety, and other markings) of the original coating system.

3.4.2 Pit measurement. The Contractor must measure pits on all observed pits using a Contractor supplied Pit Gauge in accordance with SFLC Std Spec 0740, Paragraph 3.13 (Evaluation of pitting corrosion). The Contractor to perform the quantity of pit readings indicated for each location on Table 1. The results of these measurements must be included in the inspection report, showing where pit measurements were taken and the depth of the pit.

NOTE

Pit measurements must be taken on cleaned/exposed substrates in accordance with SFLC Std Spec 0740 (in accordance with ASTM G46 via SFLC Std Spec 0740).

Depending on deck condition, not all of the estimated Pit/UT measurements will be necessary.

3.4.3 Ultrasonic test (UT). The Contractor must take UT measurements for determining suspected cracks and remaining substrate thicknesses in accordance with SFLC Std Spec 0740, Appendix C. The Contractor to perform the quantity of UT readings indicated for each location on Table 1 The results of these measurements and the locations where they were taken must be included in the inspection report.

- UT for cracks. Take UT measurements along suspected cracked substrates/discontinuities to determine their boundaries.
- UT for thickness measurement. Take UT shots in the surrounding area of any pit measuring

greater than 25% of plate thickness. UT shots must be taken in the four quadrants at an equal-distant radius from the pit center until full plate thickness is measured.

3.5 Substrate filling and fairing by epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). The Contractor must fill small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), with epoxy to delay further corrosions, after removing insulation, surface covering, and/or coating in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), "Metal Repair and Hull Smoothing", MIL-PRF-24176, and manufacturers' instructions.

- Procure 1/2 kit of epoxy (e.g. Belzona 1111, 0.5 Gallon/5 Kg Kit or equivalent) to conduct repairs.
- Apply remaining epoxy over high corrosion and erosion areas. (e.g. substrates repaired by clad welding, corners, edges, sills, welding seams, and high contact surfaces)

NOTE

"Substrate filling and fairing by epoxy for shallow pits and corrosions (i.e. pits < 25% or corrosions < 25%)" are supplement barriers intending to help delay penetrations.

3.6 Slip-resistant deck covering renewal. For areas where coating failure is evident, estimated at 12 square feet: The Contractor must prepare and coat the deck surfaces, using the system specified in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems). Apply finish/top coat to match existing adjacent surfaces. Select options as follows:

- Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel) (MIL-PRF-24667 Type V Comp. G/D/L)
- Near-White Metal Wet Abrasive Blast Cleaning SSPC-SP 10 (WAB)/NACE WAB-2, and
- Bare Metal Power Tool Cleaning (SSPC-SP 11) for all deck covering and coating defects, outfits/fittings, and limited access areas

3.6.1 Pre-surface preparation wash. Prior to accomplishing surface preparation, the Contractor must 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.

3.6.2 Preparation. The Contractor must clean the entire deck areas including foundations, outfits, coaming, and fittings (e.g. wash down counter measure, deck edges, foundations, coamings, outfits, and fittings) up all coaming heights and up to 6 inches above decks in accordance with:

- Near-White Metal Wet Abrasive Blast Cleaning SSPC-SP 10 (WAB)/NACE WAB-2, and
- Bare Metal Power Tool Cleaning (SSPC-SP 11) for deck covering or coating defects, and limited access areas (including deck edges, foundations, coamings, outfits, and fittings)

3.6.3 Coating. The Contractor must coat slip-resistant deck covering (MIL-PRF-24667C, Type V Comp G/D/L) on deck. Feather in the repairs. The coating system will be completed as follows:

- Primer Coats
- Stripe Coats on Welds and Seams – Stripe coats must be of a different color than the Primer Coats
- Intermediate Coats
- Non-Skid
- Apply one full final topcoat over entire deck (including areas adjacent to repaired section)

3.6.3.1 Slip-resistant surfaces. Select Dark Gray 36076 as the top/finish coat color. Ensure that the slip-resistant surface appearance and texture show a pattern of ridges and peaks as follows:

- 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.
- All weld seams must be cross-rolled from a minimum of 3 inches on either side of the weld.

3.6.3.2 Slip-resistant exempted surfaces. Apply Dark Gray 36076 or top/finish coats matching adjacent surfaces instead of slip-resistant deck covering on exempted surfaces (no slip-resistant deck covering) over vertical surfaces and areas as follows:

- Areas within six inches of adjacent bulkheads, deck coaming, and deck edges.
- Areas within two inches of deck foundations, deck fittings, welds, and protrusions. (two inches measured from outermost portion of foundation, for example, foundation brackets on anchor windlass)
- Decks inside coamings
- Deck fittings, including, but not limited to: pad eyes, label plates, net supports/foundations (e.g. drain heads/cups)
- Deck troughs (e.g. stuffing tubes, risers, and flanges)
- Exempted surfaces or stripes as designated by the COR.

3.6.3.3 Other adjacent surfaces. Preserve all bulkheads, foundations, outfits, coaming, and fittings including all adjacent structural members up all coaming heights and up to 6 inches above deck. Include specific surface areas as follows:

- Any coating damages due to the Contractor's work

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, Paragraph 3.1.13 (Touch-ups and minor coating repairs).

3.8 Operational test-post repair. After completion of work, the Contractor must witness Coast Guard personnel test all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to demonstrate satisfactory condition. Submit a CFR.

- Deck machinery and equipment
- Drain systems and piping

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.9 Washing. Upon completion of work and in presence of the Coast Guard Inspector, the Contractor must remove and dispose of all debris from surfaces, remove drain plugs, and clean out all deck and drains with low-pressure water, then demonstrate that all drains run free and clear.

4. NOTES

4.1 Figure of failed section of non-skid coating on fantail.

FIG 1. EXISTING FAILED COATING SECTION

WORK ITEM 8: Tenting (Stern Deck), Provide

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to provide suitable working condition and protect environment from project materials and processes in work requiring tenting, including but not limited to compartments or areas listed below and in Table 1.

- WORK ITEM : Deck Covering (Slip-Resistant) Stern Deck, Repair/Patch

TABLE 1 TENTING FOR EXTERIOR DECKS

TENTING	LOCATIONS
Stern Deck (Fantail)	Main Deck, Fr. 88 to Transom

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-100-006, Rev A, Inboard and Outboard Profiles

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-100-059, Rev E, Topside Configuration (NSC 1 SRD) (AS1100004)

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

Code of Federal Regulations (CFR) Title 29, Part 1910, 2017, Occupational Safety and Health Standards

Code of Federal Regulations (CFR) Title 29, Part 1915, 2013, Occupational Safety and Health Standards for Shipyard Employment

Code of Federal Regulations (CFR) Title 40, 2013, Protection of the Environment

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

3. REQUIREMENTS

3.1 General.

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

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).

NOTE

All shipboard outfits and fittings (e.g. flight deck nets) should not be used to prevent damage.

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

3.1.5 Work locations. The concerned work areas are listed in Table 1. See the applicable drawings in Section 2 References for guidance, locations, and details.

3.1.6 Materials, tools, and services. The Contractor must provide service, tools, and materials to accomplish the requirements in this work item. New components, parts, materials, and paints with the same color, comparable and matching material properties as the existing components/parts. Use references in Sections 1, 2 and SFLC Std Specs for guidance, required materials, and details.

3.1.7 Work coordination. The Contractor must coordinate the accomplishment of this work item with the following work items:

- Deck Covering (Slip-Resistant) Stern Deck, Renew

3.2 Environmental protection. The Contractor must abide by all requirements for environmental protection specified in SFLC Std Spec 0000, Appendix A (Requirements for Environmental Protection at Contractor Operated (Non USCG) Facilities), and Appendix B (Requirements for Environmental Protection at USCG Facilities).

3.3 Scaffolding, safety, and protection. The Contractor must comply with all required and applicable safety and protection specified in SFLC Std Spec 0000, Paragraph 3.3.1 (Personnel safety and property protection - general), and all OSHA safety and health regulations, and any other applicable federal, state, and local laws, and regulations, for the protection of both personnel and property.

- Suitable Scaffolding and/or lifelines are required for working above five feet (29 CFR 1910 and 1915)
- Temporary lines or rails must be installed in place of all removed lifelines or life rails, and be retained until replacement tasks have been completed.
- Adequate illumination is required in walkways, work areas, and access to provide a safe work environment (29 CFR 1915.92(a)).
- Scaffolding must not contact with any C5ISC, Navigation, Weapons, Controls, and Components.

3.4 Tenting. The Contractor must tent the designated areas as listed in the Table 1 (prior to blasting and preservation operations) in accordance with SFLC Std Spec 6310, Paragraph 3.1.5 (Tenting and ambient condition control). Tenting features must be as follows :

- Tenting must be set up in a way that it will not interfere with the blasting, preservation, or machinery removal and reinstallation operations.
- Tenting must be constructed to prevent precipitation from affecting normal repair operations, and be able to withstand severe inclement weather conditions.
- Tenting must be outfitted with a re-sealable opening that will permit loading and unloading of equipment and supplies.
- Tenting must be used to protect the environment from possible contamination due to preservation work.
- Temporary tenting must be included to protect exterior surfaces from inclement weather, while undergoing preservation.
- Temporary enclosures may be rigged and left overnight as long as they do not block egress routes or ventilation.
- Tenting must not contact with any C5ISC, Navigation, Weapons, Controls, and Components.

3.4.1 Inspection and repair. The Contractor must inspect and repair any damaged areas of tenting at the beginning and end of every workday.

3.4.2 Restoration. The Contractor must remove all tenting equipment and material, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness at the completion of work.

3.5 Ambient condition control. The Contractor must control environmental conditions necessary for required works in accordance with SFLC Std Spec 6310, Paragraph 3.1.4 (Ambient condition parameters).

3.5.1 Control equipment. To maintain ambient conditions recommended by coating system manufacturers, and accomplish surface preparation and coating application, the Contractor must provide suitable ambient condition control equipment including, but not limited to :

- Lighting : Lights and light fixtures
- Temperature : HVAC systems (e.g. heaters, air-conditioners)
- Humidity : Humidifiers, or dehumidifiers
- Air circulation : Blowers, and ventilators

3.5.2 Control plan. The Contractor must submit an ambient condition control plan to the COR at the Arrival Conference prior to initiating ambient condition control process.

3.6 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, Paragraph 3.1.13 (Touch-ups and minor coating repairs).

4. NOTES

This section is not applicable to this work item.

WORK ITEM 9: Deck Covering (Slip-Resistant) Hangars, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew deck covering with slip-resistant deck covering system (MIL-PRF-24667D Type V Comp. G/D/L Non-skid) for areas as listed in Table 1.

TABLE 1 SLIP-RESISTANT DECK COVERING

LOCATION	COMPO	AREA (SQFT)*	SYSTEM/APPENDIX (SFLC STD 6310)	TOPCOAT COLOR	PRESERVE LEVEL	NOTE
Hangar Stbd & Port incl. Storerooms and Storage Areas (i.e. Helo Spares Storeroom Areas 01-47-1-Q, 01-52-1-Q, 01-52-2-Q, 01-52-2-Q, and FAS Storage Area 01-48-2-Q)	Decks, Foundation, Outfits, Fittings	2,600	Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel)	Dark Gray 36076 Match existing adjacent surfaces	Renew	MIL-PRF-24667D Type V Comp. G/D/L Non-skid

***Approximated**

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-100-006, Rev A, Inboard and Outboard Profiles

Coast Guard Drawing 418A-WMSL-588-001, Rev A, Aviation Facilities General Arrangements

Coast Guard Drawing 418A-WMSL-588-005, Rev E, sUAS Combined Arrangement Modifications

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-100-035, Rev M, Unit 2340 Structure Main Deck to 01 Level - Fr 52 to Fr 64 (ASC100234)

Coast Guard Drawing 750-WMSL-100-039, Rev N, Unit 3140 Structure Mn Dk to 01 Lvl - Fr 64 to Fr 76 (ASC100314)

Coast Guard Drawing 750-WMSL-588-504, Rev B, Tiedown Installation for Navy H60S/H60R Helo (Stratton)

WMSL MH-60R/S Hangar Painting Guidance, 2018, Schlemmer G.W., AIR 4.8.1.5

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), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2024, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2024, 2024, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

American Welding Society (AWS) B1.10M/ B1.10, 2016, Guide for Nondestructive Examination of Welds

American Welding Society (AWS) B1.11M/B1.11, 2015, Guide for the Visual Examination of Welds

American Welding Society (AWS) D1.1/D1.1M, 2025, Structural Welding Code – Steel

ASTM International (ASTM) D3359-23, 2023, Standard Test Methods for Measuring Adhesion by Tape Test

ASTM Internationals (ASTM) G46-21, 2021, Standard Guide for Examination and Evaluation of Pitting Corrosion

MIL-PRF-24176C, 2020, Cement, Epoxy, Metal Repair and Hull Smoothing

MIL-PRF-24667D, 2021, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

MIL-STD-1689A, 1990, Fabrication, Welding, and Inspection of Ships Structure

NAVAIR ENGCEN Bulletin 1, Rev J; Air Capable Ship Aviation Facilities Resume

NAVAIR SI-ACS-AFB-1P, 2020, Air Capable Ship Aviation Facility Certification No. 1P

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.3 (SSPC-SP 3), 2024, Power Tool Cleaning

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

The Society for Protective Coatings (SSPC)/NACE International (NACE) Joint Surface Preparation Standard SSPC-SP 10 (WAB)/NACE WAB-2, 2015, Near-White Metal Wet Abrasive Blast Cleaning

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 Operational test - initial
- 3.4 Inspection

3.1.2 Tech Rep. The Contractor must provide the services of a qualified and certified Tech Reps and personnels as follows :

- NDE Tech Rep : NDE Operator/Level 1
- Preservation Tech Rep : AMPP Senior Certified Coatings Inspector (NACE CIP Level 3/SSPC PCI Level 3) with Marine Coatings Inspection Specialty

3.1.2.1 NDE Tech Rep. The Contractor must provide the services of a qualified and certified NDE Operator/Level 1 as follows:

- Perform NDE Operations.

3.1.2.1.1 Qualifications/certifications. NDE Operator/Level 1 certified and qualified in accordance with ASNT No. SNT-TC-1A (or ACCP). Submit the Tech Rep's qualifications/certifications to the COR at the Arrival Conference.

3.1.2.1.2 Dates of services. Include the dates of services in which Tech Reps must be on site as per their subcontract documentation.

3.1.2.2 Preservation Tech Rep. The Contractor must provide the services of a Certified Coating Inspector having successfully completed relevant AMPP (NACE/SSPC) Programs and Trainings to:

- Serve as an Independent Coating Tech Rep.
- Accomplish applicable requirements in SFLC Std Spec 0000, Paragraph 3.2.4.2.2 (Coating Tech Rep).
- Oversee the Preservation Plan requirements in SFLC Std Spec 6310, Paragraph 3.2 (Preservation Plan).
- Review and sign daily reports summarizing work. See forms QA-1 thru QA-5 provided in the General Requirements.
- Submit reports to the COR within 24 hours of each inspection.

3.1.2.2.1 Qualifications/certifications. Submit the Coating Tech Rep's qualifications/certifications in accordance with SFLC Std Spec 0000, 3.2.4.2.2.3 and 3.2.4.2.4, include name, certificate number and documented completion relevant AMPP (NACE/SSPC) Courses and Exams.

3.1.2.2.2 Submit the name and the certification of the Tech Rep to the COR at the Arrival Conference. Include the dates of services the Qualified Tech Reps will be on site as per their subcontract documentation.

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).

3.1.3.1 Specific protections. Specific areas/equipment/ components to be protected include, but are not limited to:

- Machinery and equipment
- Ventilation systems (e.g. ventilation inlets/outlets, and trunks)
- Drains, covers, and plugs
- Closures (e.g. doors, hatches, and scuttles)

3.1.3.2 Inspection of integrity. Inspect the integrity of the protective covering at the beginning of each shift where surface preparation and/or painting will be accomplished. Ensure that equipment and machinery have not been infiltrated by contamination. Repair any defects in the protective covering.

3.1.3.3 Watertight closures. Close all weather tight closures in the vicinity of the work area or install double curtain baffles at the entrance of each access door where airborne contamination could occur during surface preparation and painting. Double curtain baffles are necessary at all closures that will be in use during the preservation process. Install a dirt collection mat on the deck directly inside each closure.

3.1.3.4 Deck drains. Plug or cover all deck drains, weather deck supply and discharge prevent entry of blast grit or debris.

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 :

- Machinery, equipment, and components (e.g. removable components/parts)
- Ventilation systems, and components (e.g. removable components/parts)
- Ordinance marks
- Wash down counter measure fittings
- Drains, covers, and plugs
- Closures (e.g. doors, hatches and scuttles)
- Rails and supports
- Ladders and supports
- Outfits, foundations, and fittings (e.g. chocks, cleats, cat paws)
- Switches, controls, and terminals
- Lights, alarms, cameras, speakers, sensors, switches, and supports
- Piping, hoses, and supports
- Cables, wires, and supports

3.1.5 Work locations. The concerned work areas are listed in Table 1. See the applicable drawings in section 2 for guidance, locations, and details.

3.1.6 Materials, tools, and services. The Contractor must provide materials, tools, and services to accomplish the requirements in this work item. New components, parts, materials, and paints with the same color, comparable and matching material properties as the existing components/parts. Use references in Sections 1, 2 and SFLC Std Specs for guidance, required materials, and details.

3.1.7 Water used for washing and surface preparation procedures. The Contractor must ensure that water used in all washing and surface preparation tasks (including pre-surface preparation wash, and wet abrasive blasting) is in accordance with SSPC/NACE Standards regarding to WJs or WABs. The water used must be sufficient purity and quality, and it must 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.
- Ensure that all water used in any surface preparation or cleaning procedures is captured, contained, and all spent water disposed of in accordance with all federal, state and local regulations.
- Notify the COR within 5 days prior to the removal of accumulated water storage from the Coast Guard Base where work is being conducted.

3.1.8 Surface preparation optional methods. The Contractor has the option of using either "Wet Abrasive Blasting", "Dry Abrasive Blasting" or "Water Jetting" to achieve the required surface preparation, prior to application of the coating system specified in preservation requirements.

- Achieving greater productivity
- Achieving the required surface profile

NOTES

WABs and DABs are requested and preferred respectively, while WJs are still listed and approved under SFLC Std Spec 6310. WJs are acceptable only when remaining surface profiles still meet standards and requirements. Any surface prep areas failing to meet standards and requirements must be corrected/implemented by DABs, WABs, or equivalent.

3.1.9 Work plan. The Contractor must provide a work plan (preservation plan including protection plan) for the Deck Covering (Slip-Resistant) Renewal listed in Table 1 in accordance with SFLC Std 6310, Paragraph 3.2 (Preservation Plan) to COR at the Arrival Conference.

- Must not close/block Helo Hangar and Stern Deck at the same time.
- Notify the COR 48 hours in advances to trim bow if necessary or required.

3.2 Quality assurances and controls. 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"), and the quality controls specified in SFLC Std Spec 6310, Paragraph 3.1.10 (Coating inspection) and 3.1.15 (Coating system tests).

NOTICE

Surfaces being renewed/preserved are considered "critical-coated surfaces".

3.3 Operational test – initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of the equipment listed below to demonstrate existing operational condition. Submit a CIR.

- Deck machinery and equipment
- Drain systems and piping

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.4 Inspection. In presence of the Coast Guard Inspector and as designated by the COR, the Contractor must inspect all cleaned surfaces and exposed substrates of areas in Table 1 (after removing/cleaning surface covering/coatings and prior to priming substrates) in accordance with SFLC Std Spec 0740. Submit a CIR.

3.4.1 Visual inspection (VT). The Contractor must visually inspect all exposed deck areas for any pitting, corrosion, erosion, defects, and damages.

- Initial deck condition. The Contractor must include the description of the initial deck condition as outlined below with the documentation required in 3.4 Inspection.
- Visual or Pictorial Representation including measurements and locations of intended differentiating surface preparation levels and coating systems (i.e. stripe coating application (SFLC Std Spec 6310, 3.1.1 Stripe coat application)) over the original coating system using chalk or chalk based marking instrument

3.4.2 Pit measurement. The Contractor must take 400 pit measurements using a Contractor supplied 'Pit Gauge' in accordance with SFLC Std Spec 0740, Paragraph 3.13 (Evaluation of pitting corrosion). The results of these measurements must be included in the inspection report, showing where pit measurements are taken and the depth of the pit.

NOTE

Pit measurements must be taken on cleaned/exposed substrates in accordance with SFLC Std Spec 0740 (in accordance with ASTM G46 via SFLC Std Spec 0740)

3.4.3 Ultrasonic test (UT). The Contractor must take 400 UT measurements for determining suspected cracks and remaining substrate thicknesses in accordance with SFLC Std Spec 0740, Appendix C. The results of these measurements and the locations where they were taken must be included in the inspection report.

- UT for cracks. Take UT measurements along suspected cracked substrates/discontinuities to determine their boundaries.
- UT for thickness measurement. Take UT shots in the surrounding area of any pit measuring greater than 25% of plate thickness. UT shots must be taken in the four quadrants at an equal-

distant radius from the pit center until full plate thickness is measured.

3.5 Substrate filling and fairing by epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). The Contractor must fill small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), with epoxy to delay further corrosions, after removing insulation, surface covering, and/or coating in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), "Metal Repair and Hull Smoothing", MIL-PRF-24176, and manufacturers' instructions.

- Procure 4 kits of epoxy (e.g. 0.5 Gallon/5 Kg Kit or equivalent) to conduct repairs.
- Apply remaining epoxy over high corrosion and erosion areas. (e.g. substrates repaired by clad welding, corners, edges, sills, welding seams, and high contact surfaces)

3.6 Slip-resistant deck covering renewal. The Contractor must prepare and coat the deck surfaces, using the system specified in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems). Apply finish/top coat to match existing adjacent surfaces. Select options as follows :

- Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel) (MIL-PRF-24667D Type V Comp. G/D/L)
- Near-White Metal Wet Abrasive Blast Cleaning SSPC-SP 10 (WAB)/NACE WAB-2, and
- Bare Metal Power Tool Cleaning (SSPC-SP 11) for all deck covering and coating defects, outfits/fittings, and limited access areas

NOTES

1. Strength decks' substrates (e.g. Decks at Sides from Fore Deck through Flight Deck) are constructed of HY-AH-36 or HSLA-80 steel and may NOT be heated to remove the existing covering.

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

3. Surface preparation may be accomplished by wet abrasive-blasting, or dry abrasive-blasting, or a combination of the two.

4. Unless a containment system is used to contain surface preparation for dust and debris and coating application overspray during pier side/dockside preservation, the following must be adhered to:

a. All surface preparation tools/equipment must be vacuum-shrouded.

b. Coatings must be applied by brushing or rolling.

5. During pier side surface preparation :

- Suitable means to contain generated dust, waste water, paint chips, spent abrasives, and overspray must be provided or employed, as applicable.

- Plywood or net/canvas barriers are typically used to surround the area being blasted to contain stray steel shot.

- When net barriers are used, the mesh size of the netting material must be small enough to ensure that the steel shot 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 medium.

- Steel shot on a deck is a foreign object damage (FOD) hazard and extreme care must be taken to prevent slipping when walking over contaminated areas.

3.6.1 Pre-surface preparation wash. Prior to accomplishing surface preparation, the Contractor must 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.

3.6.2 Preparation. The Contractor must clean the entire deck areas including foundations, outfits, coaming, and fittings (e.g. wash down counter measure, deck edges, foundations, coamings, outfits, and fittings) up all coaming heights and up to 6 inches above decks in accordance with :

- Near-White Metal Wet Abrasive Blast Cleaning SSPC-SP 10 (WAB)/NACE WAB-2, and
- Power Tool Cleaning to Bare Metal (SSPC-SP 11) for deck covering or coating defects, and limited access areas (including deck edges, foundations, coamings, outfits, and fittings)

3.6.3 Coating. The Contractor must coat slip-resistant deck covering (MIL-PRF-24667C, Type V Comp G) on deck. The coating system will be completed as follows :

- Primer Coat
- Stripe Coat Welds and Seams – Stripe coat must be of a different color than the primer coat
- Intermediate Coats
- Non-Skid
- Top Coat (Areas adjacent to Non-Skid)

3.6.3.1 Slip-resistant surfaces. Select Dark Gray 36076 as the top/finish coat color. Not top-coat slip-resistant surfaces, except to restore helo deck markings. Ensure that the slip-resistant surface appearance and texture show a pattern of ridges and peaks as follows :

- 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.
- All weld seams must be cross-rolled from a minimum of 3 inches on either side of the weld.

3.6.3.2 Slip-resistant exempted surfaces. Apply Dark Gray 36076 or top/finish coats matching adjacent surfaces instead of slip-resistant deck covering on exempted surfaces (no slip-resistant deck covering) over vertical surfaces and areas as follows :

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

inches measured from outermost portion of foundation, for example, foundation brackets on anchor windlass)

- Decks inside coamings
- Deck fittings, including, but not limited to: pad eyes, label plates, net supports/foundations (e.g. drain heads/cups, helicopter tie-down fittings)
- Deck troughs (e.g. stuffing tubes, risers, and flanges)
- Exempted surfaces or stripes as designated by the COR.

3.6.3.3 Other adjacent surfaces. Preserve all bulkheads, foundations, outfits, coaming, and fittings including all adjacent structural members up all coaming heights and up to 6 inches above deck. Include specific surface areas as follows :

- Any coating damages due to the Contractor's works

3.7 Deck weapon, safety, and other markings. As designated by the COR, the Contractor must paint all deck weapon, safety, and other markings to restore them to original conditions in accordance with SFLC Std Spec 6310, COMDTINST M10360.3 (Series), Chapter 5 Cutter and Boat Safety Colors and Markings, NAVSEA OP 4, Rev 12, Ammunition and Explosives Safety Afloat, and WMSL MH-60R/S Hangar Painting Guidance. Deck markings include, but are not limited to :

3.7.1 Other markings. The Contractor must paint to restore all other markings on decks and adjacent bulkheads (e.g. helo tie-down markings in Hangar) by making and using marking templates. Prepare and coat new markings to match original markings.

- Helo-tiedown markings. Use WMSL MH-60R/S Hangar Painting Guidance for references.

3.8 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, Paragraph 3.1.13 (Touch-ups and minor coating repairs).

3.9 Operational test-post repair. After completion of work and in the presence of the Coast Guard Inspector, the Contractor must witness an operational test (by Coast Guard personnel) of the equipment listed below to demonstrate existing operational condition. Submit a CFR.

- Deck machinery and equipment
- Drain systems and pipings

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.10 Washing. Upon completion of works and in presence of the Coast Guard Inspector, the Contractor must remove and dispose of all debris from surfaces, remove drain plugs, and clean out all deck and drains with low-pressure water, then demonstrate that all drains run free and clear.

3.11 CFR. The Contractor must summarize and submit a CFR to the COR if additional repair is necessary or required.

4. NOTES

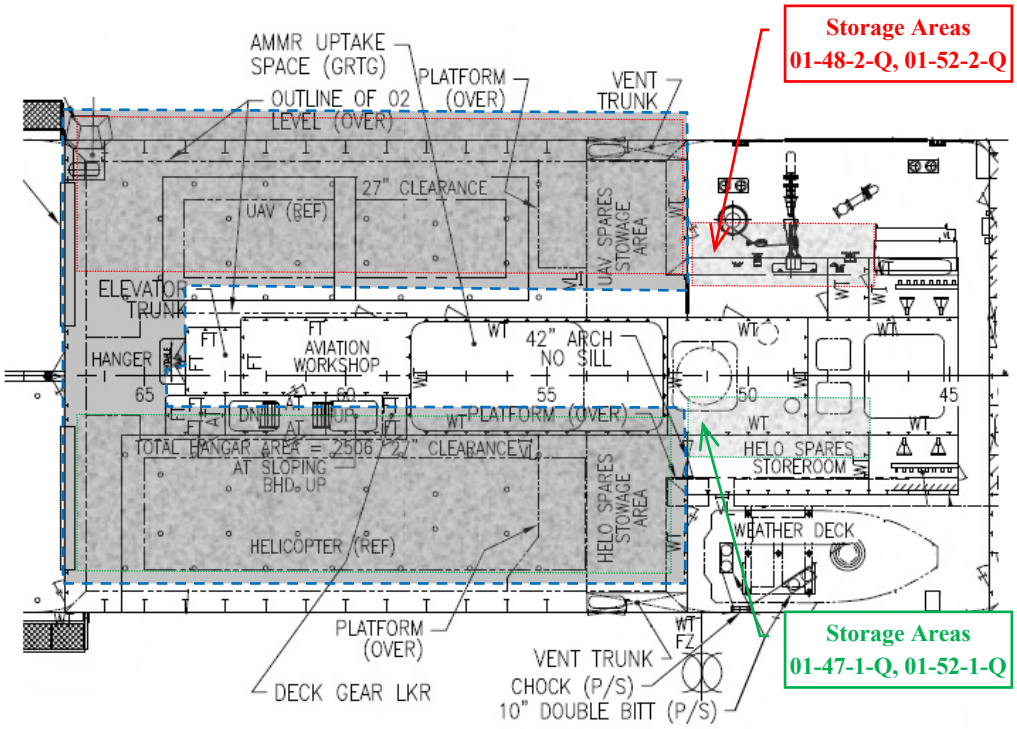

FIGURE 1 HANGAR STBD & PORT INCL. STOREROOMS AND STORAGE AREAS (I.E. HELO SPARES STOREROOM AREAS 01-47-1-Q, 01-52-1-Q, 01-52-2-Q, 01-52-2-Q, AND FAS STORAGE AREA 01-48-2-Q)

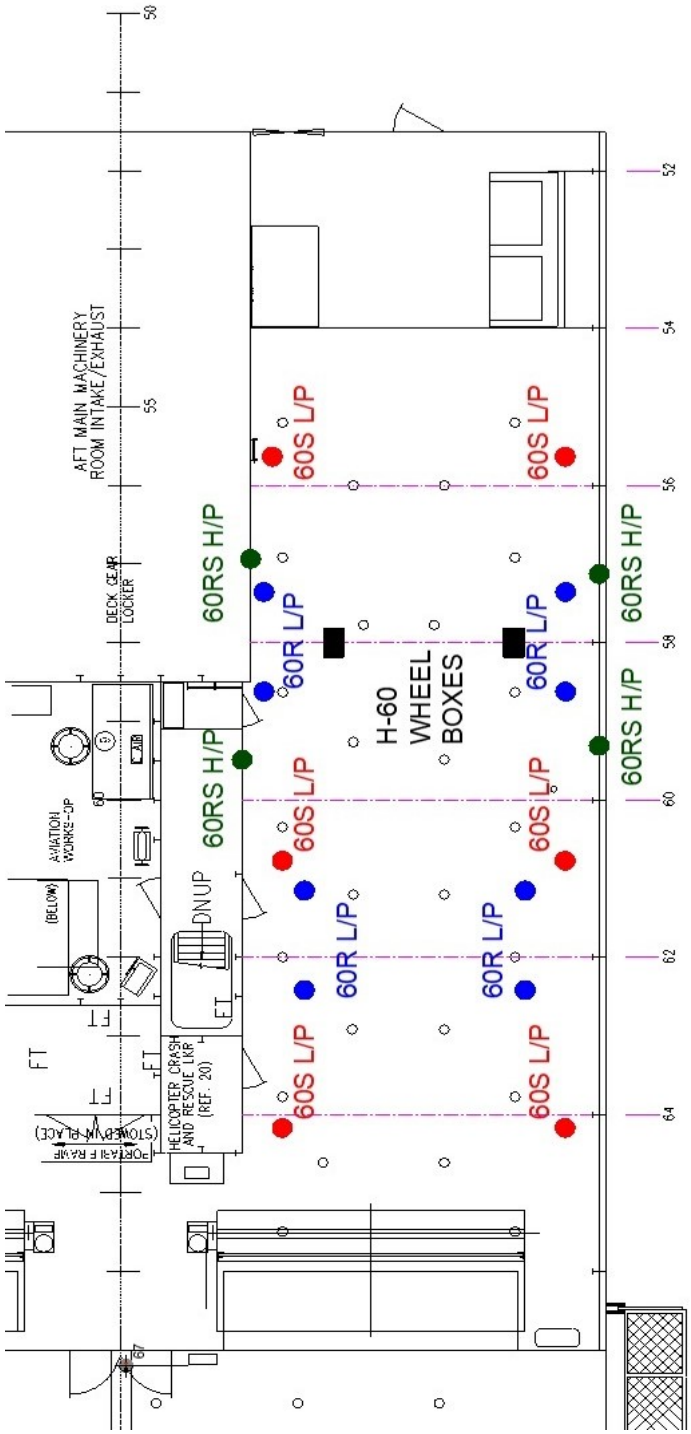

FIGURE 2 AIRCRAFT SECURING FITTINGS INSTALLATIONS AND MARKINGS (MH-60T) (WMSL STARBOARD HANGAR MARKINGS)

WORK ITEM 10: Nulka Armor Pad Cover Plate, Renew

1.1 Intent. This work item describes the requirements for the Contractor to renew both (Port and Starboard) Nulka Armor pads cover plates and to perform partial deck preservation with slip-resistant deck covering system (MIL-PRF-24667 Type V Comp. G/D/L Non-skid) for areas listed in Table 1.

TABLE 1 SLIP-RESISTANT DECK COVERING

LOCATION	COMPO	AREA (SQFT)*	SYSTEM/APPENDIX (SFLC STD 6310)	TOPCOAT COLOR	PRESERVE LEVEL
CWIS deck 03-60-1 Port Side	Decks, Tops, Foundation, Fittings	50	Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel)	Dark Gray 36076 Match existing adjacent surfaces	Partial preservation
CWIS deck 03-60-1 Starboard Side	Decks, Tops, Foundation, Fittings	50	Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel)	Dark Gray 36076 Match existing adjacent surfaces	Partial preservation

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-100-516, Rev B, Topside Configuration (NSC 1 SRD)

Coast Guard Drawing 750-WMSL-180-43, Rev G, FDN ARR DWG Design UNIT 4420 BKLT NO. 1 (ASC180442) (UNSIGNED)

NAVSEA Drawing 803-1385828, Rev P, Nozzles AFFF and Washdown Systems

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2024, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2024, 2024, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

American Welding Society, AWS D1.2-96, 1996, Structural Welding Code, Steel

ASTM Internationals (ASTM) G46, 2018, Standard Guide for Examination and Evaluation of Pitting Corrosion

MIL-PRF-24176C, Oct 2004, Cement, Epoxy, Metal Repair and Hull Smoothing

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2016, Bare Metal Power Tool Cleaning

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None

3.1.2 Tech Rep.

The Contractor must provide the services of a Qualified Tech Rep to provide the following on site:

- Accomplish all VT inspections, pit measurement and UT inspections.

3.1.2.1 Qualifications/certifications. Submit the Tech Rep's qualifications/certifications in accordance with SFLC Std Spec 0000, 3.2.4.2.2.3 and 3.2.4.2.4, include name, certificate number and documented completion NDE Operator/Level 1 certified and qualified in accordance with ASNT No. SNT-TC-1A.

3.1.2.2 Submit the name and résumé of the Tech Rep to the COR at the Arrival Conference. Include the dates of services the Qualified Tech Reps will be on site as per their subcontract documentation.

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). Specific areas/equipment/components to be protected include, but are not limited to:

- Adjacent deck surfaces and deck fittings
- Machinery and equipment (e.g. motors, pumps, fans, controls, panels, hoses, racks, piping, and supports)
- Ventilation systems (e.g. intakes, exhausts, supplies, and returns)

- Drains, covers, and plugs

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 and supports
- Cables and supports
- Railing
- Deck Drains
- Limited work spaces
- Wiring harness

3.1.4.1 Contractor must ensure that wiring harness for MK43 remains covered and protected.

3.1.5 Quality assurances and controls. The Contractor must abide by all the safety, preservation, and quality control requirements specified in SFLC Std Spec 6310, Paragraph 3.1.10 (Coating inspection) and 3.1.15 (Coating system tests).

3.1.6 Work location. CWIS deck, see CG Dwg 750-WMSL_180_43, sheet 6B.

3.1.7 Cover plates to be renewed. Refer to CG Dwg 750-WMSL-180-43, sheets 51 thru 51C, and parts list in same drawing. See Figure 1 in section 4.

3.1.8 Removal and reinstallation of MK43 (Nulka) decoy launchers. Cutter will arrive a home port after Removal of MK43 Launchers. Contractor is not responsible for removal or reinstallation of the MK-43 decoy launchers.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. 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.

FIGURE 1. NULKA ARMOR PAD'S COVER PLATE, MK 43 FOUNDATION AND DECK TO PRESERVED. PHOTOGRAPH IS FROM SISTER SHIP.

3.3 Preservation. The Contractor must follow the requirements of SFLC Std Spec 6310 as listed on Table 1 to prepare and coat the MK43 foundations and deck surfaces in the immediate area of MK43 and tapered portions of the pad. The renewed cover plates must be coated with ablative non-skid coating system, see paragraph 3.6.4 of this work item.

NOTE

Water jetting or blasting is not permitted.

3.3.1 Contractor must use Power tools only for surface preparation

WARNING

The foundation for the MK 43 is a critical alignment surface. Do not use of grinders or any tools on the top surface of the foundation.

3.4 Inspection. In presence of the Coast Guard Inspector, the Contractor must inspect all exposed substrates in Table 1 after cleaning surfaces/removing coating and prior to priming substrates in accordance with SFLC Std Spec 0740. Submit a CFR.

3.4.1 Visual inspection (VT). The Contractor must visually inspect all exposed substrates for any pitting, corrosion, and erosion.

- Component inspection. Visually inspect all structure surfaces, including, but not limited to cableways, terminals, structural members, and fasteners.

NOTE

Depending on level of corrosion and condition of deck the quantity of pit measurements and UT shots required may be less than those indicated below. If more are necessary (severely corroded decks), the Contractor must submit CFR.

3.4.2 Pit measurement. The Contractor must measure all observed pits on exposed substrates (after removing/cleaning surface covering/coatings and prior to priming substrates) in accordance with SFLC Std Spec 0740, Paragraph 3.13 (Evaluation of pitting corrosion). For bidding purposes, the Contractor must use estimate 40 pits for each MK-53 launcher (foundation and deck) are required.

- Mark up a copy of Coast Guard Drawings to show all locations selected for measurement.
- Report the measurements including results (the depth of the pits), locations, and illustrations/marked up drawings.

NOTE

The cover plates shown on Detail 51C-B sheet 51C of CG Dwg 750-WMSL-180-43 will be renewed. Pit and UT measurements of the surface of the plates is not necessary.

3.4.3 Ultrasonic measurement (UT. The Contractor must take UT measurements in the surrounding area of any pit measuring greater than 25% of plate thickness. UT measurements must be taken in the four quadrants at an equal-distant radius from the pit center until full plate thickness is measured. For bidding purposes, estimate 120 UT measurements will be needed for each MK-53 foundation and deck. Do not measure pits on the ablative pads cover plates (will be renewed). All UT measurements must be taken on cleaned surfaces in accordance with SFLC Std Spec 0740 Appendix C.

- Mark up a copy of Coast Guard Drawings. Show all locations selected for measurement.
- Report the measurements including results (thicknesses, and cracks), locations, and illustrations/marked up drawings.

3.5 Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). As designated by the COR, the Contractor must repair small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), after removing insulation, coating, or deck covering using Epoxy Fairing Material in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), "Metal Repair and Hull Smoothing", MIL-PRF-24176, and manufacturers' instructions.

NOTE

"Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%)" is a supplement barrier intending to help delay penetration.

3.6 Renew ablative pads cover plates. Fabricate new ablative pad's cover plates. Cover plate details are

shown on detail 51C-B, sheet 51C of CG Dwg 750-WMSL-180-43

3.6.1 The Contractor must use a grinder to remove existing cover plates.

3.6.2 After removal of the Cover plates, in the presence of the Coast guard inspector the Contractor must inspect the surface of the ablative pad FN 64. Report pitting, damage or internal corrosion. Submit CFR, include photographs.

NOTE

Renewal of Ablative pad FN 64 is expected to not be necessary.

3.6.3 The Contractor must install the new cover plates in accordance with CG Dwg 750-WMSL-180-43. See Plan 51B-A for welding symbols. Perform all welding and inspection in accordance with SFLC-Std-Spec 0740.

3.6.4 Apply ablative non-skid coating system to cover plates. Follow the requirements of installation note 10 on page 51C CG Dwg 750-WMSL-180-43.

3.7 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).

4. NOTES

Not applicable

WORK ITEM 11: Main Drainage Valves, Overhaul

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to overhaul or renew Main Drainage Valves in the Forward Main Machinery Room (FMMR) 5-44-01-E, See Table 1 and Table 2 for details.

TABLE 1. VALVES FOR OVERHAUL

TYPE	SIZE (INCHES)	DESCRIPTION	VALVE NO/ LOCATION
GATE (Motor Operated)	6	BILGE MAIN BULKHEAD 44 ISOLATION	MD-V-010 MD-V-4-44-3

TABLE 2. VALVES DESIGNATED FOR RENEWAL

TYPE	SIZE (INCHES)	DESCRIPTION	VALVE NO/ LOCATION
GATE (Motor Operated)	3	FMMR PORT AFT BILGE SUCTION BULKHEAD ISOLATION	MD-V-027 MD-V-4-51-2

1.2 Government-furnished property.

None

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 750-WMSL-191-001, Rev G, Ballast/Emergency Dewatering System

Coast Guard Drawing 750-WMSL-191-024, Rev C, Ballast/Emergency Dewatering Unit 2210

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication 7115A (TP 7115A), July 2025, Electronic Actuator Model Limitorque MX-05

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

American Society of Mechanical Engineers (ASME) B16.34, 2020, Valves-Flanged, Threaded, and Welding End

ASTM International (ASTM) F992, 2017, Standard Specification for Valve Label Plates

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

- 3.3 Valve material

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:

- Deck plates
- Piping
- Water
- Valve flanges.
- Motor Operator
- Wire Runs
- Ladder wells

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work and in the presence of a Coast Guard Inspector, 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.

3.2.1 The Contractor must test the motor-operated valves locally and remotely.

3.3 Valve material. The Contractor must assume all valves listed in Table 1 and Table 2 have a bronze housing and flanged connections for the purposes of bidding. Validate each valve and submit a CIR indicating the availability of the valves and/or overhaul kits for the listed valves. See Coast Guard Drawing 750-WMSL_191_1 Sheet 7 Plan 13-C and 5-C for location within the system.

3.4 Fluid handling. The Contractor must drain and dispose of all residual fluids in the piping system in accordance with all Federal, state, and local rules and regulations.

3.5 Remove. The Contractor must remove all designated valves in Table 1 and Table 2. Immediately after valve removal, install blank flanges and gaskets over all openings and secure each flange with at least two bolts, 180 degrees apart. Visually inspect associated flanges and piping; submit a CFR. Utilize the system diagrams.

3.5.1 Exercise care when removing the motor actuator, retain for reinstallation.

3.6 Contractor's option for valve renewal. The Contractor may, at no additional cost to the Government, opt to renew valves designated for overhaul if preferable for the Contractor. If the Contractor elects to renew valves designated for overhaul, ensure all new valves are commercial-standard type valves, conforming to the applicable standard listed in Table 3 (Valve Standards). New valves must be equivalent (including identical material) to the valve being renewed. Visually inspect the piping, flange and mounting arrangements; and submit a CFR detailing any required modifications to accommodate the new valve(s). If the Contractor elects to renew a valve after attempting overhaul, it will be at no additional cost to the Government.

3.7 Overhaul. The Contractor must accomplish the following as required for each valve designated for overhaul (not including valves the Contractor has opted to renew) to meet the specified valve testing standard. The applicable Coast Guard Drawing shows the approximate location of the valves and some of the specifications for the joints.

3.7.1 Disassemble. The Contractor must disassemble the valve to the extent necessary to perform the required work.

NOTE

Complete disassembly of some valves may not be necessary to accomplish overhaul.

3.7.2 Clean. The Contractor must clean all internal surfaces and visually inspect for defects in body and structural material. Inspect the surface finish and condition of seats, disks, parting faces, plugs, and sealing surfaces.

3.7.3 Machine. The Contractor must conduct all machining necessary, including but not limited to grind, lap and spot-in seat-to-disk, to obtain an acceptable leakage rate at or below valve testing standards (see Table 3 below).

3.7.4 Reassemble. The Contractor must reassemble the valve using new hardware and software (packing, O-rings, gaskets, seal rings, non-metallic seats, pins, washers, inserts, etc.).

3.7.5 Test. The Contractor must test the overhauled valves in accordance with the applicable standards listed in Table 3 (Valve Standards). Submit a CFR.

TABLE 3 - VALVE STANDARDS

VALVE TYPE	INDUSTRY STANDARD
Steel Valves	MSS SP-61
Butterfly Valve	MSS SP-67
Ball Valves, Flanged or Butt-Welded Ends	MSS SP-72A
Bronze Gate, Globe, Angle and Check Valves	MSS SP-80
All others	ASME B16.34

3.8 Valve renewal. The Contractor must renew all designated valves with commercial-standard type valves, conforming to the applicable standard listed in Table 3 (Valve Standards). The Contractor must replace any Mil-Std valves listed for renewal with equivalent commercial standard valves. The Contractor must be aware substitution of body material or trim set is not authorized. The applicable Coast Guard Drawing shows the approximate location of the valves and the specifications for the joints.

3.9 Valve reinstallation/installation. Upon completion of all authorized work, the Contractor must accomplish the following in accordance with Coast Guard Drawing 750-WMSL_191_1.

- 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.
- 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).

3.10 Actuator. The Contractor must inspect, clean, and install the valve actuator in accordance with Coast Guard TP7115A

3.10.1 Prior to installation, the Contractor must clean, inspect, and lubricate the following:

- Spline between the valve and the motor actuator
- Valve stem

3.10.2 After installation, check the actuator oil level and add oil as required by TP7115A.

3.11 Valve labeling. The Contractor must install valve label plates on all new and overhauled valves in accordance with ASTM F992.

3.12 Leak test. After completing all authorized mechanical (i.e. threaded, bolted, etc.) joint repairs, the Contractor must, in the presence of the CG Inspector, test the affected system 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.

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

3.13.1 The Contractor must test the motor-operated valves locally and remotely.

3.14 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, paragraph 3.1.13 (Touch-ups and minor coating repairs).

4. NOTES

This section is not applicable to this work item.

WORK ITEM 12: Fwd Grey Water Pump Discharge Check Valve, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew the #1 Grey Water Pump discharge check valve.

1.2 Government-furnished property.

None

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 750-WMSL-528-015, Rev E, Plumbing & Interior Deck drains and Vent Unit 2110

Coast Guard Drawing 418A-WMSL-528-001, Rev A, Plumbing & Interior Deck Drain Diagram

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

American Society of Mechanical Engineers (ASME) B16.34, 2020, Valves-Flanged, Threaded, and Welding End

ASTM International (ASTM) F992, 2017, Standard Specification for Valve Label Plates

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

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-67, 2022 Edition, Butterfly Valves

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-72A, 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. The Contractor must submit a CIR for the inspections listed in the following paragraph(s):

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

3.1.5 Continuity of Services. If the greywater pump associated with this valve will be out of service for longer than 2 days, then the Contractor must notify the Coast Guard at least 24 hours in advance. The Contractor must minimize the downtime of the greywater pump.

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.

3.2.1 The #1 Grey Water Discharge pump must be tested during the initial operational test.

3.3 Fluid handling. The Contractor must drain and dispose of all residual fluids in the piping system in accordance with all Federal, state, and local rules and regulations.

3.4 Remove. The Contractor must remove PWD-V-21, as shown in CG Dwg 750-WMSL-528-015 and

418A-WMSL-528-001. Immediately after valve removal, install blank flanges and gaskets over all openings and secure each flange with at least two bolts, 180 degrees apart. Visually inspect associated flanges and piping; submit a CFR. Utilize the system diagrams

3.5 Valve renewal. The Contractor must renew the valve with commercial-standard type valves, as specified in CG Dwg 750-WMSL-58-015 and 418A-WMSL-528-001. The Contractor must be aware substitution of body material or trim set is not authorized. The applicable Coast Guard Drawing shows the approximate location of the valves and the specifications for the joints.

3.6 Valve reinstallation/installation. Upon completion of all authorized work, the Contractor must accomplish the following in accordance with the Coast Guard drawing for the applicable system:

- 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.
- 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).

3.7 Valve labeling. The Contractor must install valve label plates on all new valves in accordance with ASTM F992.

NOTE

New valves and overhauled valves do not need to be hydrostatically tested. Only the welds that the contractor makes need to be tested.

3.8 Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all new welded/brazed piping and welded/brazed components of the effected 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.

3.9 Leak test. After completing all authorized mechanical (i.e. threaded, bolted, etc.) joint repairs, the Contractor must test the effected 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.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.10 Operational test, post repairs. After completion of work, the Contractor must witness Coast Guard personnel test all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to demonstrate satisfactory conditions in all operating modes. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 13: Deck Covering (Polymeric), Repair and Seal

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to repair and reseal existing deck covering in compartment as specified in Table 1.

TABLE 1 DECK COVERING (POLYMERIC) IN COMPARTMENTS

LOCATION	TOTAL COMPARTMENT SQ FT	SYSTEM/APPENDIX (SFLC STD 6341)	SYSTEM COLOR	NOTES
3-82-0-Q Physical Fitness Center	800	Polymeric Epoxy Resin, Type I, Class 2/Appx A	Dark Gray SS5002 with White 600 (20%)/ Blue 604 (40%) Chips	Renew up to 50 square feet Reseal Entire Deck Provide 2 sets of Slip Resistant Pads

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-085-003, Rev A, Compartment Areas & Volumes NSC 1 & NSC 2 Only (ASC085012)

Coast Guard Drawing 750-WMSL-191-040-1, Rev B, Ballast/Emergency Dewatering Unit 3220 (ASC191322-BA) (UNSIGNED)

Coast Guard Drawing 750-WMSL-528-052, Rev _, Plumbing & Interior Dk Drains and Vent. Sys - Unit 3220 (AS6528322-PD) (UNSIGNED)

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

Surface Forces Logistics Center Standard Specification 6341 (SFLC Std Spec 6341), 2022, Install Interior Deck Covering Systems

OTHER REFERENCES

MIL-D-16791, Jan 1993, Detergents, General Purpose (Liquid, Nonionic)

MIL-PRF-24613, Dec 1990, Deck Covering Materials, Interior, Cosmetic Polymeric

MIL-PRF-24667C, May 2008, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

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 protect non-affected vessel's equipment, components, and spaces during surface preparation and coating application procedures, as specified in SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection), and abide by all applicable environmental protection tasks, as specified in SFLC Std Spec 0000, Appendix B (Requirements for Environmental Protection). Upon completion of work, remove and dispose of all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

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

- Cables and supports
- Doors, hatches and scuttles
- Outfits and foundations
- Sensors and supports (e.g. TLIs)
- Slip-resistant covering treads
- Closets and racks
- Drains, covers, and plugs

- Furniture (e.g. cabinets, desks, tables, benches, and chairs)
- Outfits, foundations, and fittings
- Piping and supports
- Exercise equipment and mats

3.1.5 Work locations. The concerned work areas are listed in Table 1. See the Coast Guard Drawings in section 2 above for guidance, locations, and details.

3.1.6 Materials. The Contractor must provide any new components, parts, materials, and paints with the same color, comparable and matching material properties as the existing components/parts. Use references in section 1, 2 and SFLC Std Specs 6310 and 6341 for guidance, required materials, and details.

3.1.7 Work plan. The Contractor must provide a work plan for sealing Deck Covering System listed in the Table 1 to COR before or on arrival conference.

3.1.8 Notification. The Contractor must give written notification to COR 48 hours before starting work on this work item.

3.1.9 Contractor walk thru. In the presence of the Coast Guard inspector, and prior to start of work the Contractor must perform a walk thru of all compartments listed on Table 1. Identify and document location of anti-slip pads and initial deck condition. Note any potential issues that may impact work plan, document any compartment requiring repairs. Submit CFR.

3.2 Repair particulars. The Contractor must perform all tasks specified in SFLC Std Spec 6341 and follow manufacturer's installation instruction, to repair deck covering system in the location(s) specified in Table 1. For estimating purposes the Contractor must estimate up 5% of surface area will require repairs due to damage to coating system.

3.2.1 Removal. The Contractor must remove all loose underlayment around the damaged area(s). Feather the damaged underlayment and surrounding top deck covering layers outward about 3 inches. Dispose of all waste materials in accordance with all local, state, and federal laws and regulations.

3.2.2 Cleaning. The Contractor must clean the exposed surfaces of underlayment material and deck covering base color layers with Xylene cleaning agent and then let them dry. Surfaces must be completely free of erosion products, mill scale, dirt, oil, grease, moisture, deteriorated paint, and other surface contaminants.

3.2.3 Bonding. The Contractor must apply the bonding coat (that comes with the underlayment kit) on the exposed surfaces of underlayment and feathered deck covering layers. Allow the bonding coat to dry for one (1) day in accordance with manufacturers' installation instruction/guideline in section 2.

3.2.4 Underlayment. The Contractor must fill in underlayment around the damaged areas up to deck covering layer. Sand all exposed underlayment to provide a smooth surface free of irregularities.

3.2.5 Polymeric deck covering. The Contractor must apply Cosmetic Polymeric Epoxy Resin System (MIL-PRF-24613 Type I, Class 2, (Epoxy, with Color Flake Topping)) to match existing adjacent surfaces over exposed underlayment material and feathered deck coving in accordance with SFLC Std Spec 6341, Appendix A and manufacturers' installation instruction/guideline in section 2 above. Scatter color flakes between sealer layers for blending new and existing deck covering pattern where appropriate during sealing process.

3.2.6 Sealing. The Contractor must thoroughly seal the deck covering system with a minimum of two coats of a suitable sealer, in accordance with the deck covering system manufacturer's recommendations. Refer to paragraph 4.1 "Sealer particulars".

3.2.7 Caulking. The Contractor must renew all existing caulking and grout at joints.

3.2.8 Slip-resistance. The Contractor must add an aggregate (e.g. white aluminum oxide or glass beads) to the final seal coat. Refer to deck covering system manufacturer's recommendation.

3.2.9 Curing. The Contractor must allow sealer to cure for the manufacturer recommended times.

WARNING

Keep traffic off deck until sealer is cured. The sealing process is complete when the deck has a uniform appearance; i.e., when the surface film is continuous and free of blotchy areas.

3.3 Slip-resistant treads/mat. The Contractor must renew all removed slip-resistant treads/mat on deck (as specified in Table 1) at both sides of watertight doors, and head and foot of ladders in accordance with SFLC Std Spec 6341 and MIL-PRF-24667C, Type XI. (For estimating purposes use 2 sets of slip-resistant material for each location listed on Table 1)

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

4. NOTES

4.1 Sealer particulars. Sealer for designated deck covering system(s) may be procured from the deck covering system's manufacturer.

- Authorized suppliers for cosmetic polymeric deck covering systems are listed on the Qualified Product Listing (QPL) 24613 for MIL-PRF-24613

S021108_63100_TAB_0426_750
S024003_63100_TAB_0426_750
S024011_63100_TAB_0426_750
S024012_63100_TAB_0426_750

WORK ITEM 14: Decks, Preserve

1.1 Intent. This work item describes the requirements for the Contractor to perform preservation of the assigned deck surfaces listed on Table 1.

TABLE 1 DECK PRESERVATION

LOCATION	AREA (SQFT)	PRESERVATION LEVEL	SYSTEM/APPENDIX (SFLC STD 6310)	TOPCOAT COLOR	*REQUIRED MEASUREMENT OF PITS/UT FAIRING COPMPOUND KITS
5-44-01-E FMMR Upper Deck	1433	Full Preservation	Decks, Metal Interior and Non-Skid Areas (Metal Decks – No application of deck coverings)	Match existing	Pits 200 UT 800 Fairing Compound 2 Kits
1-81-2-Q Aux Shop And 1-84-2-Q Shore Power SWBD Area	400	Full Preservation	Decks, Metal Interior and Non-Skid Areas (Metal Decks – No application of deck coverings)	Match existing	Pits 40 UT 150 Fairing Compound 1 Kit
2-60-4-Q Fan Room	50	Full Preservation	Decks, Metal Interior and Non-Skid Areas (Metal Decks – No application of deck coverings)	Match existing	Pits 20 UT 80 Fairing Compound 1/2 Kit
5-64-1-Q Shaft Alley Port	377	Full Preservation	Decks, Metal Interior and Non-Skid Areas (Metal Decks – No application of deck coverings)	Match existing	Pits 30 UT 120 Fairing Compound 1 Kit
2-60-4-Q AMMR Port Fan Space	209	Full Preservation	Decks, Metal Interior and Non-Skid Areas (Metal Decks – No application of deck coverings)	Match existing	Pits 40 UT 120 Fairing Compound 1 Kit
5-64-2-Q Shaft Alley Starboard	377	Full Preservation	Decks, Metal Interior and Non-Skid Areas (Metal Decks – No application of deck coverings)	Match existing	Pits 30 UT 120 Fairing Compound 1 Kit

*For estimating purposes

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-085-025, Rev -, Compartment Areas & Volumes NSC 3 & Follow (AS3085012) (UNSIGNED)

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

OTHER REFERENCES

American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2024, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2024, 2024, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

American Welding Society, AWS D1.2-96, 1996, Structural Welding Code, Steel

ASTM Internationals (ASTM) G46, 2018, Standard Guide for Examination and Evaluation of Pitting Corrosion

MIL-PRF-24176C, Oct 2004, Cement, Epoxy, Metal Repair and Hull Smoothing

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2016, Bare Metal Power Tool Cleaning

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None

3.1.2 Tech Rep.

The Contractor must provide the services of a Qualified Tech Rep to provide the following on site:

- Accomplish all VT inspections, pit measurement and UT inspections.

3.1.2.1 Qualifications/certifications. Submit the Tech Rep's qualifications/certifications in accordance with SFLC Std Spec 0000, 3.2.4.2.2.3 and 3.2.4.2.4, include name, certificate number and documented completion NDE Operator/Level 1 certified and qualified in accordance with ASNT No. SNT-TC-1A.

3.1.2.2 Submit the name and résumé of the Tech Rep to the COR at the Arrival Conference. Include the dates of services the Qualified Tech Reps will be on site as per their subcontract documentation.

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). Specific areas/equipment/components to be protected include, but are not limited to:

- Adjacent deck surfaces and deck fittings
- Machinery and equipment (e.g. motors, pumps, fans, controls, panels, hoses, racks, piping, and supports)
- Ventilation systems (e.g. intakes, exhausts, supplies, and returns)
- Drains, covers, and plugs

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 and supports
- Cables and supports
- Limited working space
- Deck Drains
- Ventilation and Ducting
- Limited work spaces

3.1.5 Quality assurances and controls. The Contractor must abide by all the safety, preservation, and quality control requirements specified in SFLC Std Spec 6310, Paragraph 3.1.10 (Coating inspection) and 3.1.15 (Coating system tests).

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. The Contractor must follow the requirements of SFLC Std Spec 6310 as listed on Table 1 to prepare and coat deck surfaces, including angled portions of the deck, up to 6 inches above deck.

NOTE

Water jetting or blasting is not permitted.

3.3.1 Contractor must use Power tools only for surface preparation

3.4 Inspection. In presence of the Coast Guard Inspector, the Contractor must inspect all exposed substrates in Table 1 after cleaning surfaces/removing coating and prior to priming substrates in accordance with SFLC Std Spec 0740. Submit a CFR.

3.4.1 Visual inspection (VT). The Contractor must visually inspect all exposed substrates for any pitting, corrosion, and erosion.

- Component inspection. Visually inspect all structure surfaces, including, but not limited to cableways, terminals, structural members, and fasteners.

NOTE

Depending on level of corrosion and condition of deck the quantity of pit measurements and UT shots required may be less than those indicated on Table 1. If more are necessary (severely corroded decks), the Contractor must submit CFR.

3.4.2 Pit measurement. The Contractor must measure all observed pits on exposed substrates (after removing/cleaning surface covering/coatings and prior to priming substrates) in accordance with SFLC Std Spec 0740, Paragraph 3.13 (Evaluation of pitting corrosion). For bidding purposes, the Contractor must use estimate of pits listed on Table 1 are required.

- Mark up a copy of Coast Guard Drawings to show all locations selected for measurement.
- Report the measurements including results (the depth of the pits), locations, and illustrations/marked up drawings.

3.4.3 Ultrasonic measurement (UT). The Contractor must take UT measurements in the surrounding area of any pit measuring greater than 25% of plate thickness. UT measurements must be taken in the four quadrants at an equal-distant radius from the pit center until full plate thickness is measured. For bidding purposes, the Contractor must estimate the quantity of UT measurements for each compartment as listed on Table 1. All UT measurements must be taken on cleaned surfaces in accordance with SFLC Std Spec 0740 Appendix C.

- Mark up a copy of Coast Guard Drawings. Show all locations selected for measurement.
- Report the measurements including results (thicknesses, and cracks), locations, and illustrations/marked up drawings.

3.5 Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). As designated by the COR, the Contractor must repair small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), after removing

insulation, coating, or deck covering using Epoxy Fairing Material in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), "Metal Repair and Hull Smoothing", MIL-PRF-24176, and manufacturers' instructions.

NOTE

"Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%)" is a supplement barrier intending to help delay penetration.

3.6 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).

4. NOTES

This section is not applicable to this work item.

WORK ITEM 15: Wave Guide Dryer Flexible Hoses, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew the designated hose assemblies and expansion joints for the Wave Guide Dryer.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-516-002, Rev K, Chilled Water System Diagram (ASC516002)

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2022, 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(s):

- 3.3.1 Hose inspection and verification

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:

- Deck plates
- Piping
- Electrical wiring & cables
- Machinery
- Hoses located in secure/classified compartment.

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 Hose renewal. The Contractor must renew the hose assemblies for the Wave Guide Dryer in accordance with SFLC Std Spec 5000, Appendix C, Paragraph C2.2 (Hose assemblies). Notify the CG Inspector at least 5 business days prior to removing hoses to allow the CG to conduct a proper lay-up of components prior to work commencing.

3.3.1 Hose inspection and verification. The attached tables show an approximation of hose lengths, sizes, part numbers, and fittings to be renewed that are listed for bidding purposes only. The Contractor must validate the hoses and fittings requiring renewal, noting any deviations from the tables. To prevent potential delays, submit a CIR providing proof of procurement of materials for the new hoses.

3.3.2 Prior to each hose disconnection, the Contractor must record equipment, supply, and return line information for use in later reconnection. Temporarily tag/label the hoses and transfer tags/labels to the new hoses to aid in reinstallation.

3.3.3 System fluid disposal. The Contractor must drain all existing fluids from the designated hoses; dispose of removed fluids in accordance with all applicable Federal, state, and local regulations. In the process of removal of hoses, the Contractor must not dispose any fluid in tanks or bilges. Submit a CFR documenting the amount of fluids removed.

NOTE

Some systems may require complete draining to remove hoses. Additional fluid required to be removed (outside of the designated hoses) will be subject to a change request.

3.3.4 Immediately after disconnecting or removing hoses, the Contractor must completely seal all openings to the rest of the system using threaded caps, threaded plugs, or bolt-on blanks made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

Plastic bags, rubber gloves, and rags of any kind are prohibited from being used to prevent leaking from hoses and for system protection.

3.3.5 The Contractor must template new hose length from each removed hose. New hose type and size must be determined from hose removed. Select hoses may require in-place measurement and remain in place until replacement hose is ready for installation to minimize system down time. If hose has excess length, verify with CG inspector if excess length is required. Renew hose end fittings. Renew all o-rings, seals, two part clamps, and mounting bolts. The Contractor must retain the removed hoses and turn over to the Coast Guard upon installation of the new hoses. Submit a CFR for any additional hose connections that require replacement not on the renewed hose.

3.3.6 Hydrostatic test. The Contractor must hydrostatically test all new hose assemblies with their attached fittings. Test pressure must be 150% of the rated working pressure of the hose. Ensure no leakage from or permanent deformation of pressure-containing parts by repairing all leaks and discrepancies. Submit a CFR documenting all certifications of pressure test results.

3.3.7 Flush the hoses following hydrostatic testing and cap the ends to prevent contamination. Flush to remove all contaminates to achieve cleanliness Grade A prior to installation.

3.3.8 Fluid renewal. The Contractor must renew all removed system fluids. Verify the replacement fluid type and quantity with the Coast Guard Inspector prior to reintroduction into the system.

3.3.9 Hose tags. The Contractor must provide new stamped or engraved metal hose tags with the following bulleted information, in accordance with SFLC Std Spec 5000, Figure C-1. Tag installation must be done in a manner that does not interfere with the normal hose flexing motion. Attach hose tags to their respective hose using metal strapping. Verify the tag can be slightly moved by hand, allowing the hose to expand and contract as designed while minimizing chaffing.

- Hose Log Item Number (Serial Number)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date (DD/MM/YY)
- Service Life (Replacement Date, 12 years following installation date) Date (QTR "Q"/FY)

3.4 Hose Documentation. For each renewed hose assembly, the Contractor must submit, at a minimum, the information listed below in Microsoft Excel format. Submit information via CFR.

- Hose Number
- System
- Associated Assembly (i.e. A/C Inlet, Oil Cooler Return, etc.)
- Item (Hose, Expansion Joint, etc.)
- Location (Compartment Number)
- Hose Length (in.)

- Hose Diameter (in.)
- Hose Brand
- Hose Part Number
- Hose Construction/Type (Synth Rubber, Teflon, Metal, Plastic, etc.)
- Fitting #1 Description/Material
- Fitting #1 Brand
- Fitting #1 Part Number
- Fitting #2 Description/Material
- Fitting #2 Brand
- Fitting #2 Part Number
- Hose Rated Pressure (psi)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date
- Hose Replacement Date

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 without leaks. Submit a CFR.

4. NOTES

TABLE 1 – WAVE GUIDE DRYER HOSES

HOSE SERIAL #	LENGTH (IN.)	SIZE	PART NUMBER	HOSE MATERIAL	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
TRS-C/W-001 or CWS-F-081	15x21 (dogleg)	-20	2580-20	Synthetic Rubber	3/4" 150# Flange	2-5/16" CPV Fitting	150
TRS-C/W-002 or CWR-F-081	15x21 (dogleg)	-20	2580-20	Synthetic Rubber	3/4" 150# Flange	2-5/16" CPV Fitting	150

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WORK ITEM 16: Gas Turbine Moisture Separator Flexible Hoses, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew the designated hose assemblies and expansion joints for the Main Gas Turbine (MGT) Moisture Separator in the Forward Main Machinery Room (FMMR) Uptake Space 2-45-0-Q.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL_551_1, Rev J, Compressed Air Diagram

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2022, 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(s):

- 3.3.1 Hose inspection and verification

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:

- Deck plates
- Piping
- Electrical wiring & cables
- Machinery

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work and in the presence of a Coast Guard Inspector, 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 Hose renewal. The Contractor must renew the hose assemblies for the Wave Guide Dryer in accordance with SFLC Std Spec 5000, Appendix C, Paragraph C2.2 (Hose assemblies). Notify the CG Inspector at least 5 business days prior to removing hoses to allow the CG to conduct a proper lay-up of components prior to work commencing.

3.3.1 Hose inspection and verification. The attached tables show an approximation of hose lengths, sizes, part numbers, and fittings to be renewed that are listed for bidding purposes only. The Contractor must validate the hoses and fittings requiring renewal, noting any deviations from the tables. To prevent potential delays, submit a CIR providing proof of procurement of materials for the new hoses.

3.3.2 Prior to each hose disconnection, the Contractor must record equipment, supply, and return line information for use in later reconnection. Temporarily tag/label the hoses and transfer tags/labels to the new hoses to aid in reinstallation.

3.3.3 Immediately after disconnecting or removing hoses, the Contractor must completely seal all openings to the rest of the system using threaded caps, threaded plugs, or bolt-on blanks made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

Plastic bags, rubber gloves, and rags of any kind are prohibited from being used to prevent leaking from hoses and/or for system protection.

3.3.4 The Contractor must template new hose length from each removed hose. New hose type and size must be determined from hose removed. Select hoses may require in-place measurement and remain in place until replacement hose is ready for installation to minimize system down time. If hose has excess length, verify with CG inspector if excess length is required. Renew hose end fittings. Renew all o-rings, seals, two part clamps, and mounting bolts. The Contractor must retain the removed hoses and turn over to the Coast Guard upon installation of the new hoses. Submit a CFR for any additional hose connections that require replacement not on the renewed hose.

3.3.5 Hydrostatic test. The Contractor must hydrostatically test all new hose assemblies with their attached fittings. Test pressure must be 150% of the rated working pressure of the hose. Ensure no leakage from or permanent deformation of pressure-containing parts by repairing all leaks and discrepancies. Submit a CFR documenting all certifications of pressure test results.

3.3.6 Flush the hoses following hydrostatic testing and cap the ends to prevent contamination. Flush to remove all contaminates to achieve cleanliness Grade A prior to installation.

3.3.7 Hose tags. The Contractor must provide new stamped or engraved metal hose tags with the following bulleted information, in accordance with SFLC Std Spec 5000, Figure C-1. Tag installation must be done in a manner that does not interfere with the normal hose flexing motion. Attach hose tags to their respective hose using metal strapping. Verify the tag can be slightly moved by hand, allowing the hose to expand and contract as designed while minimizing chaffing.

- Hose Log Item Number (Serial Number)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date (DD/MM/YY)
- Service Life (Replacement Date, 12 years following installation date) Date (QTR "Q"/FY)

3.4 Hose Documentation. For each renewed hose assembly, the Contractor must submit, at a minimum, the information listed below in Microsoft Excel format. Submit information via CFR.

- Hose Number
- System
- Associated Assembly (i.e. A/C Inlet, Oil Cooler Return, etc.)
- Item (Hose, Expansion Joint, etc.)
- Location (Compartment Number)
- Hose Length (in.)
- Hose Diameter (in.)
- Hose Brand
- Hose Part Number
- Hose Construction/Type (Synth Rubber, Teflon, Metal, Plastic, etc.)
- Fitting #1 Description/Material
- Fitting #1 Brand
- Fitting #1 Part Number
- Fitting #2 Description/Material
- Fitting #2 Brand
- Fitting #2 Part Number

- Hose Rated Pressure (psi)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date
- Hose Replacement Date

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 without leaks. Submit a CFR.

4. NOTES

TABLE 1 – MOISTURE SEPARATOR PANEL HOSES

HOSE SERIAL #	LENGTH (IN.)	SIZE	SERVICE	HOSE MATERIAL	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
MS-A-001 or ALPV-F-029	24”	¾”	Panel Supply in FMMR Uptake 2-45-0-Q	Synthetic Rubber	37° Flare	37° Flare	144
MS-A-003 or ALPV-F-028	24”	¾”	Door Open in FMMR Uptake 2-45-0-Q	Synthetic Rubber	37° Flare	37° Flare	144
MS-A-002 or ALPV-F-027	24”	¾”	Door Close in FMMR Uptake 2-45-0-Q	Synthetic Rubber	37° Flare	37° Flare	144

WORK ITEM 17: Bow Thruster Flexible Hoses, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew the designated hose assemblies for the bow thruster located in compartment 3-10-0-Q.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 750-WMSL-505-006, Rev D, List of Hoses (ASC505006)

Coast Guard Drawing 750-WMSL-556-015, Rev E, Bow Thruster HPU Diagram (ASC556009)

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication 7431 (TP 7431), March 2021, Bow Thruster – Model TT1100 DPN CP – Mechanical & Hydraulic System – Installation Manual

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2022, 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(s):

- 3.3.1 Hose inspection and verification

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:

- Deck plates
- Piping
- Electrical wiring & cables
- Machinery

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.

- Bow Thruster (give 48 hour notice to CG prior to test)

3.3 Hose renewal. The Contractor must renew the hose assemblies for the equipment listed in Table 1 in accordance with SFLC Std Spec 5000, Appendix C, Paragraph C2.2 (Hose assemblies).

3.3.1 Hose inspection and verification. The attached tables show an approximation of hose lengths, sizes, part numbers, and fittings to be renewed that are listed for bidding purposes only. The Contractor must validate the hoses and fittings requiring renewal, noting any deviations from the tables. Submit a CIR with the proof of procurement of materials for new hoses.

3.3.2 Prior to each hose disconnection, the Contractor must record equipment, supply, and return line information for use in later reconnection. Temporarily tag/label the hoses and transfer tags/labels to the new hoses to aid in reinstallation.

3.3.3 System fluid disposal. The Contractor must drain all existing fluids from the designated hoses; dispose of removed fluids in accordance with all applicable Federal, state, and local regulations. In the process of removal of hoses, the Contractor must not dispose any fluid in tanks or bilges. Submit a CFR documenting the amount of fluids removed.

NOTE

Some systems may require complete draining to remove hoses. Additional fluid required to be removed (outside of the designated hoses) will be subject to a change request.

3.3.4 Immediately after disconnecting or removing hoses, the Contractor must completely seal all openings to the rest of the system using threaded caps, threaded plugs, or bolt-on blanks made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

Plastic bags, rubber gloves, and rags of any kind are prohibited from being used to prevent leaking from hoses and for system protection.

3.3.5 The Contractor must template new hose length from each removed hose. New hose type and size must be determined from hose removed. Select hoses may require in-place measurement and remain in place until replacement hose is ready for installation to minimize system down time. If hose has excess length, verify with CG inspector if excess length is required. Renew hose end fittings. Renew all o-rings, seals, two part clamps, and mounting bolts. Dispose of removed hoses in accordance with all applicable Federal, state, and local regulations. Submit a CFR for any additional hose connections that require replacement not on the renewed hose.

3.3.6 Hydrostatic test. The Contractor must hydrostatically test all new hose assemblies with their attached fittings. Test pressure must be 150% of the rated working pressure of the hose. Ensure no leakage from or permanent deformation of pressure-containing parts by repairing all leaks and discrepancies. Submit a CFR documenting all certifications of pressure test results.

3.3.7 Flush the hoses following hydrostatic testing and cap the ends to prevent contamination. Flush to a condition free of grease, oil, flux, scale, dirt, loose particles or loose corrosion products, and all other contamination foreign to the base material of the surface.

3.3.8 Fluid renewal. The Contractor must renew all removed system fluids. Hydraulic fluid must be renewed, sampled, and tested in accordance with SFLC Std Spec 5000, Appendix C, Paragraphs C2.1 (Fluids), C2.1.1, and C2.1.3. The fluid must meet the acceptance criteria as stated in SFLC Std Spec 5000, Appendix C, Paragraph C2.1.4. Verify the replacement fluid type and quantity with the Coast Guard Inspector prior to reintroduction into the system.

3.3.9 Hose tags. The Contractor must provide new stamped or engraved metal hose tags with the following bulleted information, in accordance with SFLC Std Spec 5000, Figure C-1. Tag installation must be done in a manner that does not interfere with the normal hose flexing motion. Attach hose tags to their respective hose using metal strapping. Verify the tag can be slightly moved by hand, allowing the hose to expand and contract as designed while minimizing chaffing.

- Hose Log Item Number (Serial Number)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date (DD/MM/YY)
- Service Life (Replacement Date, 12 years following installation date) Date (QTR "Q"/FY)

3.4 Hose Documentation. For each renewed hose assembly, the Contractor must submit, at a minimum, the information listed below in Microsoft Excel format. Submit information via CFR.

- Hose Number
- System
- Associated Assembly (i.e. A/C Inlet, Oil Cooler Return, etc.)
- Item (Hose, Expansion Joint, etc.)

- Location (Compartment Number)
- Hose Length (in.)
- Hose Diameter (in.)
- Hose Brand
- Hose Part Number
- Hose Construction/Type (Synth Rubber, Teflon, Metal, Plastic, etc.)
- Fitting #1 Description/Material
- Fitting #1 Brand
- Fitting #1 Part Number
- Fitting #2 Description/Material
- Fitting #2 Brand
- Fitting #2 Part Number
- Hose Rated Pressure (psi)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date
- Hose Replacement Date

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.

- Bow Thruster (give 48 hour notice to CG prior to test)

4. NOTES

TABLE 1 - BOW THRUSTER (COMPARTMENT: 3-10-0-Q)

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	LOCATION	FITTING #1	FITTING #2	DESIGN (PSI)
BT-HYD-001	35	2	HPU Line T	1-1/2" FLG	1-1/2" FLG	89
BT-HYD-002	35	2	HPU Line F	1-1/2" FLG	1-1/2" FLG	89
BT-HYD-003	35	2	HPU Line S	1-1/2" FLG	1-1/2" FLG	89
BT-HYD-004	35	3/4	HPU Line B	C.P.V.	C.P.V.	2058
BT-HYD-005	35	3/4	HPU line A	JIC	JIC	2058
BT-HYD-006	35	3/4	Thruster Line VV	JIC	JIC	89
BT-HYD-007	17	3/4	Thruster Line AA	JIC	JIC	2058

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	LOCATION	FITTING #1	FITTING #2	DESIGN (PSI)
BT-HYD-008	17	3/4	Thruster Line FF	JIC	JIC	89
BT-HYD-009	17	3/4	Thruster Line BB	JIC	JIC	2058

WORK ITEM 18: Anchor Windlass Flexible Hoses, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew the flexible hose assemblies for the port and starboard anchor windlass.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-100-001, Rev B, General Arrangements

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-505-006, Rev D, List of Hoses (ASC505006)

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2022, Auxiliary Machine Systems

OTHER REFERENCES

American National Standard Institute/American Water Works Association ANSI/AWWA C217, 2017, Petrolatum and Petroleum Wax Tape Coatings for the Exterior of Connections and Fittings for Steel Water Pipeline

3. REQUIREMENTS

3.1 General.

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

- 3.3.1 Hose inspection and verification

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:

- Deck plates
- Piping
- Electrical wiring & cables
- Machinery

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 Hose renewal. The Contractor must renew the flexible hose assemblies for the anchor windlass in accordance with SFLC Std Spec 5000, Appendix C, Paragraph C2.2 (Hose assemblies).

3.3.1 Hose inspection and verification. The attached tables show an approximation of hose lengths, sizes, part numbers, and fittings to be renewed that are listed for bidding purposes only. The Contractor must validate the hoses and fittings requiring renewal, noting any deviations from the tables. To prevent potential delays, submit a CIR providing proof of procurement of materials for the new hoses.

3.3.2 Prior to each hose disconnection, the Contractor must record equipment, supply, and return line information for use in later reconnection. Temporarily tag/label the hoses and transfer tags/labels to the new hoses to aid in reinstallation.

3.3.3 System fluid disposal. The Contractor must drain all existing fluids from the designated hoses; dispose of removed fluids in accordance with all applicable Federal, state, and local regulations. In the process of removal of hoses, the Contractor must not dispose any fluid in tanks or bilges. Submit a CFR documenting the amount of fluids removed.

NOTE

Some systems may require complete draining to remove hoses. Additional fluid required to be removed (outside of the designated hoses) will be subject to a change request.

3.3.4 Immediately after disconnecting or removing hoses, the Contractor must completely seal all openings to the rest of the system using metal threaded caps, metal threaded plugs, or bolt-on blanks made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

Plastic bags, rubber gloves, and rags of any kind are prohibited from being used to prevent leaking from hoses and for system protection.

3.3.5 The Contractor must template new hose length from each removed hose. New hose type and size must be determined from hose removed. Select hoses may require in-place measurement and remain in place until replacement hose is ready for installation to minimize system down time. If hose has excess length, verify with CG inspector if excess length is required. Renew hose end fittings. Renew all o-rings, seals, two-part clamps, and mounting bolts. Dispose of removed hoses in accordance with all applicable Federal, state, and local regulations. Submit a CFR for any additional hose connections that require replacement not on the renewed hose.

3.3.6 Hydrostatic test. The Contractor must hydrostatically test all new hose assemblies with their attached fittings. Test pressure must be 150% of the rated working pressure of the hose. Ensure no leakage from or permanent deformation of pressure-containing parts by repairing all leaks and discrepancies. Submit a CFR documenting all certifications of pressure test results.

3.3.7 Flush the hoses following hydrostatic testing and cap the ends to prevent contamination. Flush to a condition free of grease, oil, flux, scale, dirt, loose particles or loose corrosion products, and all other contamination foreign to the base material of the surface.

3.3.8 The Contractor must wrap all hose end fittings exposed to weather in a or petroleum wax saturated tape coatings such as Densil (Densyl) Tape or equivalent, conforming to ANSI/AWWA C217, after installation. Follow manufacturer's instructions, to ensure proper installation of the tape.

3.3.9 Fluid renewal. The Contractor must renew all removed system fluids. Hydraulic fluid must be renewed, sampled, and tested in accordance with SFLC Std Spec 5000, Appendix C, Paragraphs C2.1 (Fluids), C2.1.1, and C2.1.3. The fluid must meet the acceptance criteria as stated in SFLC Std Spec 5000, Appendix C, Paragraph C2.1.4. Verify the replacement fluid type and quantity with the Coast Guard Inspector prior to reintroduction into the system.

3.3.10 Hose tags. The Contractor must provide new stamped or engraved metal hose tags with the following bulleted information, in accordance with SFLC Std Spec 5000, Figure C-1. Tag installation must be done in a manner that does not interfere with the normal hose flexing motion. Attach hose tags to their respective hose using metal strapping. Verify the tag can be slightly moved by hand, allowing the hose to expand and contract as designed while minimizing chaffing.

- Hose Log Item Number (Serial Number)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date (DD/MM/YY)
- Service Life (Replacement Date, 12 years from installation date) Date (QTR "Q"/FY)

3.4 Hose Documentation. For each renewed hose assembly, the Contractor must submit, at a minimum, the information listed below in Microsoft Excel format. Submit information via CFR.

- Hose Number

- System
- Associated Assembly (i.e. A/C Inlet, Oil Cooler Return, etc.)
- Item (Hose, Expansion Joint, etc.)
- Location (Compartment Number)
- Hose Length (in.)
- Hose Diameter (in.)
- Hose Brand
- Hose Part Number
- Hose Construction/Type (Synth Rubber, Teflon, Metal, Plastic, etc.)
- Fitting #1 Description/Material
- Fitting #1 Brand
- Fitting #1 Part Number
- Fitting #2 Description/Material
- Fitting #2 Brand
- Fitting #2 Part Number
- Hose Rated Pressure (psi)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date
- Hose Replacement Date

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.

4. NOTES

TABLE 1 – ANCHOR WINDLASS HOSE ASSEMBLIES

HOSE SERIAL #	LGTH (IN.)	SIZE (IN.)	SERVICE	FITTING #1	FITTING #2	DESIGN (PSI)
AW-HYD-001	31	1	M3-Stbd Motor	Flange	Flange	3500
AW-HYD-002	31	1	M4- Stbd Motor	Flange	Flange	3500
AW-HYD-003	15	1/2	BPS- Stbd Motor Brake	ORFS	ORFS	300
AW-HYD-004	16	3/4	MDP-Port Motor Drain	JIC	JIC	75
AW-HYD-005	16	3/4	MDP- Stbd Motor Drain	JIC	JIC	75

AW-HYD-006	15	1/2	BSS- Port Motor Brake	ORF	ORFS	300
AW-HYD-007	31	1	M1- Port Motor Brake	Flange	Flange	3500
AW-HYD-008	31	1	M2- Port Motor Brake	Flange	Flange	3500
AW-HYD-009	40	3/8	To Head Tank Port	JIC	JIC	3500
AW-HYD-010	31	1/2	From Head Tank Port	JIC	JIC	3500
AW-HYD-011	40	3/8	To Head Tank Stbd	JIC	JIC	3500
AW-HYD-012	31	1/2	From Head Tank Stbd	JIC	JIC	3500

WORK ITEM 19: Tanks (MP Fuel Storage and Overflow), Clean and Inspect

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean and inspect the following tank(s):

TABLE 1 – LIST OF TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (GALLONS)	TANK CONTENT DISPOSAL (GALLONS)	PAINTED	*REQUIRED MEASUREMENT OF PITS/UT FAIRING COMPOUND KITS
Fuel Oil Storage	5-28-0-F	62,777	3,300	N	Pits - 150 UT - 600 Fairing Compound – 2

*** For Bidding Purposes**

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-801-001, Rev A, Booklet of General Plans

Coast Guard Drawing 750-WMSL-100-017, Rev L, Unit 1310 Structure – Inner Bottom to 1st Platform – Fr 22 to Fr 35 (ASC100131)

Coast Guard Drawing 750-WMSL-167-001, Rev J, Manhole List Installation and Fabrication Details Ship Wide (ASC167001)

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2022, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2022, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2022, Requirements for Preservation of Ship Structures

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(s):

- 3.7 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:

- TLIs
- Piping
- Residual tank contents/fluids

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.

3.2.1 Perform an initial operational test of each tank TLIs to demonstrate that each radar head/sensor is functional (i.e., Digital readout is displayed).

3.2.2 Ensure that there is interface/communication between the TLI sensor and the Machinery Control and Monitoring System (i.e. Digital readout at the TLI is identical to that displayed).

3.3 Tank opening. The Contractor must remove the tank manhole cover(s) and ventilate the confined spaces in accordance with SFLC Std Spec 0000, Paragraphs 3.3.1.1 and 3.3.1.2. The Contractor must provide fall protection to tank manhole cover when opened for ventilation/work. The Contractor must matchmark the manhole cover lid(s) to the flange prior to removal for proper reinstallation.

WARNING

Do not use the Fuel Service or Transfer systems to drain any water from the tank. Excessive fuel contamination will result.

3.4 Tank content and waste disposal. The Contractor must dispose of residual tank contents listed in Table 1 and any cleaning fluids in compliance with all applicable Federal, state, and local laws, ordinances and regulations. Notify the COR (in writing) at least 48 hours prior to removal of wastes and fluids. Document a complete chain of custody record of the removed tank contents and generated wastes, from the vessel to the point of final destination or delivery. Submit chain of custody record to the COR upon completion of work.

3.5 Temporary plugs. The Contractor must plug all inlet and outlet piping in the tank to prevent contaminants from entering the tank or piping system for the entire duration of the tank cleaning and inspection. Use plugs with an attached lanyard, ring or other system that will ensure plugs are not lost in the pipe openings.

3.5.1 Plug log. The Contractor must keep a written record of all installed plugs. Keep a separate list for each tank. Maintain a plug accountability log posted immediately outside the tank to prevent any of the installed temporary plugs from being lost inside the tank or left behind inside at tank closure. The log must include the type and size of each plug, installation date, and removal date. Submit this log to the COR after completion of work item via a CFR.

3.5.2 The Contractor must ensure that all plugs are removed from each tank upon completion of work in the tank.

3.6 Tank cleaning. The Contractor must clean all designated tank interior surfaces free of all foreign materials, such as residual fuel or water, sediment, sludge, rust, or biological growth, taking care not to damage the coating system (if applicable).

3.6.1 The Contractor must accomplish all requirements of SFLC Std Spec 6310, 3.1.6.4 (Surface contaminant removal) to achieve the cleanliness requirements of SSPC-SP 1, including a low-pressure (maximum 5,000 psi) fresh water wash down of the surfaces.

3.6.2 Remove cleaning media and residues continuously from the tank during the washing process. Remove any residual wash media and wipe up residual moisture with clean lint-free cloths. Wipe the interior tank structure dry and free of all cleaning agents.

3.7 Inspection. The Contractor, in the presence of the CG Inspector, must inspect all tank interior surfaces, including, but not limited to bulkheads, floor and overhead plating, structural members, manhole cover surfaces, fasteners and gasket seating surfaces. Using the Tank and Void Assessment form in General Requirements Section 4.2, submit a CIR including the following, as applicable:

- Tank structural condition
- Condition of tank coating, including dimensions, percentage, location, and type of coating failure
- Tank level indicator (TLI) and/or float switch condition

- Sounding tube and striker plate condition
- Vent pipe and check valve condition
- Manhole cover, flange distortion check, and flange stud welds
- Suction and discharge piping condition
- Ladder condition
- Fastener material and condition
- Zinc anode condition, if applicable (remaining percentage,)
- Pit measurements
- Ultrasonic thickness (UT) measurements

NOTE

Depending on the tank conditions, it may not be necessary to perform all the pit measurements and ultrasonic measurements indicated on Table 1.

3.7.1 Pit measurement. The Contractor must measure all pits within each tank/location listed in Table 1, in accordance with SFLC Std Spec 0740, Paragraph 3.13 (Evaluation of pitting corrosion). The results of these measurements must be included in the inspection report, showing where pit measurements were taken and the depth of the pit. For bidding purposes, use Table 1 for number of pit measurements per tank.

3.7.2 Ultrasonic thickness (UT) measurement. Ultrasonic thickness (UT) measurement. The Contractor must take UT measurements in the surrounding area of any pit measuring greater than 25% of plate thickness. UT measurements must be taken in the four quadrants at an equal-distant radius from the pit center until full plate thickness is measured. UT measurements must be conducted in accordance with SFLC Std Spec 0740, Appendix C, using Coast Guard Drawings listed in Section 2. The results of these measurements (original thickness, measured thickness, and any observed cracks) and the locations where they were taken must be included in the inspection report. For bidding purposes, use Table 1 for number of UT measurements per tank.

3.8 Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). The Contractor must repair small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), after removing coating, in accordance with SFLC Std Spec 6310 and manufacturers' instructions.

- For bidding purposes, procure the number of epoxy fairing kit(s) (0.5 Gallon/5 Kg Kit) as shown in Table 1.
- Epoxy fairing compound must meet the requirements of SFLC Std Spec 6310 Appendix C (MIL-PRF-24176 Cement, Epoxy, Metal Repair & Hull Smoothing) and be compatible with fluid in the tank.
- Turn over all unused kits to the COR.

NOTE

"Substrate fairing and repair by filling Epoxy for shallow pits and corrosions (i.e. pits < 25% or corrosions < 25%)" is a supplement barrier intending to help delay penetration.

3.9 Surface coating. For all non-painted tanks, the Contractor must apply a coat of system fluid to all tank interior surfaces, following final tank inspection and just prior to tank closing. If surface rust developed on the interior tank surfaces while the tank was open, the Contractor must wipe the surfaces clean to a condition free of surface rust prior to coating with system fluid.

NOTE

Minimizing the amount of time the tanks are left open will reduce the surface rust that accumulates on tank interior surfaces.

3.10 Tank closing. The Contractor must ensure that the tank(s) remain open for approximately 24 hours after completion of any authorized repair and preservation procedures. Notify the COR at least 48 hours prior to closing the tank(s). After satisfactory inspection by the Coast Guard Inspector and completion of all authorized repairs, remove all installed temporary plugs and document removal via signature on the plug log by the Coast Guard Inspector and Contractor prior to tank closing. Close tank manhole cover(s) using new gasket material, nuts, washers and grommets in accordance with Coast Guard Drawing 750-WMSL-167-001, in the presence of the Coast Guard Inspector. Chase threads on studs to ensure even installation of the access covers. Covers must be reinstalled in their proper orientation with the marks made during tank opening. Do not use power tools to secure the manhole covers. Submit a CFR with the completed plug log.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.11.1 Perform a post-work operational test of each tank TLIs to demonstrate that each radar head/sensor is functional (i.e., Digital readout is displayed).

3.11.2 Ensure that there is interface/communication between the TLI sensor and the Machinery Control and Monitoring System (i.e. Digital readout at the TLI is identical to that displayed).

3.12 Touch-up preservation. The Contractor must prepare and coat each tank in Table 1 in accordance with SFLC Std Spec 6310, Paragraph 1.3 (Touch-up) and 3.1.13 (Touch-ups and minor coating repairs). This includes all disturbed manhole cover external surfaces. Do not paint manhole cover fasteners.

4. NOTES

This section is not applicable to this work i