USCGC MAPLE (WLB 207)

SPECIFICATION FOR DOCKSIDE REPAIRS

FY2022

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(Rev-0, 17 September 2021)

TABLE OF CONTENTS

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 225 WLB 167-001, Rev W, Structural Closures

Coast Guard Drawing 225 WLB 509-001, Rev A, Duct, Trunk & Machinery Insulation Details

Coast Guard Drawing 225 WLBB 601-002, Rev G Booklet of General Drawings

Coast Guard Drawing 225B WLB 573-001, Rev E, Buoy Handling System Arrangement

Coast Guard Drawing 225B WLB 509-001, Rev A, Duct, Trunk, and Machinery Insulation Details

Coast Guard Drawing 225B WLB 512-001, Rev K, HVAC Diagram

Coast Guard Drawing 225B WLB 512-20 Ventilation Mods Incidental to ATON Crane Upgrade MMA

Coast Guard Drawing 225B WLB 512-21 HVAC Mods to E1-57-2-&S1-59-1 Incidental to MMA

Coast Guard Drawing 225B WLB 528-001, Rev E, Plumbing and Interior Deck Drains

Coast Guard Drawing 225B WLB 528-002, Rev D, Weather Deck Drains Diagram

Coast Guard Drawing 225B WLB 532-002, Rev D, Potable Water Sys Dia

Coast Guard Drawing 225B WLB 549-001, Rev A, Onboard Lubrication Requirements

Coast Guard Drawing 225B WLB 549-001, Rev C, Onboard Lubrication Requirements

Coast Guard Drawing 225B WLB 551-001, Rev G, Compressed Air System Diagram

Coast Guard Drawing 225B WLB 556-001, Rev F, Hydraulic System Diagram

Coast Guard Drawing 225B WLB 556-005, Rev D, Aft Hydraulic System A/D, Fr 66 Aft, Block 950, 970

Coast Guard Drawing 225B WLB 573-002, Rev -, Weight Handling System Arrangement

Coast Guard Drawing 225B WLB 573-009, Rev E, Bi-Dir Ch Stopper With Retractable Roller Stopper

Coast Guard Drawing 225B WLB 573-012, Rev -, Rising Sheave Chain Stopper Ripout Incidental to Upgrade

Coast Guard Drawing 225B WLB 573-013, Rev B, Rising Sheave Chain Stopper Mechanical Mods Incidental to Upgrade

Coast Guard Drawing 225B WLB 573-014, Rev -, Rising Sheave Chain Stopper Hydraulic Mods Incidental to Upgrade

Coast Guard Drawing 225B WLB 573-11, Rev -, ATON Tie Downs

Coast Guard Drawing 225B WLB 582-001, Rev -, Mooring and Towing A & D

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System Diagram

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System

Coast Guard Drawing 225B WLB 593-009, Rev B, Sewage Holding Tank

Coast Guard Drawing 225B WLB 601-001, Rev F, General Arrangement Inboard & Outboard Profiles

Coast Guard Drawing 225B WLB 601-001, Rev M; General Arrangement Inboard and Outboard Profiles

Coast Guard Drawing 225B WLB 601-002, Rev N, Booklet of General Drawings

Coast Guard Drawing 225B WLB 672-001, Rev C, Storerooms, Cargo Stowage and Ship Store Arrangement and Details

Coast Guard Drawing 225B WLB 901-003, Rev A, Hull Block 901 Block Assembly

Coast Guard Drawing 225B-WLB 549-1, Rev -, Onboard Lubrication Requirements

Coast Guard Drawing 225B-WLB 556-1, Rev B, Hydraulic System Diagram

Coast Guard Drawing 225B-WLB 573-1, Rev -, Buoy Handling System Arrangement

Coast Guard Drawing 225B-WLB 573-2, Rev -, Weight Handling System Arrangement

Coast Guard Drawing 225B-WLB 111-001, Rev A, Shell Expansion

Coast Guard Drawing 225B-WLB 167-1, Rev M, Structural Closures

Coast Guard Drawing 225B-WLB 201-001, Rev C, Machinery Spaces Arrangement

Coast Guard Drawing 225B-WLB 320-1, Rev AC, Electrical One Line Diagram

Coast Guard Drawing 225B-WLB 437-3, Rev D, Thruster Control Sys Block, Wiring Deck Plan & Elementary Wiring Diagram

Coast Guard Drawing 225B-WLB 509-001, Rev A, Duct, Truck, & Machinery Insulations Details

Coast Guard Drawing 225B-WLB 581-001, Rev D, Anchor Handling System Arrgt

Coast Guard Drawing 225B-WLB 593-001, Rev D, Sewage & Waste Water System Diagram

Coast Guard Drawing 225B-WLB 601-001, Rev E, General Arr, Inboard & Outboard Profiles

Coast Guard Drawing 225B-WLB 601-001, Rev J, Gen Arr, Inboard and Outboard Profiles

Coast Guard Drawing 225B-WLB 601-001, Rev J, General Arrangement, Inbd and Outbd Profiles

Coast Guard Drawing 225B-WLB 601-01, Rev J, General Arr Inboard and Outboard Profiles

Coast Guard Drawing 225B-WLB 631-02, Rev G, Painting Schedule

Coast Guard Drawing 225B-WLB 635-001, Rev D, Hull Thermal & Acoustic Insulation Schedule

Coast Guard Drawing 225B-WLB 801-15, Rev B, Scantlings, Decks & Platforms

Coast Guard Drawing 225B-WLB-167-001, Rev M, Structural Closures

Coast Guard Drawing 225B-WLB-601-002, Rev N, Booklet of General Drawings

Coast Guard Drawing 225B-WLB-651-001, Rev D, Galley & Pantry Arrgt & Details

Coast Guard Drawing 225-WLB-512-16, Rev B, Ventilation Mods to Focsle Deck

Coast Guard Drawing FL 2605-031, Rev D, Mechanical Chain Stopper, 1-7/8" Buoy Chain

Coast Guard Drawing FL 2605-034, Rev D, Mechanical Chain Stopper Repair Kit: 1-7/8", 1-5/8" & 1-1/4"

Coast Guard Drawing FL 7101-573, Rev L, Buoy Chain Winch Assy Model CW1

Coast Guard Drawing FL-1602-89, Rev , Fleet 26 IN X 66 IN Weathertight Door

Coast Guard Drawing FL-1602-89, Rev , Fleet 26” X 66” Weathertight Door

Coast Guard Drawing FL-1702-11, Rev -, Inspection of Sheaves

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

NAVSEA Drawing 804-5773932, Rev A, Acoustic & Thermal Insulation for Ducts Installation Details

COAST GUARD PUBLICATIONS

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

Coast Guard Technical Publication (TP) 10512, Section 573-A, July 2018, Buoy Handling Crane – Model EB600-60-40

Coast Guard Technical Publication (TP) 11101, SWBS 583, Section A (SWBS 583A), Davit, Single Point Slewing Arm Model - RAD30 - 15.5 (BMD-710)

Coast Guard Technical Publication (TP) 3498, Section A, Jul 2015, Buoy Chain Winch

Coast Guard Technical Publication (TP) 3536, Jul 2003, Switchboard, Main, Emergency, and Thruster

Coast Guard Technical Publication (TP) 3558, Apr 2008, Manufacturer's Instruction Book-SWBS Group(s) 573, Section B, Cross Deck Winch – Model BMD-471

Coast Guard Technical Publication (TP) 3559, Section 582B, Apr 2009, Aft Capstan, 21" - Model BMD-475

Coast Guard Technical Publication (TP) 3562, Sep 2013, SWBS 589, Section C, Dumbwaiter, Model –F-WK-806

Coast Guard Technical Publication (TP) 3563, 21-MAY-96, Manufacturer's Instruction Book-SWBS Group(s) 593, Tab 593-F

Coast Guard Technical Publication (TP) 3717, Jun 2003, Hydraulic Cargo Hatch

Coast Guard Technical Publication (TP) 3749, 26-APR-05, 1-7/8 Inch ATON Mechanical Chain Stopper

Coast Guard Technical Publication (TP) 3750, SWBS 573-A, Dec 2012, Rising Sheave Chain Stopper

Coast Guard Technical Publication (TP) 3796, Section A, Aug 2006, Galley Hood – Model NBDL-60 (13'-4")

Coast Guard Technical Publication (TP) 3943, Feb 2019, Manufacturer's Instruction Book - SWBS Group(s) 583, Section A, Twin Pivot Arm Davit – Type TW.PIV 5.0B

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

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

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

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2018, General Requirements

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

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

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

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

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

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2018, Requirements for Preservation of Ship Structures

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Auxiliary Machine Systems

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Preserve Ship Structures

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

Surface Forces Logistics Center Standard Specification 6341 (SFLC Std Spec 6341), 2020, Install New Deck Covering Systems

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

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

OTHER REFERENCES

American National Standards Institute/American Water Works Association (ANSI/AWWA) C652, 2011, Disinfection of Water-Storage Facilities

American National Standards Institute/National Electrical Manufacturers Association (ANSI/NEMA) AB 4, Mar 2011, Guidelines for Inspection and Preventive Maintenance of Molded Case Circuit Breakers Used in Commercial and Industrial Applications

American National Standards Institute/NSF International (ANSI/NSF) 61, 2008, Drinking Water System Components - Health Effects

American National Standards Institute/Underwriters Laboratories Inc. (ANSI/UL) 489, Molded Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures, Jan 2013

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

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

American Welding Society (AWS) D1.1, Structural Welding Code - Steel

ASTM International (ASTM) D1330, 2010, Standard Specification for Rubber Sheet Gaskets

ASTM International (ASTM) D1330, 2015, Standard Specification for Rubber Sheet Gaskets

ASTM International (ASTM) D5363, 2008, Standard Specification for Anaerobic Single Component Adhesives (AN)

ASTM International (ASTM) F683, 2010, Standard Practice for Selection and Application of Thermal Insulation for Piping and Machinery

Commercial Item Description (CID) A-A-59316, 2003, Abrasive Materials for Blasting

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

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

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

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

MIL-PRF-24176 , Oct 2004, Cement, Epoxy, Metal Repair And Hull Smoothing (Metric)

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

MIL-S-45180, 1998; Sealing Compound, Gasket, Hydrocarbon Fluid and Water Resistant

QPL-24667, May 2008, Qualified Product List (Military) of Products Qualified Under Detail Specification MIL-PRF-24667, Coating System, Non-Skid, for Roll, Spray, or Self-Adhering Application

The Society for Protective Coatings (SSPC) Surface Preparation Specification No. 16 (SSPC-SP 16), 2010, Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals

The Society for Protective Coatings (SSPC) Surface Preparation Specification No. 3 (SSPC-SP 3), 2004, Power Tool Cleaning

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2004, Power Tool Cleaning to Bare Metal

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2012, Power Tool Cleaning to Bare Metal

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

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

The Society for Protective Coatings (SSPC)/NACE International (NACE) 2006, Joint Surface Preparation Standard SSPC-SP 10/NACE No.2, Near-White Blast Cleaning

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

Underwriters Laboratories Inc. (UL) 1066, Low-Voltage AC and DC Power Circuit Breakers Used in Enclosures, Apr 2012

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)
1	N	Hydraulic Hatch Lift Cylinder	NSN: 01-522-6869 P/N: H-84B2B-5.00-29.003.00-S119	1 ea.	$3,261.41
9	N	Repair Kit, HYD Chain Stopper Rising Sheave (for Para. 3.2, Tasks #2 and #3)	NSN: 2040-01-483-3947	2 ea.	2,631.46
9	N	Cylinder, Actuating Linear	NSN: 3040-01-483-3373	4 ea.	1,777.71
10	N	Hand Pump SS	NSN: 4320-01-517-1444	1 ea	1,499.66
10	N	Pressure Gauge - Model BMD-471	NSN: 6685-01-437-2519	4 ea	43.79
10	N	Wire Rope Assembly	NSN: 4010-01-643-2077	4 ea	900.00
10	N	Hydraulic Brake Repair Kit - Model BMD-471	NSN: 3950-01-526-9090	4 ea.	913.00
10	N	Counterbalance Valve - Model BMD-471	NSN: 4810-01-353-0586	4 ea.	150.00
10	N	Shuttle Valve - Model BMD-471	NSN: 4820-01-317-2748	4 ea.	35.00
10	N	Hydraulic Motor Seal Kit - Model BMD-471	NSN: 5330-01-475-4566	8 ea.	84.00
10	N	Clutch Shoe - Model BMD-471	NSN: 4910-01-475-4125	4 ea.	56.90
10	N	Drum Bushing - Model BMD-471	NSN: 3950-01-631-0884	8 ea.	272.00
10	N	Shaft Bushing - Model BMD-471	NSN: 3950-01-631-0771	4 ea.	298.00
10	N	Gearbox Seal Kit (For Winch Gearbox Assemblies) - Model BMD-471	NIIN: XFC343225 PN: YMD-8194-R	4 ea.	70.00
10	N	Control Station Repair Parts. Kit	NSN: 6110-01-644-9898	4 ea.	438.00
10	N	Flag Block Bearing Kit	NSN: 3940-01-526-5592	1 ea.	180.00
10	N	Flag Block Bearing Cup, Sheave	NSN: 3110-01-644-9670	1 ea.	231.00
10	N	Flag Block Bearing Cone, Sheave	NSN: 3110-01-013-4036	1 ea.	182.00
10	N	Block, Tackle, For Drum Power***	NSN: 3940-01-526-5592	1 ea.	9,202.59
10	N	Seal	NSN: 5330-01-287-2826	2 ea.	104.00
10	N	Manifold Repair Kit	PN: YMD-8192-R	4 ea.	551.00

11	N	Roller bearing Unit	NSN: 3130-01-504-4363	2 ea.	4,012.00
11	N	Grease seal	NSN: 5330-01-462-5544	4 ea.	79.25
11	N	Level wind pivot bushing	NSN: 3120-01-621-2293	1 ea.	1,139.00
11	N	Level wind thrust bearing	NSN: 3120-01-621-2300	2 ea.	483.30
11	N	Rexroth DCV	NSN: 4810-01-507-0037	1 ea.	208.29
11	N	Rexroth Sandwich Flow Control	NSN: 4810-01-505-9289	1 ea.	250.00
11	N	Sun Sandwich Relief Valves	NSN: 4820-01-439-2451	2 ea.	900.00
11	Y	Level Wind Hydraulic Cylinder	NSN: 3040-01-441-3721	1 ea.	7,423.00
11	N	3:1 Pilot Ratio, Vented Counterbalance Valve Assembly	NSN: 4820-01-563-5841	1 ea	98.70
11	N	Fully Adjustable Needle Valve	NSN: 4820-01-416-0579	1 ea	48.75
11	N	Wire Rope Assembly	NSN: 4010-01-646-6972	1 ea.	500.00
11	Y	Hydraulic Motor	NSN: 4320-01-445-2248	1 ea	23,998
11	N	Cylinder Pin	NSN: 5315-01-515-9847	1 ea	500.00
11	N	Cylinder Pin	NSN: 5315-01-515-9912	1 ea	520.00
12	N	Hardware Kit, Pins	NSN: 2030-01-485-7209	2 ea.	528.47
12	N	Hardware Kit, Mechanical	NSN: 2030-01-485-7215	2 ea.	538.91
15	N	Swing Brake Seal Kit	NSN: 5330-01-390-3514 PN: 90-016-2011	2 ea	68.45
15	N	Swing Brake Disc Kit	NSN: 3010-01-464-1040 PN: 90-016-2131	2 ea	187.20
15	N	Swing Holding Valve	NSN: 4820-01-466-4918 PN: CBEA-LHV-YHL (Sun Hydraulics)	1 ea	251.50
15	N	Wire Rope Assembly	NSN: 4010-01-620-9604 PN: JWCG062100PL	1 ea	660.00
16	N	4 Year Davit In-Place Overhaul Kit	NSN: 3950-01-F18-5354 PN: 892-02053	1	124,229.92
18	N	Main Fall Wire Rope	NSN: 4010-01-486-0047 PN: JWCG13001919PL	1	2,642.00
18	N	Aux Fall Wire Rope	NSN: 4010-01-594-2228 PN: JWCG75200637PL	1	805.32
28	N	Lang Electric Fryer: Model: 130FM, 450VAC, 12.0 Kw, 14.4 Amps	Lang Model: 130FM	2 ea.	
28	N	Lang Electric Range w/Convection Oven Model: R36C-ATCM, 12" x 24" X 3/4 thick hot plates (x2) and 8"	Lang Model: R36C-ATCM	1 ea	

		diameter French plates			
28	N	Lang Electric Range w/Convection Oven Model: R36C-ATDM, 36" x 24" x 1/2" thick Griddle	Lang Model: R36C-ATDM	1 ea	
28	N	Cleveland Electric Kettle Model: KEL-25, 480VAC, 13.1 Kw, 27.2 Hp, and 15.7 Amps	Cleveland Model: KEL-25	1 ea	$14,309.00
29	N	Cargo Hatch Gasket	Walz & Krenzer P/N D-WK-831-1-8 or equivalent	2	$200
30	N	26 IN x 66 IN Weather Tight Door, Steel, RH Swing, with Hasp and Staple, Without Fixed Light	NSN: PN: 20 (Drawing Coast Guard Drawing 225B-WLB-167-001)	1 ea.	
31	N	24 IN x 36 IN C.O., RSD, WTRTT, 4 Dog, Hinged on 36 Inches RH Side, Hatch Coaming 6 Inch Height	NSN: PN:	1 ea.	
38	N	1-25-2, 26 IN x 6 IN Weather Tight Door, Steel, LH Swing, 9 IN Dia. Fixed Light		1 ea.	
39	N	02-77-3, 26 IN x 66 IN Weather Tight Door, Steel, RH Swing		1 ea.	

***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
1	Hydraulically Operated Cargo Hatch, Inspect and Service
2	Vent Ducts, Engine And Motor Room, All, Commercial Cleaning
3	Vent Ducts, Galley and Pantry Room, All, Commercial Cleaning
4	Vent Ducts, Laundry Exhaust, Commercial Cleaning
5	Vent Ducts, All Other, Commercial Cleaning
6	Potable Water Pneumatic Tanks, Clean and Inspect
7	Compressed Air Receivers and System Valves, All, Clean, Inspect, Hydro and Lift
9	Hydraulic Chain Stoppers, Inspect And Service
10	Crossdeck Winches, Inspect and Service
11	Hydraulic Inhaul Winch, Inspect And Service
12	Mechanical Chain Stoppers, Inspect and Service
13	Warping Capstan, Inspect and Service
15	Single Point Davit, Inspect and Service
16	Welin Lambie Dual Point Davit TWPIV 5.0B, Inspect, Test, and Overhaul
17	Commissary Hoist, Inspect and Service
18	Buoy Crane, Appleton EB600-60-40, Inspect and Service
19	Grey Water Holding Tanks, Clean and Inspect
20	Sewage Holding Tanks, Clean and Inspect
21	Sewage Piping, Clean and Flush
24	Temporary Services, Provide - Cutter
25	Insulated Case Circuit Breakers, Inspect, Maintain & Test

26 Power Circuit Breakers, Inspect, Maintain & Test

40 Compartment Decks, Preserve

41 Bow Thruster Ventilation, Renew

43 Tanks, Grey Water Holding, Preserve 100 Percent

45 Tanks, Potable Water Preserve, 100 Percent

46 Tanks, Potable Water, Preserve, Partial,

PRINCIPAL CHARACTERISTICS

225' WLB (B-CLASS)	
PHYSICAL	
Length overall	225' 0"
Length between perpendiculars	206' 0"
Maximum beam	46'
Designed draft	13' 0"
Full load displacement	1905.6 Long Tons SW
Light ship displacement	1500.7 Long Tons SW
Minimum operating displacement	1869.2 Long Tons SW
Mast height (above 12' waterline)	67' 5"
Anchor	Two 4000 lb standard Navy stockless anchors, 8 shots each, port and starboard, 1-3/8 die lock chain
HULL	
Bilge keels (port & starboard)	Frames 42-79
Frame spacing	
FR 0 to 12	21"
FR 12 to 30	22"
FR 30 to 102	24"
MACHINERY	
Main propulsion	Diesel Reduction
Diesel engines	Two Caterpillar 3608, TA, 3100 BHP each @ 900 RPM
Number of propellers	1
Number of blades	4
Diameter	10'
Pitch	Controllable
RPM	254
Ship's service diesel generators	Two Caterpillar 3508 TA, 450 KW
Emergency diesel generator	One Caterpillar 3406 DITA, 280 KW
Shore tie	Two 450 VAC, 400 Amp, 3-wire
Shaft bearing, forward	Cooper Bearing 01-BCP-1400-EX-TL
Shaft bearing, aft	Water Lubricated Cutless Bearing
TANK CAPACITIES	
Diesel oil	76,498 gal.
Fresh water capacity	8056 gal.
Hydraulic oil capacity	2785 gal.
Lube oil storage	764 gal.
Grey water tank	2700 gal.
Sewage holding tank	1700 gal.

General Requirements

1. SCOPE

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

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

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

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

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

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

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

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

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

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

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

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

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

3.4 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 _____.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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/NACE INSPECTOR	SIGNATURE	CERT. #	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/NACE INSPECTOR	SIGNATURE	CERT. #	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 (INCL. FRAME #'S)		AREA (SQFT)	

SURFACE PREPARATION METHOD		PROFILE ACHIEVED (MILS)		
		MIN	MAX	MEAN
SSPC-SP-10/NACE No. 2	☐			
SSPC-SP WJ-1/NACE WJ-1	☐			
SSPC-SP WJ-2/NACE WJ-2	☐			
SSPC-SP WJ-3/NACE WJ-3	☐			
SSPC-SP WJ-4/NACE WJ-4	☐			
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/NACE INSPECTOR	SIGNATURE	CERT. #	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/NACE No. 2	☐			
SSPC-SP WJ-1/NACE WJ-1	☐			
SSPC-SP WJ-2/NACE WJ-2	☐			
SSPC-SP WJ-3/NACE WJ-3	☐			
SSPC-SP WJ-4/NACE WJ-4	☐			
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 Reading (mils)					
Mean Reading (mils) IAW ASTM DD4417).					

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

WORK ITEM 1: Hydraulically Operated Cargo Hatch, Inspect and Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to perform inspections and service for the hydraulically-operated cargo hatch.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Hydraulic Hatch Lift Cylinder	NSN: 01-522-6869 P/N: H-84B2B-5.00-29.003.00-S119	1 ea.	$3,261.41

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 528-002, Rev D, Weather Deck Drains Diagram

Coast Guard Drawing 225B WLB 549-001, Rev C, Onboard Lubrication Requirements

Coast Guard Drawing 225B WLB 556-001, Rev F, Hydraulic System Diagram

Coast Guard Drawing 225B WLB 601-001, Rev M; General Arrangement Inboard and Outboard Profiles

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3717, Jun 2003, Hydraulic Cargo Hatch

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

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

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

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

- 3.2 (Tasks to be accomplished) – Task #1.

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 below-listed:

- Electrical and hydraulic switches.
- Dogs.
- Toggles.
- Hydraulic cylinders.
- Hydraulic lines.
- Electrical cables.
- Hoses.
- Overhead insulation.

3.2 Tasks to be accomplished. The Contractor must perform the following tasks:

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

CAUTION

For Task #2, failure to remove hinge interferences during hatch removal/reinstallation may result in damage to coaming and hinges. Protect hinges during hatch removal and reinstallation.

				ADDITION REQUIREMENTS	
#	**TASK TYPE**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM 5000_STD**	**OTHER**
1	Operate and Inspect	1	Cargo hatch assembly	3.2.1 (Operate and inspect)	1. Check hatch for proper operation of all indicators, switches, dogging un-dogging and overall operation. 2. Check entire coaming and drains for signs or debris or clogging of drains. 3. Conduct a visual inspection of the hatch. Check all linkages. 4. Inspect both inner and outer knife-edges for proper height and evenness of wear. 5. Inspect entire hatch structure, for signs of paint wear and corrosion. 6. Inspect gasket channels for corrosion. 7. Take 10 UT measurements of gasket channel surfaces, in locations designated by the Coast Guard Inspector, in accordance with SFLC Std Spec 0740, Appendix C. 8. Inspect hydraulic hose condition. 9. Check condition of dogs and wedges. Submit A CIR.
2	Remove and reinstall	1	Cargo hatch assembly	N/A	Remove hatch, to facilitate inspections and service tasks, and reinstall hatch, upon completion of work. Coaming in way of hatch hinges may be an interference to hatch removal. Inspect hinge clearance prior to commencing unshipping operations and determine if modifications are required. Modify/remove as necessary and return to original configuration at hatch reinstallation. Failure to remove interferences may result in damage to coaming and hinges. Protect hinges during hatch removal and reinstallation.
3	NDE	1	Cargo hatch assembly	3.2.5 (NDE)	Components designated for NDE: All welds. Submit a CFR.
4	Service and Inspect	1	Hydraulic hatch lift cylinder	3.2.2 (Service and inspect)	Submit CFR

				ADDITION REQUIREMENTS	
#	**TASK TYPE**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM 5000_STD**	**OTHER**
5	Renew	1	Cargo hatch gasket	N/A	See CG TP-3717. Conduct gasket compression test, upon installation. Submit CFR. Gasket Provided as GFP in Work Item 30: Cargo Hatch Repair.
6	Preserve	1	Cargo hatch assembly	3.2.4 (Preservation)	Use Coating System: "Weather Decks (Weather Deck, Buoy Tender Working Deck)" in accordance with in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems). Submit CFR.
7	Groom And Lubricate	1	Cargo hatch assembly	3.2.6 (Groom and lubricate)	See Coast Guard Drawing 225B WLB 549-001.
8	Boundary Testing	1	Cargo hatch assembly	N/A	Accomplish a chalk test and water hose test, in accordance with SFLC Std Spec 0740, Appendix C. Adjust dogs in accordance with CG TP-3717. Submit a CFR.
9	Operational Testing – Post Repairs	1	Cargo hatch assembly	N/A	1. Raise and lower, dog and un-dog, the hatch three complete cycles. 2. Verify hatch operates in accordance with parameters specified in TP-3717 with no unusual noise or binding. Submit CFR.
10	Touch-Up Preservation	All	New and disturbed surfaces	N/A	Prepare and coat all new and disturbed exterior and interior surfaces to match existing adjacent surfaces, in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems) and Appendix B (Cutter and Boat Interior Painting Systems), respectively, and as applicable.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 2: Vent Ducts, Engine And Motor Room, All, Commercial Cleaning

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean and inspect the designated shipboard ventilation systems.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 512-001, Rev K, HVAC Diagram

Coast Guard Drawing 225B WLB 512-007, Rev B, HVAC A&D, Fr 66-92, Innerbttm & 1st Platform

Coast Guard Drawing 225 WLB 259-005, Rev C, Combustion Intake & Exhaust A&D Hull Block 940

Coast Guard Drawing 225B WLB 512-17 MMA HVAC System Diagram

Coast Guard Drawing 225B WLB 512-18 HVAC Arrangement & Details Incidental to MMA

Coast Guard Drawings 225B WLB 512-19 Ventilation Schedule Incidental to MMA

Coast Guard Drawing 225B WLB 512-20 Ventilation Mods Incidental to ATON Crane Upgrade MMA

Coast Guard Drawing 225B WLB 512-21 HVAC Mods to E1-57-2-&S1-59-1 Incidental to MMA

COAST GUARD PUBLICATIONS

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

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

Coast Guard Technical Publication (TP) 3796, Section A, Aug 2006, Galley Hood – Model NBDL-60 (13'-4")

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):

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).

3.1.3.1 Install filter medium at the terminal ends of all supply vent ducting to prevent any residual foreign mater from blowing into the engine room spaces.

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

- Ducting screens.
- Electric pre-heaters.
- Overhead sheathing/panels.
- Ventilation covers.

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note

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.3 Cleaning requirements. The Contractor must clean and inspect the following ventilation systems, shown on Coast Guard Drawings 225B WLB 512-001, 225B WLB 512-007, and 225 WLB 259-005, in accordance with SFLC Std Spec 5100. Submit a CFR.

TABLE 1 – ENGINE ROOM

SYSTEM LOCATION	TYPE
4-66-0-E (MMR)	Exhaust
4-66-0-E (MMR)	Supply

4-82-0-E (AMR)	Exhaust
4-82-0-E (AMR)	Supply
4-92-0-E (STERNTHRUSTER MACHINERY RM)	Exhaust
4-92-0-E (STERNTHRUSTER MACHINERY RM)	Supply
4-12-0-E (BOWTHRUSTER MACHINERY RM)	Exhaust
4-12-0-E (BOWTHRUSTER MACHINERY RM)	Supply
2-48-0-E (SORS MACHINERY RM)	Exhaust
2-48-0-E (SORS MACHINERY RM)	Supply
2-21-2-Q (POTABLE WATER PUMP RM)	Exhaust
2-21-2-Q (POTABLE WATER PUMP RM)	Supply
2-57-4-E (WATER SUPPLY EQPT RM)	Exhaust
2-57-4-E (WATER SUPPLY EQPT RM)	Supply
1-102-0-E (STEERING GEAR RM)	Exhaust
1-102-0-E (STEERING GEAR RM)	Supply

3.3.1 The Contractor must clean the exhaust ventilation ducting up to and including the discharge of the engine room exhaust fans. The Contractor is not expected to clean the exhaust stack plenum area.

NOTE

Past experience has shown that the engine room exhaust ventilation systems have accumulated oils and greases and systems are coated with a very sticky and very thick sludge. Take this into consideration in the bid.

3.3.2 Disassemble the exhaust system as required to clean all sections of the exhaust system.

3.3.2.1 After cleaning, reassemble vent ducting using new gaskets and fasteners.

3.3.3 Prior to reassembling the vent systems, visually inspect the systems in the presence of the Coast Guard Inspector. Verify that the vent systems are clean and oil and build up free. The Contractor must use video probe equipment to allow viewing the internal surfaces of all vent ducting.

3.4 Notification. The Contractor must give written notification to the COR 48 hours before starting ventilation cleaning work.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

4. NOTES

4.1 Work conflict with separately contracted work. This work item must commence and be completed after 14 April 2022 or when MDE Liner Renewal is completed, whichever happens later. MDE Liner Renewal is being conducted by separate contractor, scheduled for completion on 14 April 2022. If the MDE Liner Renewal does not complete in time for this work item to be completed, work with the COR to submit a CFR.

WORK ITEM 3: Vent Ducts, Galley and Pantry Room, All, Commercial Cleaning

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean and inspect the designated shipboard ventilation systems.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 512-001, Rev K, HVAC Diagram

Coast Guard Drawing 225B WLB 512-007, Rev B, HVAC A&D, Fr 66-92, Innerbttm & 1st Platform

Coast Guard Drawing 225 WLB 259-005, Rev C, Combustion Intake & Exhaust A&D Hull Block 940

Coast Guard Drawing 225B WLB 512-17 MMA HVAC System Diagram

Coast Guard Drawing 225B WLB 512-18 HVAC Arrangement & Details Incidental to MMA

Coast Guard Drawings 225B WLB 512-19 Ventilation Schedule Incidental to MMA

Coast Guard Drawing 225B WLB 512-20 Ventilation Mods Incidental to ATON Crane Upgrade MMA

Coast Guard Drawing 225B WLB 512-21 HVAC Mods to E1-57-2-&S1-59-1 Incidental to MMA

COAST GUARD PUBLICATIONS

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

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

Coast Guard Technical Publication (TP) 3796, Section A, Aug 2006, Galley Hood – Model NBDL-60 (13'-4")

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):

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:

- Ducting screens.
- Electric pre-heaters.
- Overhead sheathing/panels.
- Ventilation covers.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

NOTE

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

3.3 Cleaning requirements. The Contractor must clean and inspect the following ventilation systems, shown on Coast Guard Drawings 225B WLB 512-001, 225B WLB 512-007, and 225 WLB 259-005, in accordance with SFLC Std Spec 5100. Submit a CFR.

TABLE – 1 SYSTEM LOCATION

SYSTEM LOCATION	TYPE
Gaylord Hood	Exhaust

Galley	Supply
1-57-1-Q (Galley)	Exhaust

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

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

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

3.4.3 Avoidance of meal preparation and service. Ensure that cleaning of galley ventilation systems is scheduled between 1900 and 0530 so that it WILL NOT interfere with meal preparation and service.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 4: Vent Ducts, Laundry Exhaust, Commercial Cleaning

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean and inspect the designated shipboard ventilation systems.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 512-001, Rev K, HVAC Diagram

Coast Guard Drawing 225B WLB 512-007, Rev B, HVAC A&D, Fr 66-92, Innerbttm & 1st Platform

Coast Guard Drawing 225 WLB 259-005, Rev C, Combustion Intake & Exhaust A&D Hull Block 940

Coast Guard Drawing 225B WLB 512-17 MMA HVAC System Diagram

Coast Guard Drawing 225B WLB 512-18 HVAC Arrangement & Details Incidental to MMA

Coast Guard Drawings 225B WLB 512-19 Ventilation Schedule Incidental to MMA

Coast Guard Drawing 225B WLB 512-20 Ventilation Mods Incidental to ATON Crane Upgrade MMA

Coast Guard Drawing 225B WLB 512-21 HVAC Mods to E1-57-2-&S1-59-1 Incidental to MMA

COAST GUARD PUBLICATIONS

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

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

Coast Guard Technical Publication (TP) 3796, Section A, Aug 2006, Galley Hood – Model NBDL-60 (13'-4")

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):

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:

- Ducting screens.
- Electric pre-heaters.
- Overhead sheathing/panels.
- Ventilation covers..

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.3 Cleaning requirements. The Contractor must clean and inspect the following ventilation systems, shown on Coast Guard Drawings 225B WLB 512-001, 225B WLB 512-007, and 225 WLB 259-005, in accordance with SFLC Std Spec 5100. Submit a CFR.

TABLE 1 – SYSTEM LOCATIONS

SYSTEM LOCATION	TYPE
1-57-4-Q (Laundry)	Exhaust
1-106-2-Q (Laundry)	Exhaust

3.4 Notification. The Contractor must give written notification to the COR, 48 hours before starting ventilation cleaning work.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 5: Vent Ducts, All Other, Commercial Cleaning

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean and inspect the designated shipboard ventilation systems.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 512-001, Rev K, HVAC Diagram

Coast Guard Drawing 225B WLB 512-007, Rev B, HVAC A&D, Fr 66-92, Innerbttm & 1st Platform

Coast Guard Drawing 225 WLB 259-005, Rev C, Combustion Intake & Exhaust A&D Hull Block 940

Coast Guard Drawing 225B WLB 512-17 MMA HVAC System Diagram

Coast Guard Drawing 225B WLB 512-18 HVAC Arrangement & Details Incidental to MMA

Coast Guard Drawings 225B WLB 512-19 Ventilation Schedule Incidental to MMA

Coast Guard Drawing 225B WLB 512-20 Ventilation Mods Incidental to ATON Crane Upgrade MMA

Coast Guard Drawing 225B WLB 512-21 HVAC Mods to E1-57-2-&S1-59-1 Incidental to MMA

Coast Guard Drawing 225 WLB 509-001, Rev A, Duct, Trunk & Machinery Insulation Details

COAST GUARD PUBLICATIONS

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

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

Coast Guard Technical Publication (TP) 3796, Section A, Aug 2006, Galley Hood – Model NBDL-60 (13'-4")

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):

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:

- Ducting screens.
- Electric pre-heaters.
- Overhead sheathing/panels.
- Ventilation covers.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.3 Cleaning requirements. The Contractor must clean and inspect the following ventilation systems, shown on Coast Guard Drawings 225B WLB 512-001, 225B WLB 512-007, and 225 WLB 259-005, in accordance with SFLC Std Spec 5100. Submit a CFR.

TABLE 1 – SYSTEM LOCATIONS

SYSTEM LOCATION	TYPE
Paint Locker	Exhaust
Paint Locker	Supply
Deck Berthing	Supply

Deck Berthing	Exhaust
Main Deck	Supply
Main Deck	Exhaust
01-Deck	Supply
01-Deck	Exhaust
01-Deck	Recirculation
02-Deck	Supply
02-Deck	Exhaust
02-Deck	Recirculation
03-Deck	Supply
03-Deck	Exhaust
03-Deck	Recirculation
2-Deck	Supply
2-Deck	Exhaust
3-Deck	Supply
3-Deck	Exhaust

3.4 Notification. The Contractor must give written notification to the COR, 48 hours before starting ventilation cleaning work.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 6: Potable Water Pneumatic Tanks, Clean and Inspect

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean and inspect the following potable water pneumatic tank(s):

TABLE 1 – TANKS

SERVICE	LOCATION	CAPACITY (GALLONS)	PRESSURE (PSIG)
Hydro-Pneumatic	2-57-4-E	25	30-70

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 532-002, Rev D, Potable Water Sys Dia

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

ASTM International (ASTM) D1330, 2015, Standard Specification for Rubber Sheet Gaskets

American National Standards Institute/American Water Works Association (ANSI/AWWA) C652, 2011, Disinfection of Water-Storage Facilities

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 below-listed:

- Piping.

3.2 Preparation. The Contractor must depressurize and drain the designated tank(s) (see paragraph 1.1 (Intent)) before performing any work on them. Dispose of all fluids in accordance with all applicable Federal, state, and local environmental regulations. Do not drain any fluids (including fresh water) into any space, bilge or exterior location.

3.3 Tanks. The Contractor must, using Coast Guard Drawing 225B WLB 532-002 for guidance, accomplish the following for all designated tank(s) (see paragraph 1.1 (Intent)):

3.3.1 Visual inspection. Clean and visually inspect the internal and external surfaces of each tank for signs of corrosion, pitting, and other damage. If required by the pneumatic tank's construction, the Contractor must provide and use a borescope during the visual inspection. Submit a CFR.

3.3.2 Surface preservation. If a Change Request has been authorized and released, the Contractor must prepare and coat each tank's interior surfaces using the system specified for "Tanks and Voids (Potable Water Tanks)" in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). If preservation is for less than 100 percent of tank interior surfaces, power tool clean all affected surfaces to "bare metal" 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.

3.3.3 Hydrostatic test. After any authorized repairs, The Contractor must hydrostatically test the designated tank(s) 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. The potable water system (other than pressure tank) and compressed air system must be excluded from hydrostatic pressure test.

3.3.4 Reinstallation. After all authorized repairs, The Contractor must reinstall the tank(s) to the original configuration with new rubber gaskets conforming to ASTM D1330. Renew all fasteners with stainless steel.

3.4 Written certification. The Contractor must, after completion of testing (and after any authorized repairs), submit written documentation listing each tank tested, the date of test, and testing facility to the COR.

3.5 Data Plates. The Contractor must affix to each tank an anodized aluminum test data plate using epoxy resin cement. Engrave the data plate with ¼-inch high letters stating the following:

- Tank name/number (as applicable).
- Hydrostatic test pressure.
- Date of inspection and test.
- Testing facility.

3.6 Tank disinfecting. After all other work involving the potable water system and tank closing have been completed, the Contractor must disinfect and treat the affected potable water tank(s), as necessary to meet or exceed the requirements of AWWA C652. After tank disinfecting, remove and dispose of all treated water in accordance with all Federal, state and local regulations. Ensure that no one enters the tanks once disinfection is completed.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 7: Compressed Air Receivers and System Valves, All, Clean, Inspect, Hydro and Lift

1. SCOPE

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

SERVICE	DESIGNATION	LOCATION	QTY	OPERATING PRESSURE (psi)
Starting Air	SA-F-E2-1, SA-F-E2-2	4-82-0-E	2	250
Ship's Whistle	ALP-F-E3-1	03-61-0-D	1	125
Ship's Service	ALP-F-E4-1	2-87-0-E	1	125

TYPE	SIZE	DESIGNATION	QTY	SET PRESSURE (psi)	Location/SYSTEM
Relief	½"	ALP-V-V1-1	1	90	STERN TUBE
Relief	1"	ALP-V-V3-1	1	138	STERN THRUSTER/REDUCING STATION
Relief	1"	ALP-V-V3-2	1	138	STERN THRUSTER/SS RECEIVER
Relief	1"	ALP-V-V3-3	1	138	SHIPS WHISTLE
Relief	½"	ALP-V-V920-1	1	175	UPPER LEVEL MMR/CLUTCH
Relief	1 ½"	SA-V-V4A-1	1	185	NR 1 MDE
Relief	1 ½"	SA-V-V4A-2	1	185	NR 2 MDE
Relief	1 ¼"	SA-V-V10-1	1	275	START AIR NR 3 COMPRESSOR
Relief	1 ¼"	SA-V-V10-2	1	275	START AIR NR 2 COMPRESSOR
Relief	1 ¼"	SA-V-V10-3	1	275	START AIR NR 1

					COMPRESSOR
Relief	½"	SA-V-V5-4	1	275	AMR/NR 1 RECEIVER
Relief	½"	SA-V-V5-5	1	275	AMR/NR 2 RECEIVER
Reducing	½"	ALP-V-V6-1	1	125-75	EMERGENCY SHAFT SEAL
Reducing	1"	SA-V-V7-1	1	250-125	AMR/START AIR - LP REDUCING STA
Reducing	1 ½"	SA-V-V8-1	1	250-165	NR 1 MDE PRESSURE REDUCING VLV
Reducing	1 ½"	SA-V-V8-2	1	250-165	NR 1 MDE PRESSURE REDUCING VLV
Reducing	½"	SA-V-V9-1	1	250-150	UPPER LEVEL MMR/CLUTCH

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 551-001, Rev G, Compressed Air System Diagram

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

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

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

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

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

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

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

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. 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 system.

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

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

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

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

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

3.3 Hydrostatic test. The Contractor must perform a hydrostatic test of the designated air receiver(s) in accordance with SFLC Std Spec 0740, Appendix C and manufacturer's recommended procedures. In the event a test pressure is not listed on the applicable drawing, test to 1-1/2 times the nominal operating pressure and hold for five minutes. Refer to Coast Guard Drawing 225B WLB-551-001 for guidance. Submit a CFR.

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

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

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

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

WARNING

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

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

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

TABLE 1 - VALVE STANDARDS

VALVE TYPE	INDUSTRY STANDARD
Steel Valves	MSS SP-61
Butterfly Valve	MSS SP-67
Ball Valves, Flanged or Butt-Welded Ends	MSS SP-72
Bronze Gate, Globe, Angle and Check Valves	MSS SP-80
Angle Style. Pressure Relief Valves	ASTM F1508
All others	ASME B16.34

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

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

3.5 Valve inspection and testing. The Contractor must inspect and test each designated air system valve as follows. Refer to Coast Guard Drawing 225B WLB-551-001 for guidance.

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

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

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

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

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

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

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

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

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

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

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

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

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

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

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

4. NOTES

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

WORK ITEM 8: Hull Fittings (Weight Handling Rigging Hardware), Inspect and Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and test designated hull fittings, listed in Table 1.

TABLE 1 - DESIGNATED ATON HULL FITTINGS

QTY	DESCRIPTION	LOCATION
4	Pad Eye and D-Ring, Flush Deck (F654 –Peck and Hale)	Buoy Deck, 20'-9" Off CL, P/S
10	Pad Eye and D-Ring, Flush Deck (F654 –Peck and Hale)	Buoy Deck, 19' Off CL, P/S
7	Pad Eye and D-Ring, Flush Deck (CGDR50T01)	Buoy Deck, 1-37-4, 1-33-4
14	Pad Eye and D-Ring, Flush Deck (F654 –Peck and Hale)	Buoy Deck, 15' Off CL, P/S
2	Pad Eye and D-Ring, Flush Deck (F654 –Peck and Hale)	Buoy Deck, Frame 54, P/S
16	Pad Eye and D-Ring, Flush Deck (F654 –Peck and Hale)	Buoy Deck, 108" Off CL, P/S
2	Pad Eye and D-Ring, Flush Deck (F654 –Peck and Hale)	Buoy Deck, Frame 52, P/S
8	Pad Eye and D-Ring, Flush Deck (F654 –Peck and Hale)	Buoy Deck, 36" Off CL, P/S
6	Pad Eye and D-Ring, Bulkhead mount (F654 – Peck and Hale)	Buoy Deck, Port and Starboard bulwark / superstructure
8	Pad Eye, Flush Deck (S-A S299)	Buoy Deck, 36" Off CL, P/S
10	Pad Eye, Flush Deck (S-A S299)	Cargo Hold, Frame 31, P/S
10	Pad Eye, Flush Deck (S-A S299)	Cargo Hold, Frame 33, P/S
10	Pad Eye, Flush Deck (S-A S299)	Cargo Hold, Frame 35, P/S

9	Pad Eye, Flush Deck (S-A S299)	Cargo Hold, Frame 37, P/S
36	D-Ring w/ Hold Down Strap (Austin 982-0046)	Cargo Hold, Bulkheads
8	Pad Eye, Flush Deck (S-A S299)	SORS Hold, Frame 41, P/S
8	Pad Eye, Flush Deck (S-A S299)	SORS Hold, Frame 43, P/S
8	Pad Eye, Flush Deck (S-A S299)	SORS Hold, Frame 45, P/S
8	Pad Eye, Flush Deck (S-A S299)	SORS Hold, Frame 47, P/S

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 573-11, Rev -, ATON Tie Downs

Coast Guard Drawing 225B WLB 672-001, Rev C, Storerooms, Cargo Stowage and Ship Store Arrangement and Details

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

3.2 Inspection and test particulars. The Contractor shall accomplish the following for each hull fitting designated in paragraph 1.1, using Coast Guard Drawings 225B WLB 573-11 and 225 WLB 672-001, as guidance., and submit a CFR:

3.2.1 Visual inspection. Visually inspect all fittings for excessive damage, wear, corrosion, distortion, elongation of holes, gouges, pits, and cracks.

3.2.2 Measurements. Perform below measurement tasks and record percent wastage. Be aware that a 10% reduction in the original dimensions shall be cause for removal from service.

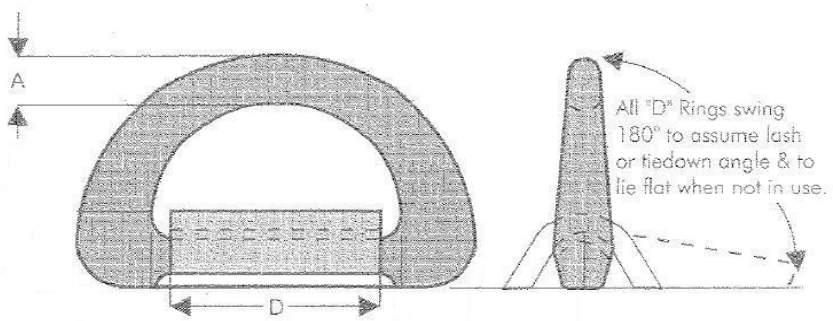
3.2.2.1 D-Ring. Using a suitable micrometer, measure the diameter (measurement A) at 90-degrees to the horizontal (top dead center). See Table 2 and the sketches provided in this work item as guidance, as applicable.

3.2.2.2 Flush deck tie-downs. Using a suitable micrometer, measure the diameter (measurement A) at center of bar of the S301 and S299 fittings. See Table 2 and the sketches provided in this work item as guidance, as applicable.

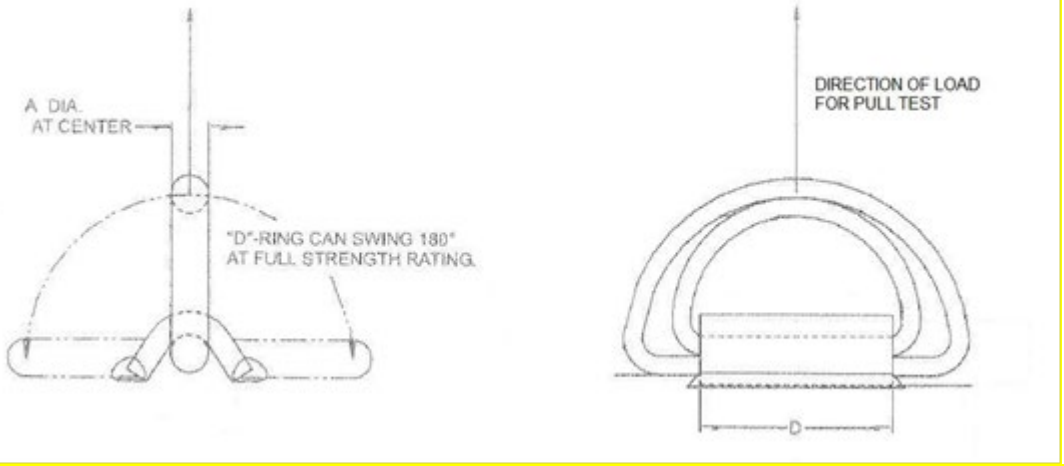
TABLE 2 - HULL FITTING MEASUREMENTS

MANUFACTURER	MODEL/MANUFAC. PART NUMBER		RING/BAR DIAMETER (MEASUREMENT A) (INCHES)
	DESIGNATOR	STRAP LENGTH (MEASUREMENT D) (INCHES)	
US Coast Guard	CGDR50T01	5.13	1.00
Schoellhorn-Albrecht	S113-50 (Generation 1)	5.0	1.00*
	S113-50 (Generation 2)	4.00	1.08
	S113-50 (Generation 3)	5.13	1.00
	S301		1.5
	S299		1.0
Peck and Hale	F654		0.91
Austin Hardware and Supply	982-0046		1.0

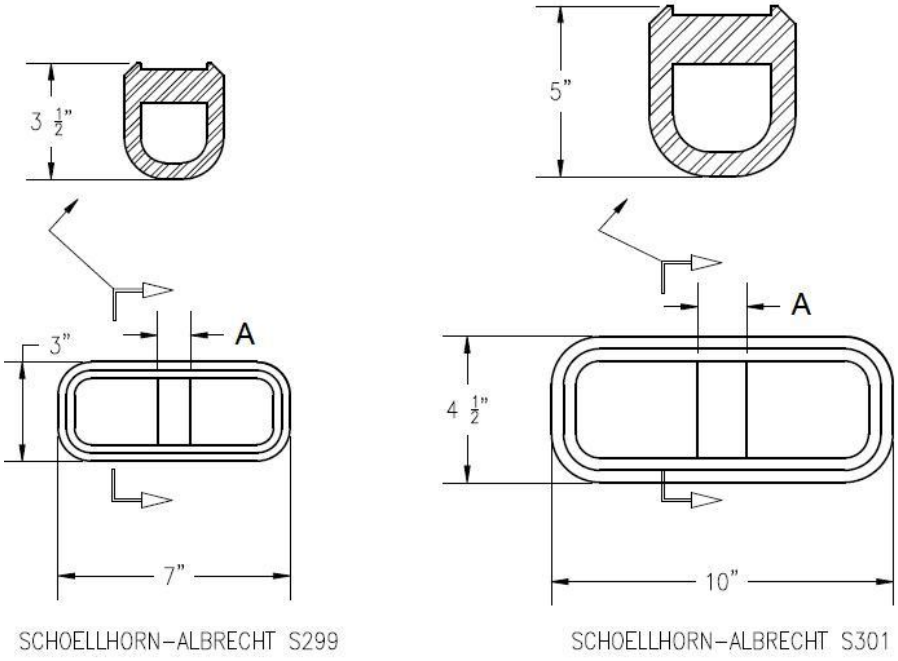
***D-Ring has a tapered cross section. Measurement is only valid in the vertical. See Sketch 1.**



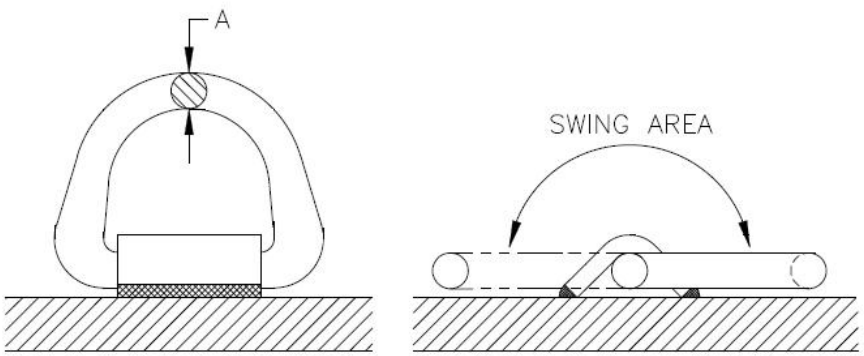
Sketch 1. Schoellhorn-Albrecht S113-50 (Generation 1) D-Ring and Strap.



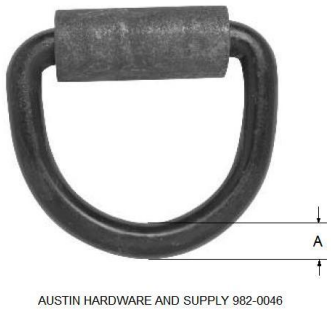
Sketch 2. Schoellhorn-Albrecht S113-50 (Generation 2 and 3) and Coast Guard CGDR50T01 D-Ring and Strap



Sketch 3. Schoellhorn-Albrecht S299 and S301 Flush Deck Tie Downs.



Sketch 4. Peck and Hale F187 D-Ring and Strap.



Sketch 5. Austin Hardware and Supply 982-0046 Heavy Duty Tie Down Rings with Clip.

3.2.3 Pull-test. Pull test all pad eyes and tie-downs in accordance with paragraph 3.2.7 (Pull test) of SFLC Std Spec 5000 , using Coast Guard Drawings 225B WLB 573-11 and 225 WLB 672-001, as guidance..

3.3 Touch-up preservation, general. The Contractor shall 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

This section is not applicable to this work item.

WORK ITEM 9: Hydraulic Chain Stoppers, Inspect And Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and service the Marinete Marine Corp. Model 573-009 Rising Sheave Chain Stoppers (RSCS).

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Repair Kit, HYD Chain Stopper Rising Sheave (for Para. 3.2, Tasks #2 and #3)	NSN: 2040-01-483-3947	2 ea.	2,631.46
N	Cylinder, Actuating Linear	NSN: 3040-01-483-3373	4 ea.	1,777.71

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 573-009, Rev E, Bi-Dir Ch Stopper With Retractable Roller Stopper

Coast Guard Drawing 225B WLB 573-012, Rev -, Rising Sheave Chain Stopper Ripout Incidental to Upgrade

Coast Guard Drawing 225B WLB 573-013, Rev B, Rising Sheave Chain Stopper Mechanical Mods Incidental to Upgrade

Coast Guard Drawing 225B WLB 573-014, Rev -, Rising Sheave Chain Stopper Hydraulic Mods Incidental to Upgrade

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3750, SWBS 573-A, Dec 2012, Rising Sheave Chain Stopper

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor shall submit a CIR for the inspections listed in the following task(s) in Table 1:

- Task #1.
- Task #2.
- Task #3.
- Task #4.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures, general. The Contractor shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, the Contractor shall 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). 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, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

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

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

3.2 Inspection and repair tasks. The Contractor shall refer to Coast Guard Drawing 225B WLB 573-009 and TP-3750 as guidance. Perform all work in Table 1 below accordance with SFLC Std Spec 5000.

TABLE 1 - TASKS

				ADDITION REQUIREMENTS	
#	**TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM SFLC STD SPEC 5000**	**OTHER**
1	Operate and Inspect	2	Hydraulic Chain Stopper Assembly	3.2.1 (Operate and Inspect)	Additional inspections: 1. Check the hydraulic stopper mechanical foundation and all mounting hardware. 2. Inspect hydraulic hoses, ensuring that hose tags match hose log installation dates. 3. Verify the relief valve; adjust settings to 2150 PSI. 4. Visually inspect the seal gland; check for signs of water intrusion. 5. Visually inspect the stopper roller. 6. Verify proper speed of raise and lower (3 - 6 seconds each way). 7. Submit a CIR.
2	Disassemble and Inspect	2	Directional Control Valve Assembly	C2.4 (Valves and manifolds)	Submit a CIR.
3	Disassemble and Inspect	2	Rising Sheave Assembly (Sheave Pin Assembly)	3.2.3 (Disassemble and Inspect)	1. Renew all fasteners exposed to weather. 2. Lubricate in accordance with references. 3. Reassemble with provided GFE. 4. Submit a CIR.
4	Renew	All	Hydraulic Cylinder		«CYLOTHER»
5	NDE	2	Hydraulic Chain Stopper Assembly and Machinery Foundation	3.2.5 (NDE)	Areas to NDE: 1. Entire stopper structure and all weld joints attaching chain stoppers to deck. 2. Foundation of the hydraulic rams and holdback blocks. 3. Submit a CFR.
6	Preserve	2	Hydraulic Chain Stopper Assembly, including Foundation and Chain Stopper	3.2.4 (Preservation)	Finish coat color: 1. Chain stopper: Black (17038) 2. Foundation: Black (17038).

				ADDITION REQUIREMENTS	
#	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
			Pockets.		
7	Groom and Lubricate	2	Hydraulic Chain Stopper Assembly	3.2.6 (Groom and lubricate)	
8	Final Test	2	Hydraulic Chain Stopper Assembly	B2.2 (Hydraulic chain stoppers)	Operational Load Test Weight: 16,500 (+0 -825) pounds Submit a CFR.
9	Fabricate and Install	2	Label Plate	B2.9 (Label plates)	Weight: 16,500 (+0 -825) pounds

3.3 Special requirements for various components. If a Change Request has been authorized for additional work on any of the components listed in Table 2 below, the Contractor shall refer to the corresponding Appendix or paragraph of SFLC Std Spec 5000.

TABLE 2 – SPECIAL REQUIREMENTS

COMPONENT	APPENDIX & PARAGRAPH IN SFLC STD SPEC 5000
Fluids	C2.1
Hose assemblies	C2.2
Piping and tubing	C2.3
Valves and manifolds	C2.4
Gages	C2.5
Gas charged accumulators	C2.6
Heat exchangers and fluid coolers	C2.7
Systems	C2.8
Fastener assemblies	D2.1
Wire rope assemblies	D2.2
Brakes and clutches	D2.3
Open gearing and gear reducers	D2.4

4. NOTES

This section is not applicable to this work item.

WORK ITEM 10: Crossdeck Winches, Inspect and Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and service the crossdeck winch assemblies and flag block assemblies, listed in Table 1.

TABLE 1 - EQUIPMENT

EQUIPMENT	LOCATION
Crossdeck Winch (PFW) – Model BMD-471	Port Fwd
Crossdeck Winch (SFW) – Model BMD-471	Stbs Fwd
Crossdeck Winch (PAW) – Model BMD-471	Port Aft
Crossdeck Winch (SAW) – Model BMD-471	Stbd Aft
Flag Block – Model -420	Port Fwd
Flag Block – Model -420	Stbd Fwd

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Hand Pump SS	NSN: 4320-01-517-1444	1 ea	1,499.66
N	Pressure Gauge - Model BMD-471	NSN: 6685-01-437-2519	4 ea	43.79
N	Wire Rope Assembly	NSN: 4010-01-643-2077	4 ea	900.00
N	Hydraulic Brake Repair Kit - Model BMD-471	NSN: 3950-01-526-9090	4 ea.	913.00
N	Counterbalance Valve - Model BMD-471	NSN: 4810-01-353-0586	4 ea.	150.00
N	Shuttle Valve - Model BMD-471	NSN: 4820-01-317-2748	4 ea.	35.00
N	Hydraulic Motor Seal Kit - Model BMD-471	NSN: 5330-01-475-4566	8 ea.	84.00
N	Clutch Shoe - Model BMD-471	NSN: 4910-01-475-4125	4 ea.	56.90
N	Drum Bushing - Model BMD-471	NSN: 3950-01-631-0884	8 ea.	272.00
N	Shaft Bushing - Model BMD-471	NSN: 3950-01-631-0771	4 ea.	298.00
N	Gearbox Seal Kit (For Winch Gearbox Assemblies) - Model BMD-471	NIIN: XFC343225 PN: YMD-8194-R	4 ea.	70.00
N	Control Station Repair Parts. Kit	NSN: 6110-01-644-9898	4 ea.	438.00

N	Flag Block Bearing Kit	NSN: 3940-01-526-5592	1 ea.	180.00
N	Flag Block Bearing Cup, Sheave	NSN: 3110-01-644-9670	1 ea.	231.00
N	Flag Block Bearing Cone, Sheave	NSN: 3110-01-013-4036	1 ea.	182.00
N	Block, Tackle, For Drum Power***	NSN: 3940-01-526-5592	1 ea.	9,202.59
N	Seal	NSN: 5330-01-287-2826	2 ea.	104.00
N	Manifold Repair Kit	PN: YMD-8192-R	4 ea.	551.00

****New or refurbished equipment that the Government may provide for installation in place of existing equipment.**
*****Supplied by Cutter as GFP, no ASM action required**

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing FL-1702-11, Rev -, Inspection of Sheaves

Coast Guard Drawing 225B-WLB 549-1, Rev -, Onboard Lubrication Requirements

Coast Guard Drawing 225B-WLB 556-1, Rev B, Hydraulic System Diagram

Coast Guard Drawing 225B-WLB 573-1, Rev -, Buoy Handling System Arrangement

Coast Guard Drawing 225B-WLB 573-2, Rev -, Weight Handling System Arrangement

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3558, Apr 2008, Manufacturer's Instruction Book-SWBS Group(s) 573, Section B, Cross Deck Winch – Model BMD-471

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must Submit a CIR. for the following inspections listed in Table 2:

- Tasks #1.
- Task #2.
- Task # 3.
- Task #4.
- Task #6.

- Task #7.
- Task #8.
- Task #9.
- Task #11.
- Task #12.
- Task #17.

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).

3.1.3.1 Protective measures, hydraulic system(s). 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, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

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

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

3.2 Brake lining. The Contractor must be aware that the brake lining contains asbestos. Handle and dispose of the friction disks, in accordance with all applicable federal, state, and local regulations.

3.3 Contractor-furnished parts. The Contractor must furnish and renew all snap rings, bearings, thrust buttons, seals, o-rings, gaskets, seal washers, keys, shims, lockwashers, dowel pins, thrust washers, cotter pins, rope clamp, foundation bolts and nuts, as applicable, in accordance CG TP 3558, SWBS 573, Sections A and B.

3.4 Tasks. The Contractor must perform the tasks designated in Table 2, using SFLC Std Spec 5000, Coast Guard Drawings 225B-WLB 549-1, 225B-WLB 556-1, 225B-WLB 573-1, 225B-WLB 573-2, and CG TP 3558, SWBS 573, Sections A and B as guidance.

TABLE 2 – RECURRING TASKS

#	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
1	Operate and Inspect	4	Crossdeck Winch Assembly	3.2.1 (Operate and Inspect)	Submit a CIR.
2	Disassemble	4	Crossdeck Winch Assembly	3.2.3	Winch Main Drum Shaft

#	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
	and Inspect			(Disassemble and Inspect)	Assembly, Clutch Assembly, And Warping Head Assembly Submit a CIR.
3	Disassemble and Inspect	4	Hydraulic Brake Assembly	3.2.3 (Disassemble and Inspect), D2.3 (Brakes and clutches)	Submit a CIR. GFP.
4	Disassemble and Inspect	4	Gear Box Assembly	3.2.3 (Disassemble and Inspect)	Renew GFP seals, Flush the gear box and renew oil. Submit a CIR.
5	Renew	4	Hydraulic Cartridge Valve Assemblies	C2.4 (Valves and manifolds)	GFP Counter balance valve GFP Needle valve GFP Shuttle valve
6	Disassemble and Inspect	4	Winch Hydraulic Motor Assembly	3.2.3 (Disassemble and Inspect)	GFP. Submit a CIR.
7	Disassemble and Inspect	4	Control Station	3.2.3 (Disassemble and Inspect)	GFP. Submit a CIR.
8	Disassemble and Inspect	4	Winch Assembly	3.2.3 (Disassemble and Inspect)	Submit a CIR. GFP drum and shaft bushing. Renew all bearings and seals.
9	Disassemble and Inspect	4	Band Brake	3.2.3 (Disassemble and Inspect)	Submit a CIR. Renew Brake lining and fasteners. 6.5 ft Scan-Pac Green Gripper 5/8” x 4 Wide brake lining and 43 set fasteners.
10	Renew	4	Wire Rope Assembly	D2.2 (Wire Rope Assemblies)	GFP Wire rope assembly. Note, the GFP wire rope is not lubricated.
11	Disassemble and Inspect	4	Directional Control Valve	3.2.3 (Disassemble and Inspect)	Submit a CIR. Renew seals.
12	Disassemble and Inspect	4	Clutch assembly	3.2.3 (Disassemble and Inspect)	Submit a CIR. GFP.

#	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
13	Renew	4	Pressure Gage	Renew	GFP
14	NDE	4	Cross Deck Winch Foundations	3.2.5 (NDE)	Areas to NDE: all weld joints connecting winch foundations to the deck. Submit a CFR.
15	Renew	4	Foundation Fasteners	D2.1 (Fastener assemblies	Provide, All foundation bolts must be 3/4 - 10NC Grade 8. Tighten all loose bolts to the torque recommended by the TP 3558, SWBS 573, Sections A and B.
16	Preserve	4	Winch Assembly and associated foundation	3.2.4 (Preservation)	Surfaces to be preserved include, but are not limited to: inside and outside surfaces of foundations, and all winch exterior surfaces that are accessible with no disassembly. Select the following top coat colors: - Spar (10371) for equipment surfaces. - Black (17038) for foundation surfaces.
17	Disassemble and Inspect	1	Flag Block, Bulkhead-Mounted Sheave Assembly	3.2.3 (Disassemble and Inspect)	Submit a CIR. GFP, Fleet Drawing FL-1702-11 Renew bearings and seals.
18	Renew	1	Flag Block, Bulkhead-Mounted Sheave Assembly	Renew	Renew one Flag Block with cutter-provided GFP, NSN: 3940-01-526-5592. Take direction from CG Member as to which Flag Block to renew and which to disassemble and inspect.
19	Groom and Lubricate	4	Crossdeck Winch Assembly	3.2.6 (Groom and lubricate)	
20	Weight Test	4	Crossdeck Winch Assembly	B2.3 (Winches)	See CG TP 3558, SWBS 573, Submit a CFR.
21	Fabricate and Install	4	Label Plate	B2.9 (Label plates)	

3.5 Additional tasks. The Contractor must perform the task(s) marked with an "X" in Table 3. Combine or group CFRs, as required, to minimize administrative burden and maximize efficiency.

TABLE 3 – ADDITIONAL TASKS

DESIGNATED EQUIPMENT	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000*	OTHER
_____PFW _____SFW _____PAW _____SAW	Disassemble and Inspect	Directional Control Valve Assembly	C2.4 (Valves and manifolds)	Submit CFR.
_____PFW _____SFW _____PAW _____SAW	Renew	Hose Assembly - Externally Installed (Set Of 6 Per Winch)	C2.2 (Hose assemblies)	
_____PFW _____SFW _____PAW _____SAW	Disassemble and Inspect	Winch Planetary Gearbox	D2.4 (Open gearing and gear reducers)	Submit CFR.
_____PFW _____SFW _____PAW _____SAW	Disassemble and Inspect	Winch Main Drum Shaft Assembly, Clutch Assembly, And Warping Head Assembly	3.2.3 (Disassemble and Inspect)	See CG TP 3558, SWBS 573, Sections A and B. Submit CFR
_____PFW _____SFW _____PAW _____SAW	Disassemble and Inspect	Hand Pump Assembly	3.2.3 (Disassemble and Inspect)	See CG TP 3558, SWBS 573, Sections A and B. Submit CFR
_____PFW _____SFW _____PAW _____SAW	Renew	Hand Pump Assembly	N/A	See CG TP 3558, SWBS 573, Sections A and B.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 11: Hydraulic Inhaul Winch, Inspect And Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and service the hydraulic inhaul (buoy chain) winch.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Roller bearing Unit	NSN: 3130-01-504-4363	2 ea.	4,012.00
N	Grease seal	NSN: 5330-01-462-5544	4 ea.	79.25
N	Level wind pivot bushing	NSN: 3120-01-621-2293	1 ea.	1,139.00
N	Level wind thrust bearing	NSN: 3120-01-621-2300	2 ea.	483.30
N	Rexroth DCV	NSN: 4810-01-507-0037	1 ea.	208.29
N	Rexroth Sandwich Flow Control	NSN: 4810-01-505-9289	1 ea.	250.00
N	Sun Sandwich Relief Valves	NSN: 4820-01-439-2451	2 ea.	900.00
Y	Level Wind Hydraulic Cylinder	NSN: 3040-01-441-3721	1 ea.	7,423.00
N	3:1 Pilot Ratio, Vented Counterbalance Valve Assembly	NSN: 4820-01-563-5841	1 ea	98.70
N	Fully Adjustable Needle Valve	NSN: 4820-01-416-0579	1 ea	48.75
N	Wire Rope Assembly	NSN: 4010-01-646-6972	1 ea.	500.00
Y	Hydraulic Motor	NSN: 4320-01-445-2248	1 ea	23,998
N	Cylinder Pin	NSN: 5315-01-515-9847	1 ea	500.00
N	Cylinder Pin	NSN: 5315-01-515-9912	1 ea	520.00

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

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 549-001, Rev A, Onboard Lubrication Requirements
Coast Guard Drawing 225B WLB 556-001, Rev F, Hydraulic System Diagram
Coast Guard Drawing 225B WLB 573-001, Rev E, Buoy Handling System Arrangement
Coast Guard Drawing 225B WLB 573-002, Rev -, Weight Handling System Arrangement

Coast Guard Drawing FL 7101-573, Rev L, Buoy Chain Winch Assy Model CW1

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3498, Section A, Jul 2015, Buoy Chain Winch

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

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

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

OTHER REFERENCES

ASTM International (ASTM) D5363, 2008, Standard Specification for Anaerobic Single Component Adhesives (AN)

MIL-S-45180, 1998; Sealing Compound, Gasket, Hydrocarbon Fluid and Water Resistant

MIL-PRF-24176 , Oct 2004, Cement, Epoxy, Metal Repair And Hull Smoothing (Metric)

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

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the inspections listed in the following task(s) in Table 1:

- Task#1

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).

3.1.3.1 Protective measures, hydraulic system(s). 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, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

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

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

3.1.5 General hydraulic system requirements. The Contractor must perform all work in accordance with paragraph 3.1 of SFLC Std Spec 5000, as applicable.

3.1.6 Contractor-furnished parts. The Contractor must furnish all snap rings, bearings, thrust buttons, seals, o-rings, gaskets, seal washers, keys, shims, lockwashers, bushings, dowel pins, thrust washers, cotter pins, rope clamp, foundation bolts and nuts, as applicable, in accordance with Coast Guard Drawings 225B WLB 549-001, 225B WLB 556-001, 225B WLB 573-001, and 225B WLB 573-002.

3.2 Recurring maintenance requirements. The Contractor must perform the tasks in Table 1 below.

TABLE 1 – RECURRING MAINTENANCE REQUIREMENTS

				ADDITION REQUIREMENTS	
#	**TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM SFLC STD SPEC 5000**	**OTHER**
1	Operate and Inspect	1	Buoy Chain In-haul Winch and Level Wind Arm Assembly	3.2.1 (Operate and Inspect)	Inspection particulars: 1. Inspect hydraulic hoses, ensuring that hose tags match hose log installation dates. 2. Visually inspect level wind arm, and hydraulic cylinder. 3. Inspect roller chock bearings, to ensure compliance with Coast Guard Drawing FL 7101-573. 4. Inspect foundation mounting bolts. 5. Visually inspect pillow block bearings, seals, and mounting bolts; check for proper bearing alignment. 6. Inspect wire rope, hook termination, and lubrication. 7. Inspect pinion and drum drive gears. Check for proper lubrication. 8. Check gear train backlash, to ensure whether backlash is between .020 and .030 inch. 10. Check hydraulic motor for proper alignment, Check all hardware and pinion seals for leakage 11. Inspect hydraulic controls for corrosion and freedom of

				ADDITION REQUIREMENTS	
#	**TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM SFLC STD SPEC 5000**	**OTHER**
					operation/adjustment (including emergency brake components). 12. Check chain winch speed; document whether satisfactory or not. 13. Check level wind speed; document whether satisfactory or not. 14. Verify level wind arm relief valve settings. 15. Inspect chain winch remote's handle and rubber boot. 16. Check and operate chain winch and level wind arm controls from remove (crane booth or shack). 17. Inspect the winch ratchet pawl for proper operation of the pawl and lock pin. Submit a CIR.
2	Service and Inspect	1	Ratchet Pawl Assembly	3.2.2 (Service and inspect)	Submit a CFR.
3	Service and Inspect	1	Bull and Pinion Gears	D2.4 (Open Gearing And Gear Reducers)	Submit a CFR.
4	Inspect and Preserve	1	Winch Drum and Shaft Assembly (External Surfaces)	3.2.4 (Preserve)	1. Visual inspection of inspection of the load bearing ends of the shaft for cracks. Submit a CFR. 2. Abrasive-blast drum shaft to "Near-White", in accordance with SSPC-SP 10. 3. Coat blasted surfaces with one coat 3.0-4.0 mils DFT Inorganic Zinc (See SFLC Std Spec 6310, Appendix C).
5	Preserve		Winch Drum (Internal Surfaces)	N/A	1. Fill interior winch drum with 10 gallons of rust preventive compound conforming to MIL-PRF-16173, Class II, Grade 3, and rotate drum for 5 minutes to coat all interior

				ADDITION REQUIREMENTS	
#	**TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM SFLC STD SPEC 5000**	**OTHER**
					surfaces and then drain. 2. Drain, collect, and dispose of drained compound in accordance with all applicable Federal, state, and local regulations. Ensure that the coated surfaces are left exposed to the atmosphere for 24 hours to allow for adequate drying. 3. Renew each plug with a new stainless steel, Type 316, or Monel drain plug. Coat new plugs prior to installation with a sealing and locking compound conforming to ASTM D5363-AN0123 or a flexible joint compound conforming to MIL-S-45180, Type II.
6	Service and Inspect	1	Roller Chock Shaft Assembly	3.2.2 (Service and inspect)	GFP. Submit a CFR.
7	Service and Inspect	1	Level Wind Arm Pivot Pin Assembly	3.2.2 (Service and inspect)	GFP. Submit a CFR.
8	Preserve	1	Level Wind Arm Hydraulic Cylinder	3.2.4 (Preserve)	
9	Renew		Wire rope assembly	D2.2 (Wire Rope Assemblies)	GFP.
10	Renew	1	Level Wind Cylinder Control Block	C2.4 (Valves And Manifolds)	GFP
11	Service and Inspect	1	Chain Winch Control Block	C2.4 (Valves And Manifolds)	GFP Submit a CFR.
12	Renew	1	Level Wind Hydraulic Cylinder.		GFP
13	Renew	18	Buoy Chain In-haul Winch Foundation Bolts	D2.1(Fastener Assemblies)	Type: 1"-8UNC-2A x 4-1/2" LG, SS 316 Torque value: See Table 6-1 in TP-3498.
14	NDE	1	Buoy Chain In-haul Winch and Level Wind Arm Assembly Foundations	3.2.5 (NDE)	Weld joints to NDE: all joints attaching winch foundations to deck and 'donut' in pawl-side drum flange (identified as PN 4A in Section 99-E of drawing FL 7101-573). Submit a CFR.

				ADDITION REQUIREMENTS	
#	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
15	Preserve	1	Buoy Chain In-haul Winch Assembly and Level Wind Arm Assembly	3.2.4 (Preservation)	Surfaces to be preserved include, but are not limited to: winch drum shaft assembly, ratchet pawl assembly, level wind arm hydraulic cylinder, and all previously coated surfaces.
16	Renew	1	Counterbalance Valve Assembly, and Fully Adjustable Needle Valve	C2.4 (Valves And Manifolds)	GFP, Adjust Counterbalance manifold setting Appendix F of Tech Pub 3498.
17	Renew	1	Hydraulic motor		GFP
18	Align	1	Buoy Chain In-haul Winch Assembly		Perform alignment per Appendix E of Tech Pub 3498, Chain Winch Realignment Instructions. Submit a CFR
19	Groom and Lubricate	1	Buoy Chain In-haul Winch and Level Wind Arm Assembly	3.2.6 (Groom and Lubricate)	Perform all adjustments in Chapter 6-2 of TP-3498.
20	Weight Test	1	Buoy Chain In-haul Winch and Level Wind Arm Assembly	N/A	Perform all weight testing In accordance TP-3498, Chapter 6, paragraph 8-6.4, Inspection and test procedures for the Buoy Chain Winch Model CW-1 onboard 175WLM, 225 WLB, and 240 WLBB class cutters. See Table 2 below. Submit a CFR.
21	Fabricate and Install	1	Label plate	B2.9 (Label Plates)	

NOTE

Coast Guard personnel will operate all machinery during testing.

TABLE 2 – TEST WEIGHTS

	MAIN HOIST TEST WEIGHTS
Static	24,750 (+5% - 0%) lbs
Rated	16,500 (+5% - 0%) lbs
Emergency Brake Release	5,000 (+0% - 5%) lbs

3.3 Additional maintenance requirements. The Contractor must perform tasks in Table 3 below marked with an "X". Submit a CFR to document all inspections and recommended additional repairs. Combine or group CFR, as required, to minimize administrative burden and maximize efficiency.

NOTE

Tasks not initially marked with an "X" must be exercised via authorized and released Change Requests (CR), when determined to be necessary by inspection results.

TABLE 3 – ADDITIONAL MAINTENANCE REQUIREMENTS

				ADDITIONAL REQUIREMENTS	
X	**TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM SFLC STD SPEC 5000**	**OTHER**
	Preserve	1	Winch Drum (Internal Surfaces)	N/A	1. Drill and tap two one- inch drain and fill holes, in locations designated by the CG Inspector. 2. Preserve internal surfaces, as specified in Task # 5 of Table I. 3. Plug each hole with a new stainless steel, Type 316, or Monel plug. 4. Coat new plugs prior to installation with a sealing and locking compound conforming to ASTM D5363-AN0123 or a flexible joint compound conforming to MIL-S-45180, Type II.
X	Renew	All	All Externally Installed Hose Assemblies	C2.2 (Hose Assemblies)	
	Disassemble and Inspect	1	Ratchet Pawl Assembly	3.2.3 (Disassemble and Inspect)	Submit a CIR.
	Disassemble and Inspect	1	Bull and Pinion Gears	D2.4 (Open Gearing And Gear Reducers)	Submit a CIR.
	Disassemble and Inspect	1	Roller Chock Shaft Assembly	3.2.3 (Disassemble and Inspect)	Submit a CIR. GFP.
	Disassemble and Inspect	1	Level Wind Arm Pivot Pin Assembly	3.2.3 (Disassemble and Inspect)	Submit a CIR. GFP.
	Disassemble and Inspect	1	Level Wind Cylinder Control Block	C2.4 (Valves And Manifolds)	Submit a CIR.

	Disassemble and Inspect	1	Chain Winch Control Block	C2.4 (Valves And Manifolds)	Submit a CIR.
	Disassemble and Inspect	1	Brake Control Block	C2.4 (Valves And Manifolds)	Submit a CIR.
	Disassemble and Inspect	1	Hydraulic motor	3.2.3 (Disassemble and Inspect)	Perform alignment per Appendix E of Tech Pub 3498, Chain Winch Realignment Instructions. Submit a CIR.
	Renew	1	Hand Pump and Isolation Valves	C2.4 (Valves And Manifolds)	GFP.
	Renew	1	Hydraulic motor	3.2.4 (Preservation)	GFP. Return the original hydraulic motor to the CG PA as a MTI. Perform alignment per Appendix E of Tech Pub 3498, Chain Winch Realignment Instructions.
	Renew and Preserve	1	Level Wind Arm Hydraulic Cylinder	3.2.4 (Preservation)	GFP.
	Disassemble and inspect	1	Winch Drum Shaft Assembly	3.2.3 (Disassemble and inspect)	Submit a CIR. GFP.
	Disassemble and Inspect	1	Roller Chock Shaft Assembly	3.2.3 (Disassemble and inspect)	Submit a CIR. GFP.
	Disassemble and Inspect	1	Level Wind Arm Pivot Pin Assembly	3.2.3 (Disassemble and inspect)	Submit a CIR. GFP.
	Renew	1	Hand Pump and Isolation Valves	C2.4 (Valves And Manifolds)	GFP.
	Renew	1	Level Wind Arm Hydraulic Cylinder	3.2.4 (Preserve)	GFP.
	Renew	1	Wire rope assembly	D2.2 (Wire Rope Assemblies)	Nominal diameter: 1-1/8 inch Nominal strength: XIPS Total length of rope required: 150 ft. End fitting type: Fiege OR poured spelter.

	Renew	18	Buoy Chain In-haul Winch Foundation Bolts	D2.1(Fastener Assemblies)	Type: 1"-8UNC-2A x 4-1/2" LG, SS 316 Torque value: See Table 6-1 in TP-3498.
	Renew	1	Counterbalance Valve Assembly, and Fully Adjustable Needle Valve	C2.4 (Valves And Manifolds)	GFP, Adjust Counterbalance manifold setting Appendix F of Tech Pub 3498.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 12: Mechanical Chain Stoppers, Inspect and Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and service the port and starboard mechanical chain stoppers.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Hardware Kit, Pins	NSN: 2030-01-485-7209	2 ea.	528.47
N	Hardware Kit, Mechanical	NSN: 2030-01-485-7215	2 ea.	538.91

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing FL 2605-031, Rev D, Mechanical Chain Stopper, 1-7/8" Buoy Chain

Coast Guard Drawing FL 2605-034, Rev D, Mechanical Chain Stopper Repair Kit: 1-7/8", 1-5/8" & 1-1/4"

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3749, 26-APR-05, 1-7/8 Inch ATON Mechanical Chain Stopper

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor shall submit a CIR for the inspections listed in Table 1, as follows:

- Task #1.
- Task #2.

3.1.2 Tech Rep.

Not applicable.

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

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

3.2 Repair particulars. The Contractor shall use FL2605-31, FL 2605-034, and TP 3749 for reference, and perform all tasks in Table 1.

TABLE 1 – REPAIR TASKS

				ADDITIONAL REQUIREMENTS	
#	**TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM SFLC STD SPEC 5000**	**OTHER**
1	Operate and Inspect	2	Mechanical Chain Stopper Assembly	3.2.1 (Operate and Inspect)	Submit a CIR.
2	Disassemble and Inspect	2	Mechanical Chain Stopper Assembly	3.2.3 (Disassemble and Inspect)	Submit a CIR. Reassemble chain stoppers with GFP. Refer to paragraph 3.2.1 for materials.
3	NDE	2	Mechanical Chain Stopper Assembly	3.2.5 (NDE)	NDE task is limited to chain stopper welds.
4	Preserve	2	Mechanical Chain Stopper Assembly and foundation	3.2.4 (Preservation)	Select the following top coating colors: Black (17038) for the chain stopper surfaces. Gray (16099) for the foundation surfaces.
5	Groom and Lubricate	2	Mechanical Chain Stopper Assembly	3.2.6 (Groom and Lubricate)	
6	Weight Test	2	Mechanical Chain Stopper Assemblies	B2.1(Mechanical Chain Stoppers)	Operational test load: 25,000 lbs.
7	Fabricate and	2	Label plate	B2.9 (Label plates)	

				ADDITIONAL REQUIREMENTS	
#	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
	Install				

3.2.1 Breakdown GFP kit. For full kit parts list, refer to Coast Guard Drawing FL 2605-034. Pin and bushing kits contain the following parts, typically: spring assembly pin, SS washers, SS hex bolt, end hinge pins, middle hinge pins, lock hinge pin, grease fittings and bronze bushings. At the installation of each bronze bushing, the Contractor shall drill a hole to line up with grease fitting in accordance with «DWG1» and FL 2605-034. Clean each bushing after drilling.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 13: Warping Capstan, Inspect and Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and service the hydraulic warping the capstan.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

None.

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3559, Section 582B, Apr 2009, Aft Capstan, 21" - Model BMD-475

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

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

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the inspections listed in Table 1:

- Task #1.
- Task #2.
- Task #4.
- Task #5.

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).

3.2 Tasks to be accomplished. The Contractor must perform the tasks designated in Table 1 below, in accordance with SFLC Std Spec 5000 and CG TP-3559, SWBS 582B

TABLE 1 – RECURRING TASKS

				ADDITION REQUIREMENTS	
#	**TASK TYPE**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM SFLC STD SPEC 5000**	**OTHER**
1	Operate and Inspect	1	Warping Capstan	3.2.1 (Operate and inspect)	Submit a CIR.
2	Disassemble and Inspect	1	Capstan Head Shaft Assembly	3.2.3 (Disassemble and inspect)	Submit a CIR.
3	Service and Inspect	1	Gear Reducer	D2.4 (Open gearing and gear reducers)	Submit a CFR.
4	Disassemble and Inspect	1	Disc Brake	D2.3 (Brakes and clutches)	Submit a CIR.
5	Disassemble and Inspect	1	Control Valve	C2.4 (Valves and manifolds)	Submit a CIR.
6	NDE	1	Warping Capstan Assembly And Foundation	3.2.5 (NDE)	NDE: All joints attaching capstan foundations to deck. Submit a CFR.
7	Preserve	1	Warping Capstan Assembly And Foundation	3.2.4 (Preservation)	Surfaces to be preserved include entire capstan assembly, head shaft assembly, control valve and stand, gear reducer, foundation, and all other previously coated surfaces.
8	Groom and lubricate	1	Warping Capstan Assembly	3.2.6 (Groom and lubricate)	
9	Operational and Weight Test	1	Warping Capstan	B2.6 (Capstans)	Submit a CFR.
10	Fabricate and Install	1	Label Plates	B2.9 (Label plates)	

Developer: Delete paragraphs 3.3 and 3.4, and Table 2, if not applicable/needed.

3.3 Additional maintenance requirements. The Contractor must perform the task below, if marked with an "X".

TABLE 2 – additional tasks

ADDITIONAL TASK		TASK TYPE	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
____	1	Renew	6	Hose Assemblies	C2.2 (Hose assemblies)	Submit a CFR.

4. NOTES

This section is not applicable for this work item.

WORK ITEM 14: Hull Fittings (Mooring and Towing), Inspect and Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect the below designated hull fittings:

QTY	DESCRIPTION	LOCATION	APPLICABLE REFERENCE
3	Chock, Bulwark Mounted (Panama Type) 12-1/2" x 10"	Focsle Deck, Forepeak, CL, P/S	Coast Guard Drawing 225B WLB 582-001
1	Bitt, Double, 12"	Focsle Deck, Frame -1, CL	Coast Guard Drawing 225B WLB 582
2	Bitt, Double, 12"	Focsle Deck, Frame 3, P/S	Coast Guard Drawing 225B WLB 582
2	Chock, Closed Railing, 6" x 12"	Focsle Deck, Frame 5, P/S	Coast Guard Drawing 225B WLB 582
4	Tow Pad Eye	Focsle Deck, Frame 7, P/S	Coast Guard Drawing 225B WLB 901-003
2	Bitt, Double, 12"	Focsle Deck, Frame 18, P/S	Coast Guard Drawing 225B WLB 582
2	Chock, Bulwark Mounted (Panama Type) 12-1/2" x 10"	Focsle Deck, Frame 21, P/S	Coast Guard Drawing 225B WLB 582
2	Bitt, Double, 8"	Buoy Deck, Frame 46, P/S	Coast Guard Drawing 225B WLB 582
2	Chock, Closed Railing, 6" x 12"	Buoy Deck, Frame 46, P/S	Coast Guard Drawing 225B WLB 582
2	Chock, Closed Railing, 6" x 12"	Frame 62, P/S	Coast Guard Drawing 225B WLB 582
2	Bitt, Double, 8"	Frame 65, P/S	Coast Guard Drawing 225B WLB 582

2	Chock, Bulwark Mounted (Panama Type) 12” x 10”	Frame 95, P/S	Coast Guard Drawing 225B WLB 582
2	Bitt, Double, 12”	Frame 99, P/S	Coast Guard Drawing 225B WLB 582
1	Towing Bitt	Frame 104, CL	Coast Guard Drawing 225B WLB 582
2	Towing Pad, 5-1/2”	Frame 106, P/S	Coast Guard Drawing 225B WLB 582
1	Towing Pad, 8”	Frame 108, CL	Coast Guard Drawing 225B WLB 582
2	Bitt, Double, 12”	Frame 107, P/S	Coast Guard Drawing 225B WLB 582
2	Tow Rail Post	Frame 110, transom corners	Coast Guard Drawing 225B WLB 582
3	Chock, Deck Mounted (Panama Type), 12” x 10”	Frame 110, CL, P/S	Coast Guard Drawing 225B WLB 582
1	Tow Rail, 10” Sch 120 pipe	Along Transom	Coast Guard Drawing 225B WLB 582

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 582-001, Rev -, Mooring and Towing A & D

Coast Guard Drawing 225B WLB 901-003, Rev A, Hull Block 901 Block Assembly

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

3.2 Inspection and test particulars. The Contractor must accomplish the following for designated fitting designated in paragraph 1.1, and submit a CFR.

3.2.1 Visual. Visually inspect all cleaned surfaces for excessive damage, wear, corrosion, distortion, elongation of holes, gouges, pits, and cracks.

3.2.2 NDE. Perform nondestructive examination (NDE) of all designated fittings, including all components and associated welds (including but not limited to deck mounting and base/foundation welds) or other mounting hardware, in accordance with SFLC Std Spec 0740, Appendix C. Use a NDE method not requiring coating removal.

3.3 Touch-up preservation. 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

This section is not applicable to this work item.

WORK ITEM 15: Single Point Davit, Inspect and Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and service the Single Point Davit (SPD) - Model RAD30-15.5.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Swing Brake Seal Kit	NSN: 5330-01-390-3514 PN: 90-016-2011	2 ea	68.45
N	Swing Brake Disc Kit	NSN: 3010-01-464-1040 PN: 90-016-2131	2 ea	187.20
N	Swing Holding Valve	NSN: 4820-01-466-4918 PN: CBEA-LHV-YHL (Sun Hydraulics)	1 ea	251.50
N	Wire Rope Assembly	NSN: 4010-01-620-9604 PN: JWCG062100PL	1 ea	660.00

***Government-loaned property, which must 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 Service Center.**

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 556-005, Rev D, Aft Hydraulic System A/D, Fr 66 Aft, Block 950, 970

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 11101, SWBS 583, Section A (SWBS 583A), Davit, Single Point Slewing Arm Model - RAD30 - 15.5 (BMD-710)

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

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

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

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):

- Task #1.
- Task #2.
- Task #3.
- Task #4.
- Task #5.
- Task #7.

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).

3.1.3.1 Protective measures, hydraulic system(s). 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, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

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

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

- Small Boat

3.2 Inspect and service task particulars. The Contractor must refer to CG TP-11101 as guidance during the performance of the tasks specified in Table 1. Perform all designated tasks in accordance with SFLC Std Spec 5000, as applicable.

TABLE I – RECURRING TASKS

	ADDITION REQUIREMENTS

#	TASK TYPE	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM 5000_STD	OTHER
1	Operate and Inspect	1	SPD System	3.2.1 (Operate and Inspect) Appendix A	Submit a CIR
2	Disassemble and Inspect	1	Fall Sheave Pin Assembly	3.2.3 (Disassemble and inspect)	Submit a CIR Renew bearing and seals.
3	Service and Inspect	1	Accumulator Assembly	C2.4 (Valves and manifolds)	Submit a CIR.
4	Service and Inspect	1	Accumulator Charging Hand Pump Assembly	C2.4 (Valves and manifolds)	Submit a CIR
5	Service and Inspect	1	Control Valve Assembly	C2.4 (Valves and manifolds)	Submit a CIR
6	Renew	1	Counterbalance Valve	C2.4 (Valves and manifolds)	GFP
7	Service and Inspect	1	Winch Assembly	3.2.2 (Service and inspect)	Submit a CFR.
8	Service and Inspect	2	Swing Drive Brake	D2.3 (Brakes and clutches)	GFP
9	Renew	3	External Hose Assembly	C2.2 (Hose assemblies)	Submit a CFR.
10	Renew	1	Wire Rope Assembly	D2.2 (Wire rope assemblies)	GFP.
11	Renew	All	System Hydraulic Fluid	C2.1 (Fluids)	
12	Preserve	1	SPD System	3.2.4 (Preservation)	Preservation to include all previously-coated surfaces.
13	Groom and Lubricate	1	SPD System	3.2.6 (Groom and Lubricate)	Perform all maintenance specified in TP-11101, Chapter 4.
14	Final Operational And Weight Tests	1	SPD System	B2.7 (Davits)	After completion of all other work, perform the operational and weight testing for this system. Main Hoist test weights are as follows: • Static: 9,000 (+450 -0) pounds • Dynamic: 7,500 (+375 -0) pounds • Rated: 6,000 (+0 -300) pounds • CT Operational test: 1,500 (+75 -000) pound. Submit a CFR.
15	Fabricate and Install	1	Label plate	B2.9 (Label Plates)	
16	Weatherize	All	Hose fittings	C2.2.1.2.2 (Weatherization).	

3.3 Special requirements for various components. If a Change Request has been authorized for additional work on any of the components listed in Table II below, the Contractor must refer to the corresponding Appendix or paragraph of SFLC Std Spec 5000, as applicable.

TABLE II – SPECIAL REQUIREMENTS

COMPONENT	APPENDIX & PARAGRAPH IN SFLC STD SPEC 5000
Fluids	C2.1
Hose assemblies	C2.2
Piping and tubing	C2.3
Valves and manifolds	C2.4
Gages	C2.5
Gas charged accumulators	C2.6
Heat exchangers and fluid coolers	C2.7
Systems	C2.8
Fastener assemblies	D2.1
Wire rope assemblies	D2.2
Brakes and clutches	D2.3
Open gearing and gear reducers	D2.4

4. NOTES

This section is not applicable to this work item.

WORK ITEM 16: Welin Lambie Dual Point Davit TWPIV 5.0B, Inspect, Test, and Overhaul

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect, test, and overhaul the Welin Lambie Dual Point Davit Model TWPIV 5.0B.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	4 Year Davit In-Place Overhaul Kit	NSN: 3950-01-F18-5354 PN: 892-02053	1	124,229.92

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

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

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

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

Coast Guard Technical Publication (TP) 3943, Feb 2019, Manufacturer's Instruction Book - SWBS Group(s) 583, Section A, Twin Pivot Arm Davit – Type TW.PIV 5.0B

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the following inspections listed in Table 1:

- Task #1.

3.1.2 Tech Rep. The Contractor must provide the services of a certified Welin-Lambie Tech Rep, to be on-site during final operational and weight testing, to commission the overhauled davit.

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 Protective measures, hydraulic system(s). 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, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

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

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

- Small Boat.

3.1.5 Receipt report. Upon receipt of the government furnished overhaul kit and parts identified from Welin Lambie Pre-Inspection Report, the Contractor must inspect and inventory the government furnished overhaul kit and parts identified from Welin Lambie Pre-Inspection Report and submit a CFR on the following:

- Missing or damaged parts/components with photographs of each.

3.2 Tasks to be accomplished. The Contractor must perform the tasks designated in Table 1 below in accordance with SFLC Std Spec 5000 and using TP 3943 for guidance.

TABLE 1 – RECURRING TASKS

#	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
1	Operate and Inspect	1	Twin Pivot Arm Davit	3.2.1 (Operate and Inspect)	Submit a CIR.
2	Fluid Sampling	1	Twin Pivot Arm Davit	C2.1 (Fluids)	Submit a CFR.
3	Disassemble and Inspect	All	Twin Pivot Arm Davit Structure and Rigging	3.2.3 (Disassemble and inspect)	Includes, but is not limited to: Cranston Eagle hook assemblies, sheave assemblies, and both forward and aft davit arm hinge pin assemblies. GFP. Submit a CFR.
4	Disassemble and Inspect	2	Boat Block Assembly	3.2.3 (Disassemble and inspect)	GFP. Submit a CFR.
5	Disassemble and Inspect	1	Main Winch	3.2.3 (Disassemble and inspect)	GFP. Submit a CFR.
6	Disassemble and Inspect	2	Falls Tension Winch	3.2.3 (Disassemble and inspect)	GFP. Submit a CFR.
7	Disassemble and Inspect	All	Control Station	3.2.3 (Disassemble and inspect)	GFP. Submit a CFR.
8	Disassemble and Inspect	All	Hydraulic Assembly	3.2.3 (Disassemble and inspect) C2.2 (Hose assemblies) C2.3 (Piping and tubing) C2.4 (Valves and manifolds) C2.5 (Gages)	GFP. Submit a CFR.
9	Disassemble and Inspect	1	Hydraulic Reservoir	3.2.3 (Disassemble and inspect) C2.4 (Valves and manifolds)	GFP. Submit a CFR.
10	Disassemble and Inspect	All	Hydraulic Panel	3.2.3 (Disassemble and inspect) C2.4 (Valves and manifolds)	GFP. Submit a CFR.
11	Disassemble and Inspect	2	Accumulator	3.2.3 (Disassemble and inspect) C2.4 (Valves and manifolds) C2.6 (Gas charged accumulators)	GFP. Submit a CFR.
12	Calibrate	All	Pressure Gauges	C2.5 (Gages)	Submit a CFR as described in SFLC Std Spec 5000 paragraph C2.5.2

#	TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
					(Calibration).
13	NDE	1	Forward and Aft Davit Arms	3.2.5 (NDE)	Submit a CFR.
14	Preserve	1	Twin Pivot Arm Davit and foundation	3.2.4 (Preservation)	
15	Groom and Lubricate	1	Twin Pivot Arm Davit	3.2.6 (Groom and Lubricate)	Renew equipment lubrication in accordance with TP 3943, paragraph 4.5.
16	Operational and Weight Test		Twin Pivot Arm Davit	3.2.8 (Operational and weight test) B2.7.2 (Dual point davits)	Perform tests in accordance with SFLC Std Spec 5000 and paragraph 3.3 of this work item.
17	Weatherize	All	Hose fittings	C2.2.1.2.2 (Weatherization).	

3.3 Test requirements - Post Overhaul.

3.3.1Test plan. The Contractor must submit a test plan to the KO for approval, to include the tests prescribed herein, prior to commencement of testing.

3.3.2 Test notification. The Contractor must give Coast Guard personnel 07 days notice prior to testing.

3.3.3 Operational and weight tests. After completion of work and in the presence of Coast Guard personnel and a qualified Tech Rep, who is certified/authorized by Welin Lambie on Model TW.PIV 5.0B davit, the Contractor must conduct the following operational tests of the davit system, on a level plane to prove satisfactory operating condition in accordance with SFLC Std Spec 5000 and as specified herein. Submit a CFR summarizing all test results.

3.3.3.1 No Load Test. Conduct an operational test of the davit using no load over the entire range of motion.

3.3.3.2 Winch Brake / Modified Static Load Test. Conduct a static brake test using 150% of the Safe Working Load (SWL) of 11,000 lbs (16,500 lbs plus or minus 25 lbs). Hold the load for a minimum of 5 minutes and inspect the brake for slippage or creep. Conduct test with a 50-50 weight distribution.

3.3.3.3 Dynamic Load tests. Conduct the following dynamic test using 125% of the Safe Working Load (SWL) of 11,000 lbs (13,750 lbs plus or minus 25 lbs) while the system is operated in the normal power mode and the hydraulically-stored energy mode (emergency operation). Conduct test with a 50-50 weight distribution for each operation mode.

3.3.3.3.1 Luffing speed test at 125% SWL. Record luffing speeds from the fully-retracted to the fully-extended positions and then from the fully-extended to fully-retracted positions at 125% SWL (13,750 lbs plus or minus 25 lbs).

NOTE

Both luffing speed tests in normal operation mode must meet a 30 to 33 second nominal luff-in and 41 to 43 second nominal luff-out time, plus or minus 3 seconds.

NOTE

Both luffing speed tests in emergency operation mode must meet a 24 to 28 second nominal luff-in and 24 to 28 second nominal luff-out time, plus or minus 3 seconds.

3.3.3.3.2 Dynamic test (at SWL) data recording. During the SWL dynamic test, record the following:

3.3.3.3.2.1 Main winch running speed test - gravity lower, measure and record the main winch speed

NOTE

The minimum speed must be 73.3 RPM rope drum speed.

3.3.3.3.2.2 Main winch hoist test - demonstrate variable speed, measure and record fast and slow hoist under power.

NOTE

The minimum fast speed and low hoist speeds must be 55 RPM and 19.5 RPM rope drum speed, respectively.

3.3.3.3.2.3 Main winch lower test - demonstrate variable speed, measure and record fast and slow lowering under power.

NOTE

The minimum fast speed and low lowering speeds must be 56.2 RPM and 20.7 RPM rope drum speed, respectively.

3.3.3.3.3 Emergency hand hoisting at 110% SWL (12,100 lbs). The hand hoist must be operated satisfactorily at 110% SWL (12,100 lbs).

3.3.3.4 Safety and emergency feature testing. Operate the davit and test all emergency stop(s), limit switch activation, brake turning handle, and emergency luffing mode (using accumulators).

3.3.4 Test certification. The Contractor must provide a test certification, identified by davit serial number and date of completion, upon successful completion of all testing.

3.3.5 Label plate. The Contractor must install a label plate(s) to document satisfactory test completion in accordance with SFLC Std Spec 5000, Appendix B, Paragraph B2.9 (Label Plates).

4. NOTES

4.1 Davit information:

- National Stock Number (NSN): 2030-99-454-8999

- Item name: Dual Point Davit
- Part Number (PN): TW.PIV5.0B
- Original Equipment Manufacturer (OEM): Welin Lambie LTD

4.2 Partial list of Government-furnished property. The following is a list of parts/components the Coast Guard requires to be renewed, but may not be all-inclusive of parts that may need to be renewed. Additional parts recommended by the Contractor for renewal must be done via CFR.

PART NUMBER	DESCRIPTION	QTY
892-02053	4 YEAR DAVIT IN-PLACE OVERHAUL KIT	
Boat Block Assembly Drawing 5650-5601		
5201-8711	Sheave Bush	2
5201-8611	Isolating Bush	4
675-05035	Tension Pin	2
7300-0120	Thrust Washer	2
7300-0121	Sleeve Bearing	2
651-10015	External Circlip	2
5440-5511	Rubbing Strip	4
5440-5711	Rubbing Strip	4
5440-5611	Rubbing Strip	4
616-02056	Slotted CSK HD Screw	16
616-02048	Hex HD Screw	8
616-02051	Plain Washer	8
616-02050	Hex HD Setscrew	8
616-02053	Hex Nut	8
616-02046	Plain Washer	16
Davit Assembly Drawing 5631-4601		
5204-5211	Ann Pivot Bush	4
639-01070	Locknut	4
5202-8411	Cylinder Pin Bush	4
5191-4711	Roller	8
7500-1225	Self-Lubricating Bearing	32
679-40032	Split Cotter Pin	32
5191-4611	Roller	8
5418-1631	Striker Arm	2
679-38032	Split Cotter Pin	8
800-02033	Main Rope- FWD	1
800-02034	Main Rope – AFT	1
889-01048	Grease Nipple	28
889-01049	Grease Nipple	2
7967-0702	Oil Seal	32

5202-7211	Sleeve	32
7004-0055	Deep Groove Ball Bearing	32
652-00100	Internal Circlip	16
Winch Gearbox Assembly Drawing 5508-7002		
5405-6911	Gasket	1
5062-0611	Bearing Housing	1
7967-0453	Oil Seal	1
5201-6111	Sleeve	1
7004-0045	Deep Groove Ball Bearing	1
889-02105	Sealing Washer	2
889-02006	Flanged Plug	2
859-01333	Miniature Immersion Heater	1
679-40030	Split Cotter Pin	2
647-00820	Plain Washer	2
7500-1220	Self-Lubricating Bearing	2
5727-0801	Brake Cylinder	1
677-40045F	Split Cotter Pin	I
651-10065	External Circlip	2
7960-0603	O-Ring	1
7967-0401	Oil Seal	1
5520-6301	Brake Shoe Assembly	1
2520-1901	Centrifugal Brake Shoe Assembly	6
7960-0453	O-Ring	1
7967-0551	Oil Seal	1
652-10052	Internal Circlip	1
5425-6331	Cylinder Plate	1
5204-5011	Bush	1
679-38020	Split Cotter Pin	1
647-00810	Plain Washer	1
7500-0612	Self-Lubricating Bearing	2
5421-8011	Pivot Plate	1
629-00016	Hex Nut	1
609-16150	Hex HD Setscrew	1
894-01706	Bonded Washer	1
683-00327	Compression Spring	4
647-00816	Plain Washer	4
651-10030	External Circlip	4
647-00830	Plain Washer	4
5492-6011	Motor T.B. Gasket	1
651-10045	External Circlip	1
677-40025F	Split Cotter Pin	6

Falls Tension Winch Assembly Drawing 5503-3902		
5142-6911	Anchor Pin	2
5590-1411	Modified Nut	2
679-39050	Split Cotter Pin	2
5492-601 l	Motor T.B. Gasket	2
5293-231 l	Gasket	2
7960-1543	O-Ring	2
891-05524	Brake Lining	2
Control Station Assembly Drawing 5694-4701		
830-00110	PVC Strip Seal	1
5405-7111	Gasket	1
Hydraulic Assembly Drawing 5631-4602		
5726-6101	Pressure Hose Assembly	2
5726-5901	Pressure Hose Assembly	2
5726-6001	Pressure Hose Assembly	4
890-90204	Equal Tee	1
890-90203	Elbow Fitting	1
Hydraulic Reservoir Assembly Drawing 5735-1001		
5405-7911	Reservoir Gasket	1
894-00915	Suction Strainer	2
894-00836	Oil Heater	1
894-01709	Bonded Washer	1
894-00835	Air Bag	1
894-00913	Pressure Filter	2
894-00822	Desiccant Breather	1
894-00834	Desiccant Breather Adaptor	I
894-00813	Breather	1
894-00321	Relief Valve	2
891-00601	Pressure Filter Element	2
891-00449	Water Filter Element	1
894-00908	Return Filter Element	1
5492-6011	Motor T.B. Gasket	2
894-10213	Male Stud Coupling	2
894-10215	Male Stud Coupling	4
894-11355	Reducer	2
5425-8911	Bell Housing Gasket	2
5433-7811	Pump Gasket	2
894-00206	Hydraulic Pump	2
Hydraulic Panel Assembly Drawing 5733-1301		
894-00319	Solenoid Coil	1
5406-4511	Hydraulic Panel Gasket	1

Misc.		
885-02061	Accumulator Gas Valve	2
885-02059	Accumulator Bladder Kit	2
885-02072	Accumulator Bleed Valve	2
891-00460	Accumulator Cushion Ring	2
885-02025	Accumulator Safety Block	1
885-02073	Accumulator Burst Disk	2
892-01013	Seal Kit (Hyd Cylinder)	2
891-00451	Overcentre Valve	4

WORK ITEM 17: Commissary Hoist, Inspect and Service

1. SCOPE

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

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

None.

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3562, Sep 2013, SWBS 589, Section C, Dumbwaiter, Model –F-WK-806

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

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

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

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the inspections listed in the following tasks in Table 1:

- Task #1.
- Task #2.
- Task #3.

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).

3.2 Inspection and service particulars. The Contractor must perform the tasks listed in Table 1 below in accordance with TP 3562, SWBS 589C; and using SFLC Std Spec 5000 as guidance.

TABLE 1 – TASK PARTICULARS

				ADDITIONAL REQUIREMENTS	
#	**TASK TYPE**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM 5000_STD**	**OTHER**
1	Operate and Inspect	1	Commissary Hoist	3.2.1 (Operate and inspect	Refer to TP 3562, SWBS 589C Submit a CIR.
2	Disassemble and Inspect	1	Electric brake	D2.3(Brakes and clutches)	Submit a CIR
3	Overhaul and Preserve	1	Electric Motor	3.2.4 (Preservation)	Perform requirements in paragraphs 3.1 thru 3.4.3 of SFLC Std Spec 3020. Submit a CIR for all inspections required
4	Service and Inspect	1	Hoist Sheave Assembly	3.2.2 (Service and inspect)	Submit a CFR.
5	Service and Inspect	1	Deflection Sheave Assembly	3.2.2 (Service and inspect)	Submit a CFR.
6	Service and Inspect	2	Carriage Guide Roller and Side Roller Assemblies	3.2.2 (Service and inspect)	Submit a CFR.
7	Service and Inspect	1	Carriage Sheave Assembly	3.2.2 (Service and inspect)	Submit a CFR.
8	Service and Inspect	1	Carriage Broken Rope Safety Device Assembly	3.2.2 (Service and inspect)	Submit a CFR.
9	Service and Inspect	1	Slack Rope Safety Device Assembly	3.2.2 (Service and inspect)	Submit a CFR.
10	Service and Inspect	1	Wire Rope Drum and Drum Shaft Assembly	3.2.2 (Service and inspect)	Submit a CFR.
11	Service and Inspect	1	Sprockets and Sprocket Shaft Assemblies, Roller Chain, and Chain Tension Assembly	3.2.2 (Service and inspect)	Submit a CFR.
12	Service and Inspect	1	Door Assembly	3.2.2 (Service and inspect)	Submit a CFR.
13	Service and Inspect	1	Control Station	3.2.2 (Service and inspect)	Submit a CFR.

				ADDITIONAL REQUIREMENTS	
#	TASK TYPE	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM 5000_STD	OTHER
14	Service and Inspect	1	Door Switch Assembly	3.2.2 (Service and inspect)	Submit a CFR.
15	Service and Inspect	1	Hold Level Door Assembly	3.2.2 (Service and inspect)	Submit a CFR.
16	Service and Inspect	1	Hold Level Deck Control Station	3.2.2 (Service and inspect)	Submit a CFR.
17	Service and Inspect	1	Hold Level Deck Door Switch Assembly	3.2.2 (Service and inspect)	Submit a CFR.
18	Service and Inspect	All	Guide Rail Assemblies	3.2.2 (Service and inspect)	Submit a CFR.
19	Service and Inspect	1	Carriage Assembly	3.2.2 (Service and inspect)	Submit a CFR.
20	Service and Inspect	1	Up Over Travel Limit Switch Assembly	3.2.2 (Service and inspect)	Submit a CFR.
21	Service and Inspect	1	Down Stop Limit Switch Assembly	3.2.2 (Service and inspect)	Submit a CFR.
22	Service and Inspect	1	Up Stop Limit Switch Assembly	3.2.2 (Service and inspect)	Submit a CFR.
23	Service and Inspect	1	Slack Rope Safety Device Limit Switch Assembly	3.2.2 (Service and inspect)	Submit a CFR.
24	Service and Inspect	1	Worm Gear Reducer	3.2.2 (Service and inspect)	Submit a CFR.
26	Renew	1	Wire Rope Assembly	D2.2 (Wire Rope Assemblies)	Refer to TP 3562, SWBS 589C
27	Preserve	1	Commissary Hoist Assembly	3.2.4 (Preservation)	Preservation to include: capstan assembly housing and foundation and the motor casing, and gear reducer, and all other previously painted associated components surfaces. Select the following top coat colors: Grey (26307)
28	Adjust and Align	1	Rails and Car Guide		Refer to TP 3562, SWBS 589C
29	Groom and lubricate	1	Commissary Hoist	3.2.6 (Groom and lubrication)	Refer to lubrication table in TP 3562, SWBS 589C

3.3 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 Commissary Hoist to be in satisfactory operating condition. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 18: Buoy Crane, Appleton EB600-60-40, Inspect and Service

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and service the Appleton EB600-60-40 Crane.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Main Fall Wire Rope	NSN: 4010-01-486-0047 PN: JWCG13001919PL	1	2,642.00
N	Aux Fall Wire Rope	NSN: 4010-01-594-2228 PN: JWCG75200637PL	1	805.32

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

2. REFERENCES

COAST GUARD DRAWINGS

None.

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 10512, Section 573-A, July 2018, Buoy Handling Crane – Model EB600-60-40

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

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

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Auxiliary Machine Systems

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. The Contractor must submit a CIR for the inspections required in the following Table 1 tasks:

- Task# 1.
- Task# 2.
- Task# 3.
- Task# 4.
- Task# 5.
- Task# 6.

3.1.2 Tech Rep. The Contractor must provide the services of a Qualified Technical Representative who is familiar with the Appleton EB600-60-40 equipment/system, to accomplish the following on site:

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

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

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

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

3.1.3.1 Protective measures, hydraulic system(s). 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, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

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

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

3.2 Tasks. The Contractor must perform the tasks specified in Table 1, for the buoy crane, in accordance with SFLC Std Spec 5000 and CG TP 10512. Install all Government-furnished equipment and components, as applicable, during equipment/component reassembly.

TABLE 1 - RECURRING TASKS

#	TASK TYPE	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
1	Operate and Inspect	1	Buoy Crane Assembly	3.2.1 (Operate and inspect)	Submit a CIR.
2	Service and Inspect	1	Buoy Crane Assembly	3.2.2 (Service and inspect)	Submit a CIR.
3	Disassemble and Inspect	1	Main Winch Brake Cylinder Assembly	3.2.3 (Disassemble and inspect) D2.3 (Brake and clutch)	Renew friction discs. Submit a CIR.
4	Disassemble and Inspect	1	Aux Winch Brake Cylinder Assembly	3.2.3 (Disassemble and inspect) D2.3 (Brake and clutch)	Renew friction discs. Submit a CIR.
5	Disassemble and Inspect	4	Slew Drive Brake Assemblies	3.2.3 (Disassemble and inspect) D2.3 (Brake and clutch)	Renew friction discs. Submit a CIR.
6	Service and Inspect	All	Fwd HPU Assemblies	3.2.2 (Service and inspect) C2.1 (Fluids)	Submit a CIR. Renew reservoir oil, and reservoir filters.
7	Renew	1	Main Hoist Wire Rope Assembly	D2.2 (Wire rope assemblies)	GFP. See 4.1 (Retention of wire rope manufacturer's Test Certification and Serial Number)
8	Renew	1	Aux Hoist Wire Rope Assembly	D2.2 (Wire rope assemblies)	GFP. See 4.1 (Retention of wire rope manufacturer's Test Certification and Serial Number).
9	Partially-Preserve	All	Crane Exterior Surfaces	3.2.4 (Preservation)	Surfaces to be preserved are all previously-painted surfaces, including but not limited to: boom, cylinder bodies, turret, hydraulic motor case, pedestal/foundation, winch body, control stand, foundation bolts and flange, etc. Disconnect components, as necessary, to facilitate partial-preservation.
10	Groom and Lubricate	1	Buoy Crane Assembly	3.2.6 (Groom and lubricate) C2.4 (Valves and manifolds)	Perform all tasks in TP 10512, paragraph 4-23. Set and tag in place all system pressure control valves (e.g. relief valves, etc.).

#	TASK TYPE	QTY	COMPONENT OR ASSEMBLY	APPENDIX AND PARA. FROM SFLC STD SPEC 5000	OTHER
11	Final test	1	Buoy Crane Assembly	B2.4.1 (Functional / No-load test) B2.4.3 (Winch Brake / Modified static load test) B2.4.4 (Dynamic Overload test) B2.4.5 (Rated load test)	Perform operational and weight testing. Use Paragraph 6-10 and Appendix W of TP 10512 for guidance. Refer to Table 2 for required test weights. Submit a CFR.
12	Fabricate and Install	1	Label plate	B2.9 (Label plates)	
13	Weatherize	All	Hose fittings	C2.2.1.2.2 (Weatherization).	

TABLE 2 - TEST WEIGHTS

	TEST WEIGHTS – AUX HOIST
Modified Static Test	15,000 (+5% - 0%)lbs
Dynamic	12,500 (+5% - 0%)lbs
Rated	10,000 (+0% - 5%)lbs at rated speed
	TEST WEIGHTS – MAIN HOIST
Modified Static Test	60,000 (+5% - 0%)lbs
Dynamic	45,000 (+5% - 0%)lbs
Rated	40,000 (+0% - 5%)lbs at rated speed

NOTE

Coast Guard Personnel will operate equipment.

3.3 Filtering hydraulic system using Contractor filter cart. The Contractor must furnish a minimum 5gpm filtering cart/rig equipped with a three-micron absolute filter, a water separator, and a pressure differential gage across the filter element assembly. Connect the supply and discharge lines of the filtering cart/rig to the hydraulic system.

NOTE

The best connection points will minimize filtering time and will maximize the rate at which previously unfiltered fluid passes through the rig/cart. Select points at opposite ends of the reservoir if possible.

3.3.1 Continuously circulate system hydraulic fluids through the filtering cart/rig. The Coast Guard Inspector must cycle all system actuators four separate times as described in the notice below during the filtering process. Upon conclusion of actuator cycling, take a hydraulic oil sample.

NOTE

To dislodge and suspend particulate contamination and to heat the fluid to a maximum, constant, steady state temperature, the Coast Guard inspector will cycle all actuators associated with the hydraulic system for a minimum of 20 minutes at the start of the filtering process. The Coast Guard Inspector will repeat this process a minimum of three additional times, equally spaced through the filtering period.

3.3.2 The Contractor must renew the filter element as required and whenever the pressure differential across the filter element exceeds the filter element manufacturer's specifications.

3.3.3 The Contractor must furnish a portable oil sample particle counting analyzer. All oil samples must be immediately tested with the portable analyzer onboard the Cutter. Submit CFR.

3.3.4 Whenever a noticeable increase in the pressure drop across the filter cart is observed, the filter must be renewed. Be aware that this may occur as frequently as 15 min intervals.

3.3.5 During filtering, constant monitoring of the filtering oil must be maintained in order to determine the contamination level. Filtering must continue until the fluid entering the return filter meets the particle population ISO cleanliness code of 19/17/14, in accordance with ISO 4406. In addition, the Contractor must visually inspect return filter for contamination and submit CFR.

3.3.6 The Contractor must furnish return filters as required and whenever the pressure differential across the filter element exceeds the filter element manufacturer's specifications. The Contractor must dispose all used filters in accordance with all rules and regulations.

3.3.7 Take a representative sample of oil from the hydraulic system in accordance with Std Spec 5000 paragraph C2.1.3. Send sample out to a laboratory for oil analysis. Analysis must include viscosity, moisture, total acid number, particle size and population in sufficient detail to determine ISO cleanliness code of 19/17/14, in accordance with ISO 4406. Submit CFR.

4. NOTES

4.1 Retention of wire rope manufacturer's Test Certification and Serial Number. Ship's crew will retain both main and aux wire rope manufacturer's test certification and serial numbers.

WORK ITEM 19: Grey Water Holding Tanks, 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 – TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (Gallons)	LOW SUCTION (Gallons)
Grey Water Tank	4-82-2-W	2,798	106
Grey Water Tank	4-48-1-W	11,250	350
Grey Water Tank	4-48-2-W	11,250	350

1.2 Government-furnished property.

None.

1. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System Diagram

Coast Guard Drawing 225B WLB 593-009, Rev B, Sewage Holding Tank

COAST GUARD PUBLICATIONS

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

OTHER REFERENCES

ASTM International (ASTM) D1330, 2015, Standard Specification for Rubber Sheet Gaskets

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).

3.1.3.1 Plug all inlet and outlet piping in the tank(s) to prevent contaminants from entering. Use plugs with an attached lanyard, ring or other system that will ensure plugs are not lost in the pipe openings.

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.
- Pump(s).
-

3.2 Plug log. The Contractor must keep a written record of all plugs put in any tank vents. A separate list must be kept for each tank being entered.

3.2.1 Ensure that all plugs are removed from each tank upon completion of work in the tank.

3.2.2 The plug log must be available to the Coast Guard Inspector when the inspector is performing his close-out inspection on each tank.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.4 Service disruption. When grey water is disrupted due to Contractor repairs, the Contractor must refer to SFLC Standard Spec 0000 par 3.2.11 to provide required temporary facilities.

3.5 Cleaning. The Contractor must accomplish the following for the tank(s) listed. The Contractor must refer to Coast Guard drawings 225B WLB 593-001 and 225B WLB 593-009 for guidance.

3.5.1 Content removal. Remove and dispose of all contents, fluids, and/or residues in accordance with all applicable Federal, state, and local regulations

3.5.2 Cleaning requirements. Remove manhole cover(s). Clean all tank structure's interior surfaces free of all foreign materials, sediment, and sludge. Remove all persistent residues, taking care not to damage the tank coating system. 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. Collect, contain, and dispose of all wash media, residues, and cleaning materials in accordance with all Federal, state, and local regulations. Clean all tank vent lines. Remove and clean the eductors and level switches inside of the tank(s). Reinstall the eductors and level switches upon completion of tank cleaning. Use new gaskets and o-rings to install/reinstall all removed/disturbed components.

3.6 Inspection. The Contractor must visually inspect all interior surfaces, including, but not limited to bulkheads, floor and overhead plating, structural members, manhole cover surfaces, fasteners and gasket seating surfaces. Submit the Tank and Void Inspection Form, and a CFR including the following, as applicable:

- Tank structural condition.
- Inaccessible areas.
- Condition of tank coating, including measurements taken, percentage, location, and type of coating failure (not applicable for stainless steel tanks).
- Tank level indicator (TLI), vacuum and/or float switch condition.
- Suction and discharge piping and vent line condition.
- Fastener material (stainless steel) and condition.
- Zinc anode condition (remaining percentage).

3.7 Control panel assembly. The Contractor must open and vacuum clean the control panel assembly. Inspect the control panel assembly for any indications of overheating or loose wiring or connections. Submit a CFR

3.8 Closing. The Contractor must notify the COR at least 24 hours prior to closing the tank(s). After satisfactory inspection by the Coast Guard Inspector, and completion of all authorized repairs, close the manhole cover(s) with new gasket material conforming to ASTM D1330.

3.8.1 Renew 100% of nylon insert/nylock nuts and washers.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.9.1 The Contractor must adjust the set point on each of the vacuum pressure switches (as applicable) to the set points noted previously.

3.9.2 The Contractor must verify operation of the low and high level switches/alarms and that the pumps cycle from lead to lag status during operation. Demonstrate proper operation of tank TLIs to prove satisfactory operating condition.

3.9.3 Upon completion of testing and, in the presence of the Coast Guard Inspector, the Contractor must pump tank(s) to the limit of the ship's installed pumps.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 20: Sewage Holding Tanks, 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 – TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (Gallons)	LOW SUCTION (Gallons)
Sewage Holding Tank	4-82-2-W	1,772	
Sewage Atmospheric Tank	4-82-0-E	600	

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System Diagram

Coast Guard Drawing 225B WLB 593-009, Rev B, Sewage Holding Tank

COAST GUARD PUBLICATIONS

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

OTHER REFERENCES

ASTM International (ASTM) D1330, 2015, Standard Specification for Rubber Sheet Gaskets

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).

3.1.3.1 Plug all inlet and outlet piping in the tank(s) to prevent contaminants from entering. Use plugs with an attached lanyard, ring or other system that will ensure plugs are not lost in the pipe openings.

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.
- Pump(s).
-

3.2 Plug log. The Contractor must keep a written record of all plugs put in any tank vents. A separate list must be kept for each tank being entered.

3.2.1 Ensure that all plugs are removed from each tank upon completion of work in the tank.

3.2.2 The plug log must be available to the Coast Guard Inspector when the inspector is performing his close-out inspection on each tank.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

3.5 Cleaning and inspection requirements. The Contractor must accomplish the following for the tank(s) listed in paragraph 1.1 (Intent), referring to Coast Guard drawings 225B WLB 593-001 and 225B WLB 593-009 for guidance:

3.5.1 Content removal. Remove and dispose of all contents, fluids, and/or residues in accordance with all applicable Federal, state, and local regulations

3.5.2 Cleaning requirements. Remove manhole cover(s). Clean all tank structure's interior surfaces free of all foreign materials, sediment, and sludge. Remove all persistent residues, taking care not to damage the tank coating system. 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. Collect, contain, and dispose of all wash media, residues, and cleaning materials in accordance with all Federal, state, and local regulations. Clean all tank vent lines. Remove and clean the eductors and level switches inside of the tank(s). Reinstall the eductors and level switches upon completion of tank cleaning. Use new gaskets and o-rings to install/reinstall all removed/disturbed components.

3.5.3 Inspection. Visually inspect all interior surfaces, including, but not limited to bulkheads, floor and overhead plating, structural members, manhole cover surfaces, fasteners and gasket seating surfaces. Submit a CFR including the following, as applicable:

- Tank structural condition.
- Inaccessible areas.
- Condition of tank coating, including measurements, percentage, location, and type of coating failure (not applicable for stainless steel tanks).
- Tank level indicator (TLI), vacuum and/or float switch condition.
- Suction and discharge piping and vent line condition.
- Fastener material (stainless steel) and condition.
- Zinc anode condition (remaining percentage).

3.5.4 Control panel assembly. Open and vacuum clean the control panel assembly. Inspect the control panel assembly for any indications of overheating or loose wiring or connections. Submit a CFR

3.6 Closing. The Contractor must notify the COR at least 24 hours prior to closing the tank(s). After satisfactory inspection by the Coast Guard Inspector, and completion of all authorized repairs, close the manhole cover(s) with new gasket material conforming to ASTM D1330.

3.6.1 The Contractor must renew 100% of nylon insert/nylock nuts and washers.

3.6.1 Chase threads on studs to ensure even installation of the access covers. Renew any damaged or missing fasteners. Existing undamaged fasteners may be reused. For purpose of bid, assume 10% of existing fasteners will require renewal. Renew all nylon insert nuts.

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

3.7 Operational test, post repairs. After completion of work, the Contractor must accomplish the following in the presence of the Coast Guard Inspector, and submit a CFR:

3.7.1 Adjust the set point on each of the vacuum pressure switches (as applicable) to the set points noted previously.

3.7.2 Verify operation of the low and high level switches/alarms and that the pumps cycle from lead to lag status during operation. Demonstrate proper operation of tank TLIs to prove satisfactory operating condition.

3.7.3 Upon completion of testing and, in the presence of the Coast Guard Inspector, pump tank(s) to the limit of the ship’s installed pumps.

4. NOTES

4.1 Atmospheric tank. The atmospheric sewage tank is a standalone tank and is not a part of the ship's structure.

WORK ITEM 21: Sewage Piping, Clean and Flush

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to clean the sewage piping system.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 528-001, Rev E, Plumbing and Interior Deck Drains

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System

COAST GUARD PUBLICATIONS

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

OTHER REFERENCES

ASTM International (ASTM) D1330, 2010, Standard Specification for Rubber Sheet Gaskets

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 below-listed:

- Sewage pumps (Isolate pumps for chemical (e.g. ridlime) soak method)
- Toilets

3.2 Contamination prevention. The Contractor must take all precautions to prevent contamination of personnel and spaces in accordance with all applicable Federal, state, and local regulations.

3.3 Personnel qualification. The Contractor must ensure that personnel accomplishing this work are qualified and experienced in operating the pressurized water system and handling the chemicals. For each operator/cleaning technician, submit documentation of applicable experience and training obtained within the last twelve months along with the Cleaning Plan.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.4 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.

3.5 Cleaning plan. Submit the written plan for chemical cleaning to the COR for approval 96 hours before work is to commence. The procedure must include products to be used, safety precautions, disposal requirements, sequence of events, etc. Submit a MSDS to the COR for all chemicals proposed for use. Changes to the chemical cleaning plan as written, need to be approved by the COR (and Facilities).

CAUTION

Although the Coast Guard prefers pressurized water as the cleaning fluid, the Contractor may propose chemical cleaning as an alternative, providing that the proposed chemical cleaning agent is environmentally safe, suitable for use in marine sewage piping application, and pre-approved by the COR.

The chemicals used in the cleaning (including cleaning chemicals, neutralizing compounds, and defoaming chemicals) must not cause any significant detrimental effects to the sewage piping system or any other system components Due to the fact that system piping has historically been difficult to clean by pressure washing only, chemical cleaning is usually required to successfully complete the cleaning process.

3.5.1 Procedure requirements. The Contractor must ensure that the procedure includes the following:

- Methods of cleaning.
- All safety precautions required during cleaning operations.
- List of qualified personnel who will operate machinery or handle chemicals (see paragraph 3.3 (Personnel qualification) herein).
- Locations in the sewage piping where cleaning will take place, and any additional fittings necessary.

- Sequence of each location that ensures all piping sections will be cleaned and all foreign debris removed.

3.5.2 Plan submittal. The Contractor must submit the written plan to the COR for approval at least 48 hours prior to commencing cleaning operations. Changes to the chemical cleaning plan as written, need to be approved by the COR (and local Facilities).

3.6 Clean and flush. The Contractor must clean and flush approximately 1,000 linear feet of sewage system piping, shown on Coast Guard Drawings 225B WLB 593-001 and 225B WLB 528-001.

3.6.1 Pumps and valves. Replace system tank valve(s) with temporary spool piece(s) before cleaning. Visually inspect system pumps and valve(s); and submit a CFR. Upon completion of work, reinstall the removed tank valve(s) with new gaskets.

3.6.2 Cleaning. Continue cleaning until all of the following conditions are met:

- All visible calcium carbonate deposits, solid deposits and build-up are removed from pipe walls.
- Discharge water from the piping being cleaned is free of all visible scale and deposits.

3.6.3 Inspect the piping interior using a borescope in the presence of the COR, to verify that all solid deposits visible to the unmagnified eye have been removed. Continue the cleaning process until all visible solid deposits are removed from the pipe walls.

3.6.4 Flush twice the volume of the system cleaned with water to include 3 repeated pH tests between 6 and 8. The flushing water shall be collected and disposed by the Contractor.

3.7 Waste disposal. The Contractor must dispose of all cleaning fluids and debris in accordance with all applicable Federal, state, and local regulations. Remove all unused chemicals from USCG property immediately upon completion of work item. Do not drain any fluids (including fresh water) into any space, bilge, or exterior location.

3.8 Gasket renewal. The Contractor must reinstall all removed valves and fittings with new gasket material conforming to ASTM D1330.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.9.1 Leak test. After all system components are reinstalled, the Contractor must test all disturbed piping for leaks, as follows, and submit a CFR:

- Plug all system openings (except the highest) and fill system with water to the point of overflow. Ensure that the water level does not go down (without adding any water) for sufficient time to inspect the entire system (no less than 15 minutes).
- Closely monitor the system for leaks. Repair all leaks detected.

- Repeat test and inspection until no leaks are detected.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 22: Tanks (Sewage Holding), Preserve "100%"

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to prepare and preserve 100% of the following tank(s):

TABLE 1 – TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (Gallons)	LOW SUCTION (Gallons)
Sewage Holding Tank	4-82-2-W	1,772	
Sewage Atmospheric Tank	4-82-0-E	600	

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System Diagram

Coast Guard Drawing 225B WLB 593-009, Rev B, Sewage Holding Tank

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General. The Contractor shall refer to Coast Guard drawings 225B WLB 593-001 and 225B WLB 593-009 for guidance.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, the Contractor shall 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 The Contractor shall plug all inlet and outlet piping in the tank(s) to prevent contaminants from entering. Use plugs with an attached lanyard, ring or other system that will ensure plugs are not lost in the pipe openings. Maintain a plug accountability log outside the tank to prevent any of the installed temporary plugs from being lost inside the tank or forgotten inside at tank closure. Submit this log to the COR after completion of work item.

3.1.4 Interferences. The Contractor shall 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.
- Pumps.
- TLI.
- Sewage ejector assembly.

3.1.5 Temporary access openings. Due to limited access to work areas, the Contractor may, with express permission of the KO (via submission of a CFR), cut access holes to facilitate accomplishment of the work specified herein. Perform all work required to open and close the access openings in accordance with SFLC Std Spec 8636.

NOTE

Requirements for tank opening and closing, content disposal, and inspection are covered in the clean and inspect work items.

3.2 Inspection. After surface preparation and before coating application, the Contractor shall visually inspect all interior surfaces; including, but not limited to bulkheads, floor and overhead plating, structural members, manhole cover surfaces, fasteners and gasket seating surfaces. Submit a CFR including the following, as applicable:

- Structural condition.
- Inaccessible areas.
- Tank level indicator (TLI) and/or float switch condition.
- Sounding tube and striker plate condition.
- Suction and discharge piping.

3.3 Surface preservation. The Contractor shall accomplish the following tasks for the tanks listed in paragraph 1.1 (Intent):

3.3.1 Remove and retain the tank manhole cover(s). Remove the sewage ejector and bulkhead packing gland assembly.

3.3.2 Prepare and coat all tank interior surfaces (including the interior and exterior bulkhead surfaces under the packing gland assembly and the internal surfaces of manhole cover(s), the manhole cover hull ring(s) extending outward to the weld line that ties the hull ring into the tank plating on the tank exterior), using the system specified for "Tanks and Voids (Grey Water, Sewage, and CHT Tanks), Option I", in SFLC Std Spec 6310, Appendix B (Cutters and Boat Interior Paint Systems). Select finish/top coat color to match existing.

3.3.3 Prepare and coat all manhole cover external surfaces to match existing adjacent surfaces, using the system specified for “Decks, Metal Interior and Non-Skid Areas (Steel and Aluminum Decks - Wet Areas, Food Preparation Areas, Exit Areas, and Areas Subject To Condensation)”, in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select finish/top coat color to match existing adjacent surfaces.

3.4 In-process quality control measures. The Contractor shall 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). Surfaces being preserved are considered “critical-coated surfaces”.

4. NOTES

Per Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements, the following paragraph may be applicable:

3.2.11.1 Sanitary facilities for vessel-personnel – due to disruption of grey water and sewage systems. When the shipboard grey water and sewage systems are disrupted due to repairs required by contract work, the Contractor shall provide vessel-personnel with a sanitary facility, within a five minute walking

distance from the vessel, to include the amenities listed in Table 2(Sanitary Facility Amenities). Ensure the following:

- Shower stalls are equipped with privacy screens.

- Sinks are provided with fresh hot and cold water.

- Electrical convenience GFI receptacles, in accordance with NFPA 70, National Electric Code (NEC), are located in vicinity of sinks.

- Toilets have doors or privacy dividers.

- Lockers are capable of being locked.

WORK ITEM 23: Tanks (Sewage Holding), Preserve "Partial"

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to prepare and preserve the following tank(s):

TABLE 1 – TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (Gallons)	LOW SUCTION (Gallons)
Sewage Holding Tank	4-82-2-W	1,772	
Sewage Atmospheric Tank	4-82-0-E	600	

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System Diagram

Coast Guard Drawing 225B WLB 593-009, Rev B, Sewage Holding Tank

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General. The Contractor shall refer to Coast Guard drawings 225B WLB 593-001 and 225B WLB 593-009 for guidance.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

3.1.4 Interferences. The Contractor shall 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.
- Pump(s).
-

3.1.5 Temporary access openings. Due to limited access to work areas, the Contractor may, with express permission of the KO (via submission of a CFR), cut access holes to facilitate accomplishment of the work specified herein. Perform all work required to open and close the access openings in accordance with SFLC Std Spec 8636.

NOTE

Requirements for tank opening and closing, content disposal, and inspection are covered in the clean and inspect item.

3.2 Surface preservation. The Contractor shall prepare and coat the designated tank interior surfaces, using the system specified for "Tanks and Voids (Grey Water, Sewage, and CHT Tanks), Option I", in SFLC Std Spec 6310, Appendix B (Cutters and Boat Interior Paint Systems). Power tool clean all affected surfaces to “bare metal”, 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. Select finish/top coat color to match existing adjacent surfaces.

3.3 In-process quality control measures. The Contractor shall 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). Surfaces being preserved are considered "critical-coated surfaces".

4. NOTES

Per Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements, the following paragraph may be applicable:

3.2.11.1 Sanitary facilities for vessel-personnel – due to disruption of grey water and sewage systems. When the shipboard grey water and sewage systems are disrupted due to repairs required by contract work, the Contractor shall provide vessel-personnel with a sanitary facility, within a five minute walking distance from the vessel, to include the amenities listed in Table 2(Sanitary Facility Amenities). Ensure the following:

- Shower stalls are equipped with privacy screens.

- Sinks are provided with fresh hot and cold water.

- Electrical convenience GFI receptacles, in accordance with NFPA 70, National Electric Code (NEC), are located in vicinity of sinks.

- Toilets have doors or privacy dividers.

- Lockers are capable of being locked.

WORK ITEM 24: Temporary Services, Provide - Cutter

1. SCOPE

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

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. 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).

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

TABLE 1 - SERVICE SELECTION

*SUB-PARAGRAPH	TITLE	Y/N
3.3.1	Office space	
3.3.2	Telephone and internet access	
3.3.3	Parking	
3.3.4	Duty section berthing: __ male, __ female. Duty section berthing must be provided for {Note: Choose one and delete the rest: (1) The entire duration of the availability, (2) during disruption of berthing areas or (3) _____ days}	
3.3.5	Electrical power (including all requirements in associated sub-paragraphs)	
3.3.6	Hull grounding straps (not applicable when cutter is waterborne)	
3.3.7	Compressed air (including all requirements in associated sub-paragraphs)	
3.3.8	Hazardous material/hazardous waste disposal (see Tables 2 and 3 below)	
3.3.9	Heavy lift equipment: {__ day(s)/or __ hour(s)}	
3.3.10	Water supply	
3.3.10.1	Potable water: {___ gallons per day, at __ psig.}{ or _____ gallons, bulk}	X
3.3.10.2	Hot-circulating water	
3.3.10.3	Cooling water	
3.3.10.4	Firemain system (including all requirements in associated sub-paragraphs)	
3.3.11	Steam (including all requirements in associated sub-paragraphs)	
3.3.12	Refuse disposal	
3.3.13	Sewage and grey water disposal (including all requirements in associated sub-paragraphs)	
3.3.14	Storage – General (including all requirements in associated sub-paragraphs):	
3.3.14	Dry stores.	
3.3.14	Paint and flammable stores.	
3.3.14	Refrigerated stores.	
3.3.15	Small boat storage (including all requirements in associated sub-paragraphs)	

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

TABLE 2 - HAZARDOUS WASTE DISPOSAL – LIQUIDS (GALLONS)

PAINT THINNERS	ENGINE COOLANT	BILGE WATER
Xx	xx	xx

TABLE 3 - HAZARDOUS WASTE DISPOSAL – SOLIDS

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

***Previously housed hazardous materials.**

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 25: Insulated Case Circuit Breakers, Inspect, Maintain & Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect, maintain, and test insulated case circuit breakers located on the Thruster Switchboard that were designed and tested to UL 489 standards.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

COAST GUARD PUBLICATIONS

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

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

Coast Guard Technical Publication (TP) 3536, Jul 2003, Switchboard, Main, Emergency, and Thruster

OTHER REFERENCES

American National Standards Institute/National Electrical Manufacturers Association (ANSI/NEMA) AB 4, Mar 2011, Guidelines for Inspection and Preventive Maintenance of Molded Case Circuit Breakers Used in Commercial and Industrial Applications

American National Standards Institute/Underwriters Laboratories Inc. (ANSI/UL) 489, Molded Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures, Jan 2013

3. REQUIREMENTS

3.1 General.

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

- 3.2 (Operational assessment).
- 3.4.2 (Inspection).
- 3.4.3 (Testing)

3.1.2 Tech Rep. The Contractor shall provide the services of a Qualified Technical Representative (Tech Rep) who is familiar with the original equipment manufacturer or employed by a firm accredited by the InterNational Electrical Testing Association (NETA). An accredited firm shall use only NETA certified technicians (http://www.netaworld.org/) with calibrated test equipment during the performance of this work item.

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

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

3.1.5 The Contractor shall notify the Coast Guard Inspector 48 hours prior to starting work on this item.

3.1.6 Outages. The Contractor shall coordinate the disconnection and removal of the circuit breakers listed in the table below with the Coast Guard Inspector to ensure orderly shutdown of equipment. Providing temporary circuit breakers or temporarily relocating circuit breakers from non-essential circuits to essential circuits (same frame size and trip settings) are acceptable strategies to minimize outage durations. When power interruption is expected to exceed 15 minutes, secure uninterruptable power supplies and supported loads.

3.1.7 Essential circuits. The Contractor shall minimize the interruption of power to the following circuits, unless actively being serviced by other work items:

3.1.7.1 Ship service lighting (unless temporary lighting is installed).

3.1.7.2 Fire (circuits F and SM), flooding (circuit FD), and general (circuit G) alarms.

3.1.7.3 Main announcing (circuit 1MC) and dial telephone (circuit J) systems.

3.1.7.4 Galley, scullery, potable water heater, HVAC, and sewage systems (unless cutter crew is not living on board).

3.1.7.5 Electric fire pump (unless temporary firefighting water supply is connected).

3.2 Operational assessment. The Contractor shall perform an operational assessment of each circuit breaker listed in the table below prior to removal from the switchboard. Submit an operational assessment report via CFR.

3.2.1 General.

3.2.1.1 Ship’s Force shall operate all equipment, as well as remove and reinstall control power fuses.

3.2.1.2 For cutters with stationary mounted circuit breakers or draw-out type with no TEST position, Ship's Force shall run generators or operate shore power, as necessary, to establish safe plant conditions for the operational assessment and provide circuit breaker control power. Ensure that water cooled prime movers are furnished with adequate normal or temporary raw water supplies and that required auxiliaries such as batteries, exhaust, ventilation, start air, fuel oil, jacket water, and lube oil are available.

3.2.1.3 When practicable, operate draw-out type circuit breakers in the TEST position such that the primary contacts (stabs) are disconnected from the switchboard bus but all secondary (control) contacts are still connected to switchboard circuits. For generator circuit breakers, remove the control power transformer secondary winding fuses. Taking appropriate electrical safety precautions, connect a Contractor-furnished temporary control power supply, fused to an ampacity no greater than the normal control power supply, to the vacated load side fuse clips.

3.2.1.4 For a circuit breaker that is locked out and/or tagged out (caution or danger tag), typically in support of another work item, complete the tasking requiring the isolation or shift the work isolation boundary so that the lock and/or tags may be cleared. When shifting the isolation boundary is the only feasible option, such is typically accomplished by opening a local disconnect switch or temporarily disconnecting the feeder cable in accordance with SFLC Std Spec 3042. Ensure that a new lock and/or tag are installed at the new isolation boundary prior to clearing those from the circuit breaker to be removed.

3.2.2 Initial conditions. The circuit breaker to be operationally assessed is assumed to be open with the closing spring charged and control power available.

3.2.3 Manual operation. The Contractor shall perform the following for a circuit breaker with mechanical closing and opening controls on the frame:

3.2.3.1 Manually close the circuit breaker. Verify that the mechanical flag for circuit breaker position, if installed, changes state satisfactorily. Confirm that circuit breaker position indicating lights and machinery control system display, if applicable, also toggle. If installed, verify that the spring charging motor recompresses the closing spring and automatically drops out shortly after the spring is fully charged. If no spring charging motor is installed or it fails to operate, manually recompress the closing spring.

3.2.3.2 Manually trip the circuit breaker. Verify that the mechanical flag for circuit breaker position, if installed, changes state satisfactorily. Confirm that circuit breaker position indicating lights and machinery control system display, if applicable, also toggle.

3.2.3.3 If the circuit breaker is equipped with a mechanical or electrical lockout, activate each lockout device one at a time and verify that the circuit breaker cannot be closed manually.

3.2.3.4 If the circuit breaker is equipped with an undervoltage release coil, secure power to the coil by removing a secondary control power fuse or securing the temporary control power supply. Attempt to manually close the circuit breaker. Observe indicators and flags to ensure that the main contacts do not close (even momentarily). Discharge of the closing spring is acceptable. Reenergize the undervoltage release coil.

3.2.3.5 For circuit breakers without an undervoltage release coil or for those where the closing spring did not discharge while testing the undervoltage release closing interlock, secure control power to the spring charging motor, ensuring that the undervoltage release coil, if installed, remains energized. Some circuit

breaker designs have an internal spring charging motor switch for this purpose; otherwise a control power lead to the motor must be temporarily disconnected at the secondary terminal block. Manually close the circuit breaker and then manually open it to discharge the closing spring.

3.2.3.6 Verify that the mechanical flag for closing spring status, if installed, changes state during this step. Manually charge the closing spring, observing the ratchet mechanism and pawls for signs of damage, such as binding or excessive wear.

3.2.3.7 Reenergize any circuit breaker control circuits that were deenergized in paragraph 3.2.3.5 above.

3.2.4 Electrical operation. The Contractor shall perform the following for a circuit breaker with electrical closing and opening controls on the switchboard:

3.2.4.1 Electrically close the circuit breaker. Verify that the mechanical flag for circuit breaker position and closing spring status, if installed, change state satisfactorily. Confirm that circuit breaker position indicating lights and machinery control system display, if applicable, also toggle. If installed, verify that the spring charging motor recompresses the closing spring and automatically drops out shortly after the spring is fully charged. If no spring charging motor is installed or it fails to operate, manually recompress the closing spring.

3.2.4.2 Electrically trip the circuit breaker. Verify that the mechanical flag for circuit breaker position, if installed, changes state satisfactorily and that the shunt trip coil remains deenergized while the control switch is held in the TRIP position. Confirm that circuit breaker position indicating lights and machinery control system display, if applicable, also toggle.

3.2.4.3 If the circuit breaker is equipped with a mechanical or electrical lockout, activate each lockout device one at a time and verify that the circuit breaker cannot be closed electrically.

3.2.4.4 If the circuit breaker is equipped with an undervoltage release coil, secure power to it by temporarily disconnecting the associated lead at the secondary terminal block; ensure that power to the closing coil and position indicating circuit remains available. Attempt to electrically close the circuit breaker and observe indicators and flags to ensure that the main contacts do not close (even momentarily). Discharge of the closing spring is acceptable.

3.2.4.5 Reenergize any circuit breaker control circuits that were deenergized in paragraph 3.2.4.4 above.

3.2.4.6 If the circuit breaker is equipped with an anti-pump mechanism, electrically close the circuit breaker and continue to hold the control switch in the CLOSE position. If practicable, trip the circuit breaker on fault by simulating an overcurrent condition at the trip unit; otherwise defer this test until the circuit breaker arrives at the maintenance facility. Verify that the circuit breaker does not reclose until the control switch is released and another closing operation is attempted. Open the circuit breaker.

3.2.5 Bell alarm switch. The Contractor shall perform the following for a circuit breaker with a bell alarm switch:

3.2.5.1 Close the circuit breaker using mechanical or electrical control.

3.2.5.2 If practicable, automatically trip the circuit breaker by simulating an overcurrent condition at the trip unit or by momentarily deenergizing control power to activate the undervoltage release; otherwise

defer this test until the circuit breaker arrives at the maintenance facility. Verify that the bell alarm switch contacts are in the tripped state.

3.2.5.3 Manually reset the tripped circuit breaker using mechanical or electrical control. Verify that the bell alarm switch contacts are in the normal state.

3.2.6 Draw-out interlock. The Contractor shall perform the following for a circuit breaker with a draw-out interlock:

3.2.6.1 De-energize both sets of primary contacts (stabs) in the switchboard.

3.2.6.2 If the circuit breaker is equipped with an undervoltage release or can only be operated electrically and temporary control power is not already installed:

3.2.6.2.1 Remove the control power transformer secondary winding fuses.

3.2.6.2.2 Taking appropriate electrical safety precautions, connect a Contractor-furnished temporary control power supply, fused to an ampacity no greater than the normal control power supply, to the vacated load side fuse clips.

3.2.6.3 Ensure that the circuit breaker is withdrawn to the TEST position such that the primary contacts (stabs) are disconnected from the switchboard bus but all secondary (control) contacts are still connected to switchboard circuits.

3.2.6.4 Close the circuit breaker using mechanical or electrical control.

3.2.6.5 Attempt to rack in the closed circuit breaker to the CONNECTED position. Verify that such an operation is physically impossible or confirm that the circuit breaker automatically trips before the stabs reach the primary contacts in the switchboard.

3.2.6.6 If not already tripped, open the circuit breaker using mechanical or electrical control and fully insert it to the CONNECTED position.

3.2.6.7 Close the circuit breaker using mechanical or electrical control.

3.2.6.8 Attempt to rack out the closed circuit breaker to the TEST or DISCONNECTED position. Verify that such an operation is physically impossible or confirm that the circuit breaker automatically trips before the stabs separate from the primary contacts in the switchboard.

3.2.6.9 If not already tripped, open the circuit breaker using mechanical or electrical control.

3.2.7 Spring discharge interlock. The Contractor shall perform the following for a circuit breaker with a spring discharge interlock:

3.2.7.1 If not already compressed, charge the closing spring.

3.2.7.2 Rack out the open circuit breaker to the DISCONNECTED position. Verify that such an operation is physically impossible or confirm that the closing spring automatically discharges between the TEST and DISCONNECTED positions.

3.2.8 Restoration.

3.2.8.1 Ensure that the circuit breaker is open.

3.2.8.2 If not already accomplished, remove the circuit breaker control power transformer secondary winding fuses and disconnect any temporary control power supply.

3.2.8.3 If compressed, discharge the closing spring.

3.3 Removal. The Contractor shall comply with the following procedures while removing circuit breakers in completion of this work item:

3.3.1 Prior to the removal of each circuit breaker listed in the table below, record location (position or circuit identifier), wiring information, and if adjustable, as found pickup and time delay settings. Retain all mounting and connecting hardware for later reuse. Submit a CFR with all recorded data to the Coast Guard Inspector.

3.3.2 Disconnect and remove the circuit breakers listed in the table below.

3.3.3 Inspect the primary and secondary disconnects in the switchboard for wear and erosion. Check the torques of all primary disconnect studs to the bus work or power cable lugs. Inspect for broken control wiring lugs and check the tightness of wiring at the secondary disconnect terminal blocks. Renew any broken lugs and tighten any loose connections to wiring or bus.

3.3.4 Temporarily cover or insulate switchboard openings created by the removal of circuit breakers to prevent personnel contact with energized conductors and to block the entry of debris from other ongoing industrial activities.

3.4 Shop Work. The Contractor shall comply with the following procedures while servicing circuit breakers in completion of this work item:

3.4.1 Cleaning and lubrication. Clean accessible circuit breaker internals with manufacturer's approved solvents and lint free cloths. Do not use high pressure air or wire brushes. Lubricate all accessible components in accordance with manufacturer's instructions.

3.4.2 Inspection. Perform the inspections and take the measurements described below. Report all results, including any adjustments made, on a CFR.

3.4.2.1 Remove and inspect the arc chutes. Note if an arc chute is severely burned, cracked, or excessively eroded.

3.4.2.2 Visually inspect all primary contacts for wear, erosion, and evidence of overheating. Inspect associated insulators for cracks and degradation. Determine whether the condition of one or more contacts or insulators meets the criteria for renewal in accordance with manufacturer's guidelines.

3.4.2.3 Reinstall the arc chutes and torque all fasteners in accordance with manufacturer's instructions.

3.4.2.4 Inspect the primary and secondary disconnects (stabs) for wear and erosion. For a circuit breaker with finger type primary disconnects, check that the proper force is applied when a dummy bar, representative of the mating stationary disconnect, is inserted.

3.4.2.5 Inspect electrical switches, solenoids, relays, wiring, and motors for excessive wear and damage. Perform an insulation resistance check of all control wiring using a 500 VDC test voltage. Isolate and identify any wiring or component with insulation resistance of less than 1 MΩ to ground.

3.4.2.6 For a circuit breaker equipped with a spring charging motor, verify that the motor cutoff switch is aligned in accordance with manufacturer's instructions.

3.4.3 Testing. The Contractor shall test each circuit breaker listed in the table below as directed in this section after satisfactory visual inspection and completion of any authorized repair work.

3.4.3.1 Perform the following tests of ANSI/NEMA AB 4, Section 6:

- Mechanical operation
- Insulation resistance
- Individual pole resistance (millivolts drop)
- Inverse-time overcurrent trip (not applicable to non-automatic switches)
- Instantaneous overcurrent trip
- Rated hold-in current

3.4.3.2 Short-time overcurrent trip. This test is applicable only if the circuit breaker is equipped with a short-time delay trip. The operation of the short-time delay unit should be within 90% and 125% of the overcurrent setting of the circuit breaker as shown on the manufacturer's time-current curves.

3.4.3.3 Ground fault trip. The circuit breaker should not be equipped with a ground fault trip. If such is installed, submit a CFR noting the discrepancy.

3.4.3.4 Dielectric test. Perform a dielectric test on each 480 or 600 volt rated circuit breaker where the case was opened for repair or the circuit breaker was obtained through non-OEM authorized supply channels. The dielectric test should be conducted at an AC test voltage of 1568 (480 volt rating) or 1760 volts (600 volt rating) or at 2500 volts DC for 1 minute withstand. Conduct the dielectric test for each of the following conditions:

- Each pole (line to load terminal) with the circuit breaker open
- Each pair of line to line terminals with the circuit breaker closed
- Each line terminal to ground with the circuit breaker open
- Each pole to ground with the circuit breaker closed

3.4.3.5 For each circuit breaker accessory, perform the applicable tests of ANSI/NEMA AB 4, Section 7. Review the Table 1 configuration below for each circuit breaker and submit a CFR for model number discrepancies as well as any missing or extra accessory. When performing ANSI/NEMA AB 4, Section 7.3, use a variable voltage control power source and voltmeter to measure dropout and pickup voltages of the undervoltage release coil. Dropout voltage shall be between 15% and 60% of the coil voltage rating; pickup shall occur between 30% and 85%.

3.4.3.6 Record the following data for each circuit breaker that was tested:

- Circuit breaker model and serial number
- Circuit identifier or position
- Test data and results

- Test technician name and date of test
- Name and address of testing laboratory

3.4.3.7 Update the label on the circuit breaker case, as necessary, so that it accurately describes the circuit breaker configuration and installed accessories. Apply a sticker showing the name of the testing laboratory along with the date of the test.

3.5 Reinstallation. The Contractor shall perform the following for each circuit breaker removed in accordance with section 3.3 Removal.

3.5.1 Vacuum out the circuit breaker enclosure and completely remove any foreign material.

3.5.2 Lubricate primary and secondary disconnects in accordance with manufacturer's instructions.

3.5.3 Reinstall and reconnect each circuit breaker using information retained in paragraph 3.2.1 above.

3.5.4 Perform an energized operational test of all affected circuit breakers in the presence of the Coast Guard Inspector. Verify that all accessory devices are functioning. For circuit breakers supplying three phase motor loads, either directly or indirectly through intermediate panelboards, perform a phase rotation check if any power wiring was disconnected.

3.5.5 When isolation is no longer required, reconnect all cables disconnected per paragraph 3.2.1.4 above per SFLC Std Spec 3042.

4. NOTES

4.1 Inspection periodicity. Circuit breakers are normally maintained, tested, and lubricated at 48 month intervals; however, such should also be performed when the following number of open-close cycles are exceeded with main contact current flow since the last inspection:

4.1.1 2500 ampere frame and below –500 cycles

4.1.2 3000 ampere frame and above – 400 cycles

4.2 High current fault. When a circuit breaker interrupts a high current fault, perform the arc chute and primary contact inspections before returning the device to operation. Also inspect the associated switchboard bus work for deformation and possible derangement.

TABLE 1 - CIRCUIT BREAKER LIST (WLB225B)

Accessories	**Draw-Out with TEST Position**	X	X	X
	Undervoltage Release	Instant		
	Shunt Trip Coil	X	X	X

	Lockout Device, Mech or Elec			
	Closing Coil, Anti-Pump	CC & AP	CC & AP	CC & AP
	Spring Charging Method(s)	Man/Auto	Man/Auto	Man/Auto
	Auxiliary Switch	6NO/6NC	6NO/6NC	6NO/6NC
	Bell Alarm Switch			
Settings	**Instantaneous Pickup (A [×I_r])**	8000 [5]	1200 [1.5]	1800 [1.5]
	Short Time Delay	0.07		
	Short Time Pickup (A) [×I_L]	4800 [3]		
	Long Time Delay	30	2.5	2.5
	Long Time Pickup I_L (A) [×I_r]	1600 [100%]	760 [95%]	1200 [100%]
Withdrawal Interlock		X	X	X
Spring Discharge Interlock		X	X	X
Rating Plug or Sensor I_r (A)		1600	800	1200
Part Number		Siemens SBA2016DV	Siemens SBA0808DV	Siemens SBA2012DV
Frame (A)		2000	800	2000
Circuit		TG-4P-TP	TP-4P-A	TP-4P-B
Function & Location		Thruster Generator (Thruster Switchboard)	Bow Thruster SCR Drive (Thruster Switchboard)	Stern Thruster SCR Drive (Thruster Switchboard)

WORK ITEM 26: Power Circuit Breakers, Inspect, Maintain & Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect, maintain, and test power circuit breakers located on the Ship Service and Emergency Switchboards that were designed and tested to UL 1066 standards.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB 320-1, Rev AC, Electrical One Line Diagram

COAST GUARD PUBLICATIONS

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

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

Coast Guard Technical Publication (TP) 3536, Jul 2003, Switchboard, Main, Emergency, and Thruster

OTHER REFERENCES

American National Standards Institute/National Electrical Manufacturers Association (ANSI/NEMA) AB 4, Mar 2011, Guidelines for Inspection and Preventive Maintenance of Molded Case Circuit Breakers Used in Commercial and Industrial Applications

Underwriters Laboratories Inc. (UL) 1066, Low-Voltage AC and DC Power Circuit Breakers Used in Enclosures, Apr 2012

3. REQUIREMENTS

3.1 General.

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

- 3.2 (Operational assessment).
- 3.4.2 (Inspection).
- 3.4.3 (Testing).

3.1.2 Tech Rep. The Contractor shall provide the services of a Qualified Technical Representative (Tech Rep) who is familiar with the original equipment manufacturer or employed by a firm accredited by the InterNational Electrical Testing Association (NETA). An accredited firm shall use only NETA certified technicians (http://www.netaworld.org/) with calibrated test equipment during the performance of this work item. The Tech Rep shall accomplish the following on site:

- Advise on manufacturer's proprietary system information.
- Assist with the 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 shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, the Contractor shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

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

3.1.5 The Contractor shall notify the Coast Guard Inspector 48 hours prior to starting work on this item.

3.1.6 Outages. The Contractor shall coordinate the disconnection and removal of the circuit breakers listed in the table below with the Coast Guard Inspector to ensure orderly shutdown of equipment. Providing temporary circuit breakers or temporarily relocating circuit breakers from non-essential circuits to essential circuits (same frame size and trip settings) are acceptable strategies to minimize outage durations. When power interruption is expected to exceed 15 minutes, secure uninterruptable power supplies and supported loads.

3.1.7 Essential circuits. The Contractor shall minimize the interruption of power to the following circuits, unless actively being serviced by other work items:

3.1.7.1 Ship service lighting (unless temporary lighting is installed).

3.1.7.2 Fire (circuits F and SM), flooding (circuit FD), and general (circuit G) alarms.

3.1.7.3 Main announcing (circuit 1MC) and dial telephone (circuit J) systems.

3.1.7.4 Galley, scullery, potable water heater, HVAC, and sewage systems (unless cutter crew is not living on board).

3.1.7.5 Electric fire pump (unless temporary firefighting water supply is connected).

3.2 Operational assessment. The Contractor shall perform an operational assessment of each circuit breaker listed in the table below prior to removal from the switchboard. Submit an operational assessment report via CFR.

3.2.1 General.

3.2.1.1 Ship's Force shall operate all equipment, as well as remove and reinstall control power fuses.

3.2.1.2 For cutters with stationary mounted circuit breakers or draw-out type with no TEST position, Ship's Force shall run generators or operate shore power, as necessary, to establish safe plant conditions for the operational assessment and provide circuit breaker control power. Ensure that water cooled prime movers are furnished with adequate normal or temporary raw water supplies and that required auxiliaries such as batteries, exhaust, ventilation, start air, fuel oil, jacket water, and lube oil are available.

3.2.1.3 When practicable, operate draw-out type circuit breakers in the TEST position such that the primary contacts (stabs) are disconnected from the switchboard bus but all secondary (control) contacts are still connected to switchboard circuits. For generator circuit breakers, remove the control power transformer secondary winding fuses. Taking appropriate electrical safety precautions, connect a Contractor-furnished temporary control power supply, fused to an ampacity no greater than the normal control power supply, to the vacated load side fuse clips.

3.2.1.4 For a circuit breaker that is locked out and/or tagged out (caution or danger tag), typically in support of another work item, complete the tasking requiring the isolation or shift the work isolation boundary so that the lock and/or tags may be cleared. When shifting the isolation boundary is the only feasible option, such is typically accomplished by opening a local disconnect switch or temporarily disconnecting the feeder cable in accordance with SFLC Std Spec 3042. Ensure that a new lock and/or tag are installed at the new isolation boundary prior to clearing those from the circuit breaker to be removed.

3.2.2 Initial conditions. The circuit breaker to be operationally assessed is assumed to be open with the closing spring charged and control power available.

3.2.3 Manual operation. The Contractor shall perform the following for a circuit breaker with mechanical closing and opening controls on the frame:

3.2.3.1 Manually close the circuit breaker. Verify that the mechanical flag for circuit breaker position, if installed, changes state satisfactorily. Confirm that circuit breaker position indicating lights and machinery control system display, if applicable, also toggle. If installed, verify that the spring charging motor recompresses the closing spring and automatically drops out shortly after the spring is fully charged. If no spring charging motor is installed or it fails to operate, manually recompress the closing spring.

3.2.3.2 Manually trip the circuit breaker. Verify that the mechanical flag for circuit breaker position, if installed, changes state satisfactorily. Confirm that circuit breaker position indicating lights and machinery control system display, if applicable, also toggle.

3.2.3.3 If the circuit breaker is equipped with a mechanical or electrical lockout, activate each lockout device one at a time and verify that the circuit breaker cannot be closed manually.

3.2.3.4 If the circuit breaker is equipped with an undervoltage release coil, secure power to the coil by removing a secondary control power fuse or securing the temporary control power supply. Attempt to manually close the circuit breaker. Observe indicators and flags to ensure that the main contacts do not close (even momentarily). Discharge of the closing spring is acceptable. Reenergize the undervoltage release coil.

3.2.3.5 For circuit breakers without an undervoltage release coil or for those where the closing spring did not discharge while testing the undervoltage release closing interlock, secure control power to the spring charging motor, ensuring that the undervoltage release coil, if installed, remains energized. Some circuit breaker designs have an internal spring charging motor switch for this purpose; otherwise a control power lead to the motor must be temporarily disconnected at the secondary terminal block. Manually close the circuit breaker and then manually open it to discharge the closing spring.

3.2.3.6 Verify that the mechanical flag for closing spring status, if installed, changes state during this step. Manually charge the closing spring, observing the ratchet mechanism and pawls for signs of damage, such as binding or excessive wear.

3.2.3.7 Reenergize any circuit breaker control circuits that were deenergized in paragraph 3.2.3.5 above.

3.2.4 Electrical operation. The Contractor shall perform the following for a circuit breaker with electrical closing and opening controls on the switchboard:

3.2.4.1 Electrically close the circuit breaker. Verify that the mechanical flag for circuit breaker position and closing spring status, if installed, change state satisfactorily. Confirm that circuit breaker position indicating lights and machinery control system display, if applicable, also toggle. If installed, verify that the spring charging motor recompresses the closing spring and automatically drops out shortly after the spring is fully charged. If no spring charging motor is installed or it fails to operate, manually recompress the closing spring.

3.2.4.2 Electrically trip the circuit breaker. Verify that the mechanical flag for circuit breaker position, if installed, changes state satisfactorily and that the shunt trip coil remains deenergized while the control switch is held in the TRIP position. Confirm that circuit breaker position indicating lights and machinery control system display, if applicable, also toggle.

3.2.4.3 If the circuit breaker is equipped with a mechanical or electrical lockout, activate each lockout device one at a time and verify that the circuit breaker cannot be closed electrically.

3.2.4.4 If the circuit breaker is equipped with an undervoltage release coil, secure power to it by temporarily disconnecting the associated lead at the secondary terminal block; ensure that power to the closing coil and position indicating circuit remains available. Attempt to electrically close the circuit breaker and observe indicators and flags to ensure that the main contacts do not close (even momentarily). Discharge of the closing spring is acceptable.

3.2.4.5 Reenergize any circuit breaker control circuits that were deenergized in paragraph 3.2.4.4 above.

3.2.4.6 If the circuit breaker is equipped with an anti-pump mechanism, electrically close the circuit breaker and continue to hold the control switch in the CLOSE position. If practicable, trip the circuit breaker on fault by simulating an overcurrent condition at the trip unit; otherwise defer this test until the circuit breaker arrives at the maintenance facility. Verify that the circuit breaker does not reclose until the control switch is released and another closing operation is attempted. Open the circuit breaker.

3.2.5 Bell alarm switch. The Contractor shall perform the following for a circuit breaker with a bell alarm switch:

3.2.5.1 Close the circuit breaker using mechanical or electrical control.

3.2.5.2 If practicable, automatically trip the circuit breaker by simulating an overcurrent condition at the trip unit or by momentarily deenergizing control power to activate the undervoltage release; otherwise defer this test until the circuit breaker arrives at the maintenance facility. Verify that the bell alarm switch contacts are in the tripped state.

3.2.5.3 Manually reset the tripped circuit breaker using mechanical or electrical control. Verify that the bell alarm switch contacts are in the normal state.

3.2.6 Draw-out interlock. The Contractor shall perform the following for a circuit breaker with a draw-out interlock:

3.2.6.1 De-energize both sets of primary contacts (stabs) in the switchboard.

3.2.6.2 If the circuit breaker is equipped with an undervoltage release or can only be operated electrically and temporary control power is not already installed:

3.2.6.2.1 Remove the control power transformer secondary winding fuses.

3.2.6.2.2 Taking appropriate electrical safety precautions, connect a Contractor-furnished temporary control power supply, fused to an ampacity no greater than the normal control power supply, to the vacated load side fuse clips.

3.2.6.3 Ensure that the circuit breaker is withdrawn to the TEST position such that the primary contacts (stabs) are disconnected from the switchboard bus but all secondary (control) contacts are still connected to switchboard circuits.

3.2.6.4 Close the circuit breaker using mechanical or electrical control.

3.2.6.5 Attempt to rack in the closed circuit breaker to the CONNECTED position. Verify that such an operation is physically impossible or confirm that the circuit breaker automatically trips before the stabs reach the primary contacts in the switchboard.

3.2.6.6 If not already tripped, open the circuit breaker using mechanical or electrical control and fully insert it to the CONNECTED position.

3.2.6.7 Close the circuit breaker using mechanical or electrical control.

3.2.6.8 Attempt to rack out the closed circuit breaker to the TEST or DISCONNECTED position. Verify that such an operation is physically impossible or confirm that the circuit breaker automatically trips before the stabs separate from the primary contacts in the switchboard.

3.2.6.9 If not already tripped, open the circuit breaker using mechanical or electrical control.

3.2.7 Spring discharge interlock. The Contractor shall perform the following for a circuit breaker with a spring discharge interlock:

3.2.7.1 If not already compressed, charge the closing spring.

3.2.7.2 Rack out the open circuit breaker to the DISCONNECTED position. Verify that such an operation is physically impossible or confirm that the closing spring automatically discharges between the TEST and DISCONNECTED positions.

3.2.8 Restoration. The Contractor shall perform the following for each circuit breaker assessed in accordance with section 3.2 Operational assessment.

3.2.8.1 Ensure that the circuit breaker is open.

3.2.8.2 If not already accomplished, remove the circuit breaker control power transformer secondary winding fuses and disconnect any temporary control power supply.

3.2.8.3 If compressed, discharge the closing spring.

3.3 Removal. The Contractor shall comply with the following procedures while removing circuit breakers in completion of this work item:

3.3.1 Prior to the removal of each circuit breaker listed in the table below, record location (position or circuit identifier), wiring information, and if adjustable, as found pickup and time delay settings. Retain all mounting and connecting hardware for later reuse. Submit a CFR with all recorded data to the Coast Guard Inspector.

3.3.2 Disconnect and remove the circuit breakers listed in the table below.

3.3.3 Inspect the primary and secondary disconnects in the switchboard for wear and erosion. Check the torques of all primary disconnect studs to the bus work or power cable lugs. Inspect for broken control wiring lugs and check the tightness of wiring at the secondary disconnect terminal blocks. Renew any broken lugs and tighten any loose connections to wiring or bus.

3.3.4 Temporarily cover or insulate switchboard openings created by the removal of circuit breakers to prevent personnel contact with energized conductors and to block the entry of debris from other ongoing industrial activities.

3.4 Shop Work. The Contractor shall comply with the following procedures while servicing circuit breakers in completion of this work item:

3.4.1 Cleaning and lubrication. Clean circuit breaker internals with manufacturer's approved solvents and lint free cloths. Do not use high pressure air or wire brushes. Lubricate all components in accordance with manufacturer's instructions.

3.4.2 Inspection. Perform the inspections and take the measurements described below. Report all results, including any adjustments made, on a CFR.

3.4.2.1 Remove and inspect the arc chutes. Note if an arc chute is severely burned, cracked, or excessively eroded.

3.4.2.2 Visually inspect all primary intermediate (if installed), main, and arcing contacts for erosion and evidence of overheating. Inspect associated insulators for cracks and degradation. Determine whether the

condition of one or more contacts or insulators meets the criteria for renewal in accordance with manufacturer's guidelines.

3.4.2.3 Set up the circuit breaker for maintenance or slow closing. Check alignment and measure the contact force, spring tension, air gap, and wipe on each contact in accordance with manufacturer's instructions and make adjustments, as necessary, to set these values within specification.

3.4.2.4 Check contact closure sequencing to ensure that the differences in the making of the arcing contacts on the same pole and between poles is within manufacturer's tolerances. Also verify that the opening sequencing is satisfactory in the same manner.

3.4.2.5 Reinstall the arc chutes and torque all fasteners in accordance with manufacturer's instructions.

3.4.2.6 Inspect the primary and secondary disconnects (stabs) for wear and erosion. For a circuit breaker with finger type primary disconnects, check that the proper force is applied when a dummy bar, representative of the mating stationary disconnect, is inserted.

3.4.2.7 Inspect mechanical linkages, bearings, pawls, gears, cams, rollers, rods, and shafts for excessive wear and damage. Identify incorrectly assembled components. Note all missing and improperly installed fasteners.

3.4.2.8 Inspect electrical switches, solenoids, relays, wiring, and motors for excessive wear and damage. Perform an insulation resistance check of all control wiring using a 500 VDC test voltage. Isolate and identify any wiring or component with insulation resistance of less than 1 MΩ to ground.

3.4.2.9 For a circuit breaker equipped with a spring charging motor, verify that the motor cutoff switch is aligned in accordance with manufacturer's instructions.

3.4.3 Testing. After satisfactory visual inspection and completion of any authorized repair work, test each circuit breaker listed in the table below as directed in this section.

3.4.3.1 Perform the following tests of ANSI/NEMA AB 4, Section 6:

- Mechanical operation
- Insulation resistance
- Individual pole resistance (millivolts drop)
- Inverse-time overcurrent trip (not applicable to non-automatic switches)
- Instantaneous overcurrent trip
- Rated hold-in current

3.4.3.2 Short-time overcurrent trip. This test is applicable only if the circuit breaker is equipped with a short-time delay trip. The operation of the short-time delay unit should be within 90% and 125% of the overcurrent setting of the circuit breaker as shown on the manufacturer's time-current curves.

3.4.3.3 Ground fault trip. The circuit breaker should not be equipped with a ground fault trip. If such is installed, submit a CFR noting the discrepancy.

3.4.3.4 Dielectric test. Perform a dielectric test on each 480 or 600 volt rated circuit breaker where the case was opened for repair or the circuit breaker was obtained through non-OEM authorized supply

channels. The dielectric test should be conducted at an AC test voltage of 1568 (480 volt rating) or 1760 volts (600 volt rating) or at 2500 volts DC for 1 minute withstand. Conduct the dielectric test for each of the following conditions:

- Each pole (line to load terminal) with the circuit breaker open
- Each pair of line to line terminals with the circuit breaker closed
- Each line terminal to ground with the circuit breaker open
- Each pole to ground with the circuit breaker closed

3.4.3.5 For each circuit breaker accessory, perform the applicable tests of ANSI/NEMA AB 4, Section 7. Review the Table 1 configuration below for each circuit breaker and submit a CFR for model number discrepancies as well as any missing or extra accessory. When performing ANSI/NEMA AB 4, Section 7.3, use a variable voltage control power source and voltmeter to measure dropout and pickup voltages of the undervoltage release coil. Dropout voltage shall be between 15% and 60% of the coil voltage rating; pickup shall occur between 30% and 85%.

3.4.3.6 Record the following data for each circuit breaker that was tested:

- Circuit breaker model and serial number
- Circuit identifier or position
- Test data and results
- Test technician name and date of test
- Name and address of testing laboratory

3.4.3.7 Update the label on the circuit breaker case, as necessary, so that it accurately describes the circuit breaker configuration and installed accessories. Apply a sticker showing the name of the testing laboratory along with the date of the test.

3.5 Reinstallation. The Contractor shall perform the following for each circuit breaker removed in accordance with section 3.3 Removal.

3.5.1 Vacuum out the circuit breaker enclosure and completely remove any foreign material.

3.5.2 Lubricate primary and secondary disconnects in accordance with manufacturer's instructions.

3.5.3 Reinstall and reconnect each circuit breaker using information retained in paragraph 3.2.1 above.

3.5.4 Perform an energized operational test of all affected circuit breakers in the presence of the Coast Guard Inspector. Verify that all accessory devices are functioning. For circuit breakers supplying three phase motor loads, either directly or indirectly through intermediate panelboards, perform a phase rotation check if any power wiring was disconnected.

3.5.5 When isolation is no longer required, reconnect all cables disconnected per paragraph 3.2.1.4 above per SFLC Std Spec 3042.

TABLE 1 – CIRCUIT BREAKER LIST (WLB225B)

Accessories	**Draw-Out with TEST Position**	X	X	X	X	X
	Undervoltage Release	Instant	Instant	Instant	Instant	
	Shunt Trip Coil	X	X	X	X	X
	Lockout Device, Mech or Elec					
	Closing Coil, Anti-Pump	CC & AP	CC & AP	CC & AP	CC & AP	CC & AP
	Spring Charging Method(s)	Man/Auto	Man/Auto	Man/Auto	Man/Auto	Man/Auto
	Auxiliary Switch	2NO/2NC	2NO/2NC	2NO/2NC	2NO/2NC	2NO/2NC
	Bell Alarm Switch					
Settings	**Instantaneous Pickup (A [×I_r])**	2610 [5]	1260 [3.0]	4500 [5]	4500 [5]	2880 [4]
	Short Time Delay	0.40 I^2t out	0.40 I^2t out	0.40 I^2t out	0.40 I^2t out	0.30 I^2t out
	Short Time Pickup (A) [×I_L]	1566 [3.0]	1260 [3.0]	2700 [3.0]	2700 [3.0]	2160 [3.0]
	Long Time Delay	30	30	30	30	30
	Long Time Pickup I_L (A) [×I_r]	522 [0.87]	420 [0.70]	900 [0.75]	840 [0.70]	720 [0.6]
Withdrawal Interlock		X	X	X	X	X
Spring Discharge Interlock		X	X	X	X	X
Rating Plug or Sensor I_r (A)		600	600	1200	1200	1200
Part Number		Siemens RL-AS8EAFXBA06D-U7 with Static Trip III	Siemens RL-AS8EAFXBA06D-U7 with Static Trip III	Siemens RL-AS1EAHXBA06D-U7 with Static Trip III	Siemens RL-AS1EAHXBA06D-U7 with Static Trip III	Siemens RL-AS1EAHXBA06D
Frame (A)		800	800	1600	1600	1600
Circuit		1EG-4EP-1E	1S-4P-1E	1SGA-4P-1S	2SGA-4P-2S	1S-4P-2S

	Function & Location	Emergency Diesel Generator (1E Switchboard)	1E-1S Bus Tie (1E Switchboard)	No. 1 Ship Service Diesel Generator (1S Switchboard)	No. 2 Ship Service Diesel Generator (2S Switchboard)	1S-2S Bus Tie (2S Switchboard)
Accessories	Draw-Out with TEST Position	X	X	X	X	
	Undervoltage Release	Instant	Instant			
	Shunt Trip Coil	X	X	X	X	
	Lockout Device, Mech or Elec					
	Closing Coil, Anti-Pump	CC & AP	CC & AP	CC & AP	CC & AP	
	Spring Charging Method(s)	Man/Auto	Man/Auto	Man/Auto	Man/Auto	
	Auxiliary Switch	2NO/2NC	2NO/2NC	2NO/2NC	2NO/2NC	
	Bell Alarm Switch					
Settings	Instantaneous Pickup (A [×I_r])	2000 [5]	2000 [5]	1200 [3]	3000 [5]	
	Short Time Delay	0.40 I^2t out	0.40 I^2t out	0.08 I^2t out	0.08 I^2t out	
	Short Time Pickup (A) [×I_L]	1200 [3.0]	1200 [3.0]	1600 [4.0]	3600 [6.0]	
	Long Time Delay	30	30	6	6	
	Long Time Pickup I_L (A) [×I_r]	400 [1.0]	400 [1.0]	400 [0.50]	600 [0.75]	
	Withdrawal Interlock	X	X	X	X	
	Spring Discharge Interlock	X	X	X	X	
	Rating Plug or Sensor I_r (A)	400	400	800	800	
	Part Number	Siemens RL-AS8EAEXBA06D-U7 with Static Trip III	Siemens RL-AS8EAEXBA06D-U7 with Static Trip III	Siemens RL-AS8EAGXBA06D with Static Trip III	Siemens RL-AS8EAGXBA06D with Static Trip III	
	Frame (A)	800	800	800	800	

Circuit	4PSA-1S	4PSB -1S	2S-4P-D	2S-4P-E	
Function & Location	Bus A Shore Power (1S Switchboard)	Bus B Shore Power (1S Switchboard)	Buoy Deck Equipment Hydraulic Power Unit (2S Switchboard)	Cargo Crane Hydraulic Power Unit (2S Switchboard)	

4. NOTES

4.1 Inspection periodicity. Circuit breakers are normally maintained, tested, and lubricated at 48 month intervals; however, such should also be performed when the following number of open-close cycles with main contact current flow are exceeded since the last inspection:

4.1.1 800 ampere frame and below – 2800 cycles

4.1.2 900-2500 ampere frame – 800 cycles

4.1.3 3000 ampere frame and above – 400 cycles

4.2 High current fault. When a circuit breaker interrupts a high current fault, perform the arc chute and primary contact inspections before returning the device to operation. Also inspect the associated switchboard bus work for deformation and possible derangement.

63121_0320_FLT
REC_63120_Dks_Exterior_FLT_225' WLB (ALL) (0914)
S19_016_63120_ACC_0920_207

WORK ITEM 27: Focsle Deck - Exterior, Preserve, Mil-Spec/Flight Deck System,

1. SCOPE

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

- Foc'sle Deck (Approximately 2,250 Sq ft), 01 Level, bow to frame 27 (Sheet 3).

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225 WLBB 601-002, Rev G Booklet of General Drawings

COAST GUARD PUBLICATIONS

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

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

OTHER REFERENCES

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

QPL-24667, May 2008, Qualified Product List (Military) of Products Qualified Under Detail Specification MIL-PRF-24667, 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 shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, 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 Apply protective measures as specified in SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection) to the following components, spaces and equipment:

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

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

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

3.3 Preservation requirements particulars. The Contractor shall accomplish the following tasks. Use Coast Guard Drawing 225G WLB 601-002 as guidance.

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

3.3.2 Surface preparation and coating application. Prepare and coat the deck surfaces designated in paragraph 1.1 (Intent), including bitt and chock foundations, machinery rack guards and machinery foundations, hatches and hatch guards, stanchion sockets, vent pipes, angle coaming area, and approximately six inches up all adjacent vertical surfaces (as applicable); use the system specified for “Weather Decks, Non-Skid, MIL-SPEC Coating for Steel or Aluminum”, in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems).

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

3.3.2.2 Color selection. Select and use Gray (16099) as the finish/top coat color.

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

- Within two inches of deck fittings, hatches, welds, and protrusions.
- Within six inches of deck coaming, bulkheads, and deck edges.
- Within six inches of all deck edges and bulkheads.
- Within two inches of deck foundations (two inches measured from outermost portion of foundation, for example, foundation brackets on anchor windlass).
- Over deck fittings.
- Over waterways.

NOTES

1. Surface preparation may be accomplished by waterjetting, abrasive-blasting, or a combination of the two.

2. Waterjetting only reveals an existing substrate anchor profile and does not create a new profile. Abrasive may be introduced to the waterjet stream, to achieve required surface profile and/or greater productivity.

3. Surfaces being preserved are considered "critical-coated surfaces".

4. Unless a containment system is used to contain surface preparation 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 vacuum-shrouded.

b. Coatings must be applied by brushing or rolling.

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

3.4 Low temperature cure system. If a Change Request has been authorized and released, the Contractor shall apply a low temperature cure system, conforming to MIL-PRF-24667, Type VIII, Composition G. Ensure that top color coating is a silicone alkyd enamel product, recommended by the nonskid coating system manufacturer, in lieu of the polyurethane-based coating listed on QPL-24667.

NOTES

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

2. Primer, non-skid, and color coatings must be procured as part of a system kit from the system's manufacturer or supplier.

3.5 Flexible membrane system. If a Change Request has been authorized and released, the Contractor shall apply the MIL-PRF-24667, Type III, Composition G system, with the intermediate membrane.

NOTE

The Type III non-skid system with the intermediate membrane should only be used over deck surfaces that undergo a great deal of flexing, or over uneven deck surfaces where flatness is required.

3.6 In-process quality control measures. The Contractor shall 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).

4. NOTES

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

WORK ITEM 28: Galley, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew two (2) electric fryers, one (1) electric range with convection oven, hot plates and French plate, one (1) electric range with convection oven and thick griddle and one (1) electric griddle in Galley (1-57-1-Q). The configuration meeting that of drawings.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Lang Electric Fryer: Model: 130FM, 450VAC, 12.0 Kw, 14.4 Amps	Lang Model: 130FM	2 ea.	
N	Lang Electric Range w/Convection Oven Model: R36C-ATCM, 12" x 24" X 3/4 thick hot plates (x2) and 8" diameter French plates	Lang Model: R36C-ATCM	1 ea	
N	Lang Electric Range w/Convection Oven Model: R36C-ATDM, 36" x 24" x 1/2" thick Griddle	Lang Model: R36C-ATDM	1 ea	
N	Cleveland Electric Kettle Model: KEL-25, 480VAC, 13.1 Kw, 27.2 Hp, and 15.7 Amps	Cleveland Model: KEL-25	1 ea	$14,309.00

****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 Service Center.**

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB-601-002, Rev N, Booklet of General Drawings
Coast Guard Drawing 225B-WLB-651-001, Rev D, Galley & Pantry Arrgt & Details
Coast Guard Drawing 225B-WLB 601-01, Rev J, General Arr Inboard and Outboard Profiles

Coast Guard Drawing 225B-WLB 801-15, Rev B, Scantlings, Decks & Platforms

Coast Guard Drawing 225B-WLB 631-02, Rev G, Painting Schedule

COAST GUARD PUBLICATIONS

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

Surface Forces Logistics Center Standard Specification 6341 (SFLC Std Spec 6341), 2020, Install New Deck Covering Systems

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Preserve Ship Structures

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

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures - general. The Contractor shall 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 shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

3.1.4 Interferences. The Contractor shall 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:

- Electrical wiring.
- Border attached to equipment.

3.2 Relocation particulars. The Contractor shall accomplish the following using Coast Guard Drawing 225B-WLB-651-001 as guidance:

3.2.1 Removals and disconnections.

3.2.1.1 Remove electrical connections and bonding cable from equipment needing renewal.

NOTE!
Retain the bonding cable for reuse.

3.2.1.2 Remove the existing equipment needing renewal.

3.2.2 Surface preservation. The Contractor shall prepare and coat all deck and bulkhead surfaces including adjacent structural members underneath the removed equipment, using the system specified for "Decks, Metal Interior and Non-Skid Areas" in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select color grey as the finish/top coat color.

3.2.2.1 Substrate inspection. Upon completion of surface preparation and prior to application of primer coat, the Contractor shall perform a visual inspection of the prepared surfaces for cracks and weld separation; submit a CFR.

3.2.2.2 Deck Renewal. The Contractor shall perform all tasks specified in SFLC Std Spec 6341, SFLC Std Spec 6310 and herein, to prepare and renew/install the deck covering that is flush with the base of removed galley equipment, approximately 45 sqft total. Deck covering system to be used is Cosmetic Polymeric Epoxy Resin, Type III (One-Step Epoxy System) / SFLC STD SPEC 6341 Appendix A. System color to match currently installed color.

3.2.3 Equipment installations.

3.2.3.1 Install the new equipment using Coast Guard Drawings 225B-WLB-651-001 as guidance.

3.2.3.2 Ensure new equipment is electrically bonded using the grounding strap from the old units.

3.4 Operational test – post repairs. After completion of work, the Contractor shall witness an operational test (by Coast Guard personnel) of the dishwasher to prove satisfactory operating condition. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 29: Cargo Hatch Repair

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to repair wasted material along the gasket sealing surface during the completion of Work Item 1: Hydraulically Operated Cargo Hatch, Inspect and Service.

CLOSURE IDENTIFICATION	LOCATION	DESCRIPTION
1-35-0	Main Cargo Hold (2-30-0-AA)	84 IN x 108 IN FLWT Hatch, RH, at 12 IN AFT FR 36, ON CL

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Cargo Hatch Gasket	Walz & Krenzer P/N D-WK-831-1-8 or equivalent	2	$200

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB 167-1, Rev M, Structural Closures

COAST GUARD PUBLICATIONS

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

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

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

Coast Guard Technical Publication (TP) 3717, Jun 2003, Hydraulic Cargo Hatch

OTHER REFERENCES

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2004, Power Tool Cleaning to Bare Metal

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

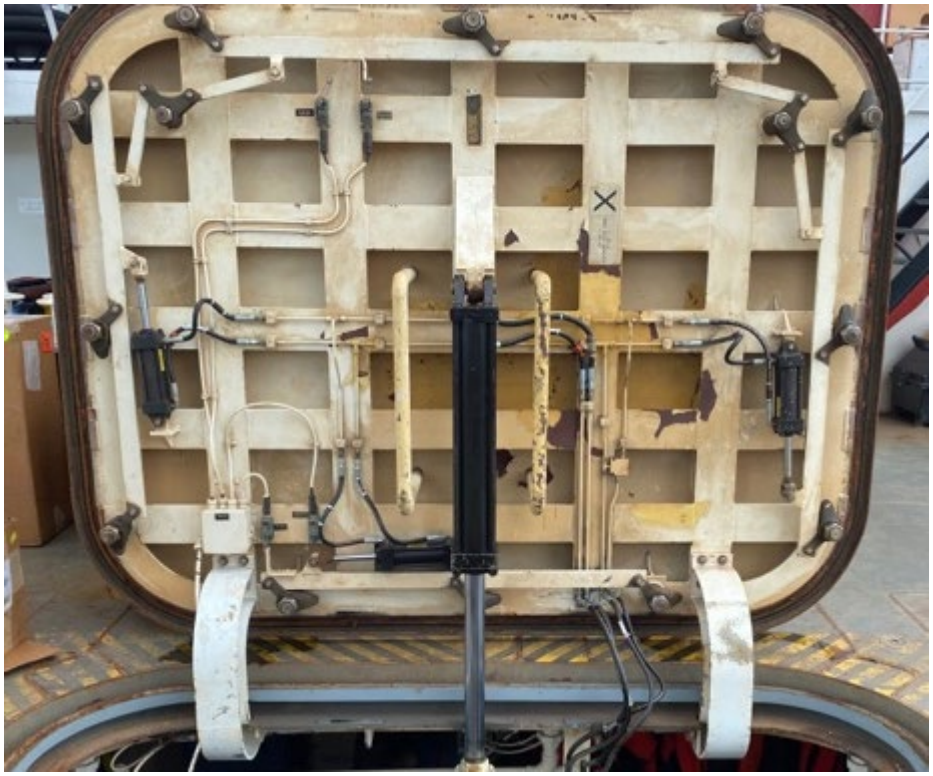
3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor shall furnish and install suitable covering to seal off and protect all non-affected surfaces/equipment and spaces in the vicinity of the work area against contamination during the performance of work. Upon completion of work, remove protective material and inspect for the presence of contamination. Clean all equipment and spaces, contaminated due to improper protection, to original condition of cleanliness.

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

3.2 Renew. The Contractor shall repair wasted material along the gasket sealing surface during the completion of Work Item 2 “Hydraulically Operated Cargo Hatch, Inspect and Service”. Repair all 3/16”x1” A-36 steel retainer web, 4 corner retainer flanges (3/16” x ¾” x 8”) and 8 center retainer flanges..Use Coast Guard Technical Publication (TP) 3717, Jun 2003, Hydraulic Cargo Hatch, Drawing D-WK-831-2, Rev G for guidance. Renew gasket if necessary. See below pictures of damaged areas of the cargo hatch.



3.3 Touch-up preservation. The Contractor shall 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.)

CAUTION!

DO NOT PAINT GASKETS OR ANY MOVING PARTS, INCLUDING DOGS, NUTS, WEDGES, SPINDLES, YOKES, PACKING, CONNECTING RODS AND HINGE PINS.

4. NOTES

This section is not applicable to this work item

S_16700_ESD_MMYY_SWIT
S20_0003_16801_WED_0720_207

WORK ITEM 30: Weather Tight Doors, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew weather tight doors identified in Table 1 to be supplied by Unit.

TABLE 1 – WEATHER TIGHT DOOR LOCATION

DESCRIPTION	LOCATION	DRAWING
01-27-1, 26 IN x 66 IN Weather Tight Door, Steel, RH Swing, Without Fixed Light	Buoy Deck Control Booth, (01-26-0-C)	IAW USCG Drawing FL-1602-89

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	26 IN x 66 IN Weather Tight Door, Steel, RH Swing, with Hasp and Staple, Without Fixed Light	NSN: PN: 20 (Drawing Coast Guard Drawing 225B-WLB-167-001)	1 ea.	

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB-167-001, Rev M, Structural Closures

Coast Guard Drawing FL-1602-89, Rev , Fleet 26 IN X 66 IN Weathertight Door

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

Commercial Item Description (CID) A-A-59316, 2003, Abrasive Materials for Blasting

The Society for Protective Coatings (SSPC)/NACE International (NACE) 2006, Joint Surface Preparation Standard SSPC-SP 10/NACE No.2, Near-White Blast Cleaning

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2012, Power Tool Cleaning to Bare Metal

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- Bulkhead Insulation
- Wiring

NOTE

Geometric dimensioning and tolerance variances and minor hardware differences are to be expected with the Government-furnished closures. These variances and differences are not limited to the following: location and physical size of the hinge assemblies; location, physical size, and number of flush mounted pockets; location, size, and orientation of securing devices.

3.2 Renewal. The Contractor shall crop, remove, and dispose of the door identified in Table 1 of this work item.

3.2.1 Install door provided by unit in place of that removed..

3.2.2 Perform all necessary modifications not limited to relocation, fabrication and installation of a new securing device, and modifications to ensure all renewed items properly fit and function.

3.2.3 At the direction of the Coast Guard Inspector, perform all necessary relocation and modification of securing latches.

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

3.3 Testing. Upon complete renewal of each structural closure, the Contractor shall perform the following boundary tests and submit a CFR:

chalk test

water hose test

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

3.4 Preservation. The Contractor shall prepare and coat the surfaces of all installed items identified in Table 1 of this work item, and all disturbed surfaces to match existing adjacent area, in accordance with Table 2 and as determined by the surface material to be preserved.

TABLE 2 – SURFACE PREPARATION AND COATING

	COATING	
SURFACE	**STEEL**	**STEEL**
DOOR EXTERIOR/	SSPC-SP10/NACE No. 2, using grit conforming to MIL-A-22262 (1.5 to 2.5 mil anchor profile) -Or- SSPC-SP 11 (1.0 mil anchor profile)	SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems)
DOOR INTERIOR	SSPC-SP 11 (1.0 mil anchor profile)	SFLC Std Spec 6310 , Appendix B (Cutter and Boat Interior Painting Systems) “Door, Joiner, Option I”

3.5 Operational test, post repairs. After completion of work, the Contractor shall 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 as defined in the following; submit a CFR.

Closures are properly secured, to prevent accidental or unintentional movement.

Securing latches adequately engage closures and positively lock into place without excessive force or manipulation by the operator.

4. NOTES

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

WORK ITEM 31: Watertight Hatch (External DC Deck and Below), Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew water tight hatch identified in Table 1.

TABLE 1 – WATER TIGHT HATCH LOCATIONS

DESCRIPTION	LOCATION	DRAWING
01-24-1; 24 Inches x 36 Inches C.O., RSD, WTRTT, 4 Dog, Hinged on 36Inches RH Side	Crane Pedestal (3-23-0-Q)	Similar to Kearfott DWG KS-40008

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	24 IN x 36 IN C.O., RSD, WTRTT, 4 Dog, Hinged on 36 Inches RH Side, Hatch Coaming 6 Inch Height	NSN: PN:	1 ea.	

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225 WLB 167-001, Rev W, Structural Closures

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

Commercial Item Description (CID) A-A-59316, 2003, Abrasive Materials for Blasting

The Society for Protective Coatings (SSPC)/NACE International (NACE) 2006, Joint Surface Preparation Standard SSPC-SP 10/NACE No.2, Near-White Blast Cleaning

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2012, Power Tool Cleaning to Bare Metal

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

3.2 Removal and installation. The Contractor shall accomplish the following tasks for each hatch assembly, designated in Table 1:

- Crop, remove, and dispose of the hatch, including its coaming.
- Install a new GFP hatch assembly in place of the removed.
- Perform all necessary modifications to ensure the renewed hatch properly fits on its corresponding enclosure.
- Provide and install new hatch gaskets, and fasteners, as required.
- To achieve satisfactory latch operating condition and at the Coast Guard Inspector's direction, relocate, adjust, fabricate and install new securing latches to the closure or ship's structure.

NOTE

Geometric dimensioning and tolerance variances and minor hardware differences are to be expected with the Government-furnished closures. These variances and differences are not limited to the following: location and physical size of the hinge assemblies; location, physical size, and number of flush mounted pockets; location, size, and orientation of securing devices.

NOTE

Grab handle maybe attached vertically on the hatch framing to assist members going through a scuttle. See Figure 1.

3.2.1 Preservation. The Contractor shall prepare and coat all new and disturbed exterior and interior surfaces to match existing adjacent surfaces, refer to Table 2.

CAUTION

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

TABLE 2 – SURFACE PREPARATION AND COATING

	STEEL		ALUMINUM	
	PREPARATION	**COATING**	**PREPARATION**	**COATING**
Top	SSPC-SP10/NACE No. 2, using grit conforming to MIL-A-22262 (1.5 to 2.5 mil anchor profile) -Or- SSPC-SP 11 (1.0 mil anchor profile)	Apply coating system specified for Freeboard/ Superstructure/Mast (Freeboard/Superstructure, Steel), Option I", in Appendix A (Cutter and Boat Exterior Painting Systems) of SFLC Std Spec 6310.	Brush blast to bare metal with clean, fine aluminum oxide, garnet or equivalent inert material conforming CID A-A-59316, Type I & IV (1.0-1.5 mil anchor profile). -Or- Power tool clan, using non-metallic abrasive padding, to remove all coatings and contamination.	Apply coating system specified for "Freeboard/ Superstructure/Mast (Freeboard/Superstructure, Aluminum), Option I", in Appendix A (Cutter and Boat Exterior Painting Systems) of SFLC Std Spec 6310.
Bottom	SSPC-SP 11 (1.0 mil anchor profile)	Apply coating system specified for "Door, Joiner, Option I" in Appendix B (Cutter and Boat Interior Painting Systems) of SFLC Std Spec 6310.	Power tool clan, using non-metallic abrasive padding, to remove all coatings and contamination.	Apply coating system specified for "Door, Joiner, Option I" in Appendix B (Cutter and Boat Interior Painting Systems) of SFLC Std Spec 6310.

3.2.2 Testing. Upon complete renewal of each structural closure, the Contractor shall perform the following boundary tests and submit a CFR in accordance with SFLC Std Spec 0740, Appendix C:

- Chalk test
- Water hose test

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.3 Operational test – post repairs. After completion of work and in the presence of the Coast Guard Inspector, the Contractor shall thoroughly test and demonstrate the equipment listed below to be in satisfactory operating condition. Submit a CFR. Ensure the following:

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

4. NOTES

4.1 Damage control markings. Coast Guard personnel will apply appropriate damage control decals onto all newly installed closure(s).

S_63000_0320_SWIT
S20_008_63000_ACC_0920_207

WORK ITEM 32: Crane Pedestal, Preserve

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to preserve the crane pedestal interior deck and bulkhead surfaces.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

None.

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

3.1.4 Interferences. The Contractor shall 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:

- Wireways
- Hydraulics
- Hatches
- Insulation

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

3.3 Surface preservation. The Contractor shall prepare and coat the crane pedestal interior deck and bulkhead surfaces, including ladder and all other adjacent structural members, using the system specified for “Bulkheads and Overheads, Uninsulated Metal-(Wet areas such as washrooms, water closets, shower space, food prep areas and exits to weather)” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select finish/top coat color to match existing.

4. NOTES

This section is not applicable to this work item.

S_63000_0320_SWIT
S20_009_63000_ACC_0920_207

WORK ITEM 33: AMR Bulkheads, Preserve

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to preserve the fore and aft bulkhead surfaces of the Auxiliary Machine Room (4-82-0-E).

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

3.1.4 Interferences. The Contractor shall 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:

- Lights
- Switches
- Cable runs
- Pumps
- Piping

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

NOTE

Bulkheads requiring preservation are on both the upper and lower levels of the AMR, fore and aft.

3.3 Surface preservation. The Contractor shall prepare and coat the AMR bulkhead surfaces, including all adjacent structural members, using the system specified for “Bulkheads and Overheads, Uninsulated Steel” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select finish/top coat color to match existing.

WARNING

Abrasive-blasting is not permissible in a machinery spaces.

3.3.1 Select power tool cleaning to “bare metal” (SSPC-SP 11) with a minimum 1.0 mil anchor profile as the method of surface preparation.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 34: Anchor Pocket Repair

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and repair the anchor pockets, both port and starboard.

1.2 Government-furnished property. None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB 601-001, Rev J, Gen Arr, Inboard and Outboard Profiles

Coast Guard Drawing 225B-WLB 111-001, Rev A, Shell Expansion

Coast Guard Drawing 225B-WLB 581-001, Rev D, Anchor Handling System Arrgt

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2012, Power Tool Cleaning to Bare Metal

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Technical Representative.

Not applicable.

3.1.3 Protective measures. The Contractor shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, the Contractor shall remove

all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

3.1.4 Interferences. The Contractor shall 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:

- Anchor and chain.
- Anchor pockets.
- Boatswain Storeroom No. 1 (1-0-0-A).

3.2 Repair particulars. The Contractor shall accomplish the following tasks to inspect and repair the anchor pockets port and starboard, using Coast Guard Drawings 225B-WLB 111-001, SFLC Std Spec 0740 and the references listed above as guidance;

3.2.1 Visual inspect the Anchor Pockets to identify the areas of chain abrasion and corrosion, see PHOTOs below.

3.2.2 Prepare the Anchor pocket ramp plating in accordance with SSPC-SP 11. The Contractor shall take a total of 40 UT measurements of plating, in locations designated by the Coast Guard Inspector, in accordance with SFLC Std Spec 0740, Appendix C. Use Coast Guard Drawing 225B-WLB 111-001 as guidance. Chalk out the boundary of the abraded plating where the remaining thicknesses are less than 75% of the original thickness. Submit a CFR.

3.2.3 Prior to repairing any plating, open, ventilate, and clean all spaces and components necessary to accomplish this work item as required to certify them as "SAFE FOR PERSONNEL" and/or "SAFE FOR HOT WORK" in accordance with SFLC Std Spec 0000. Obtain verification from the Coast Guard Inspector of the chalked out boundary.

3.2.4 Upon verification from the Coast Guard Inspector, weld repair (surface) and grind smooth the chalked out boundary of Anchor Pocket in accordance with SFLC Std Spec 0740. Submit a CFR if the gouged areas have remaining thicknesses that are less than 50% of the original thickness (40.8# plate).

3.3 Inspection. In the presence of the Coast Guard Inspector perform a UT inspection of the affected area, in accordance with SFLC Std Spec 0740. Submit a CFR.

3.4. Touch-up preservation. The Contractor shall prepare and coat all new and disturbed exterior and interior surfaces to match existing adjacent surfaces, in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems) and Appendix B (Cutter and Boat Interior Painting Systems), respectively, and as applicable

4. NOTES

Referenced **PHOTO**s below.

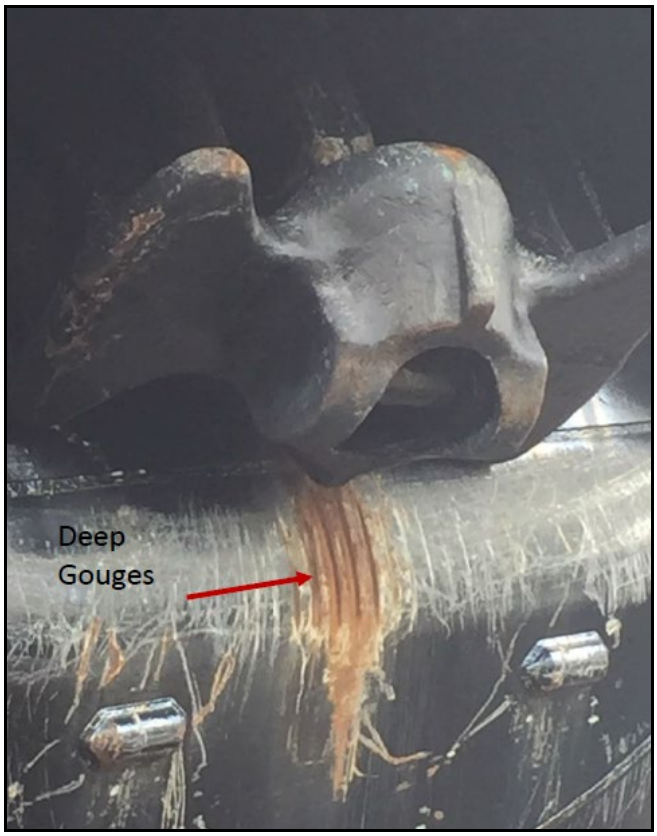


PHOTO 1: ANCHOR POCKET DAMAGE

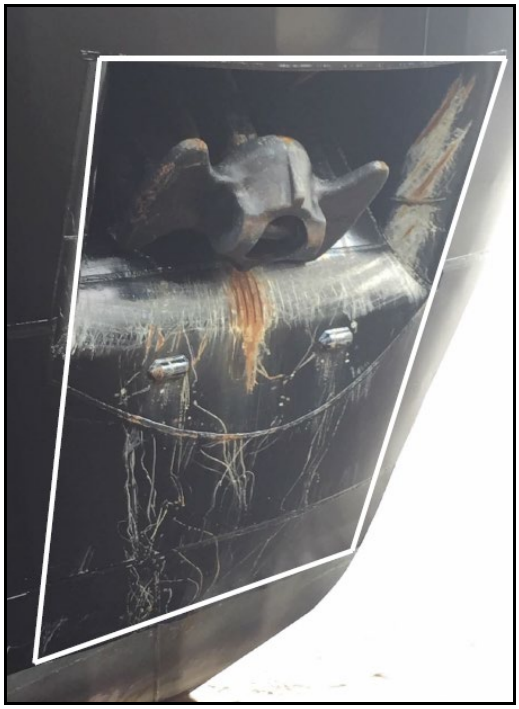


PHOTO 2: ANCHOR POCKET

WORK ITEM 35: Vent Duct Insulation, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew insulation on the natural supply air ducting in the areas listed in Table 1 as designated by the Coast Guard Inspector.

TABLE 1 - INSULATION RENEWAL

DESCRIPTION Duct size / Renewal area in linear feet (LF)	**LOCATION**
6” diameter / 13 LF	Dry Provisions Storeroom (1-60-6-A)
4” diameter / 9 LF	Machine Shop (2-57-1-Q)
6” diameter / 1 LF	Ship Store (2-57-2-A)
8” diameter / 7 LF 6” diameter / 5 LF 4” diameter / 8 LF 6”X9” rectangular / 2 LF 9”X12” / 2 LF	ELEC/ELEX Workshop & Storeroom (2-59-1-Q)
4” diameter / 5 LF 6”X6” rectangular / 4 LF	Engineer Control Center (2-69-1-C)

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 509-001, Rev A, Duct, Trunk, and Machinery Insulation Details

Coast Guard Drawing 225B WLB 512-001, Rev K, HVAC Diagram

COAST GUARD PUBLICATIONS

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

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

OTHER REFERENCES

The Society for Protective Coatings (SSPC) Surface Preparation Specification No. 3 (SSPC-SP 3), 2004, Power Tool Cleaning

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

3.2 Insulation Removal – Remove insulation designated for renewal by Table 1. Dispose in accordance with local, state, and federal laws and regulations.

3.3 Surface Preparation – Prepare all steel surfaces where insulation was removed by power tool cleaning in accordance with SSPC-SP 3.

3.3.1 In the presence of the Coast Guard Inspector, inspect all prepared surfaces for deterioration or damage. Submit a CFR to the Coast Guard Inspector.

3.4 Ducting insulation installation. The Contractor shall install new insulation material over the exposed duct surfaces in accordance with referenced CG Drawings 225B-WLB 509-001 and 225B WLB 512-001. Coat the newly installed insulation using the system specified for “Insulation Surfaces, Fiberglass Sheet/Closed Cell PVC Foam” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems).

4. NOTES

This section is not applicable to this work item.

WORK ITEM 36: Sewage Atmospheric Tank, Repair

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and repair the Sewage Atmospheric (collection) tank plating and piping.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB 601-001, Rev E, General Arr, Inboard & Outboard Profiles

Coast Guard Drawing 225B-WLB 201-001, Rev C, Machinery Spaces Arrangement

Coast Guard Drawing 225B-WLB 593-001, Rev D, Sewage & Waste Water System Diagram

COAST GUARD PUBLICATIONS

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

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

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2020, Preserve Ship Structures

Coast Guard Technical Publication (TP) 3563, 21-MAY-96, Manufacturer's Instruction Book-SWBS Group(s) 593, Tab 593-F

OTHER REFERENCES

The Society for Protective Coatings (SSPC) Surface Preparation Specification No. 16 (SSPC-SP 16), 2010, Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. None.

3.1.2 Tech Rep. Not applicable.

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

3.1.4 Interferences. The Contractor shall 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:

- Sewage Atmospheric (collection) tank, 620 gallons.
- Vacuum sewage manifold assembly.
- Manhole and Gasket.
- Piping

3.2 Work particulars. The Contractor shall accomplish the following tasks to inspect and repair the Sewage Atmospheric tank, plating and piping, in the Auxiliary Machinery Room (4-82-0-E) upper level, in accordance with SFLC Std Spec 0000 and SFLC Std Spec 0740 using the Coast Guard Drawings referenced above, for guidance and details;

3.2.1 Confined space and hot work. Open, ventilate, and clean all spaces and components necessary to accomplish this work item as required to certify them as "SAFE FOR PERSONNEL" and/or "SAFE FOR HOT WORK."

3.2.2 Inspection. Visually inspect the Sewage Atmospheric tank, plating and piping citing the areas of corrosion and damage.

3.2.2.1 The Contractor shall prepare the cited areas of corrosion in accordance with SSPC-SP 16 and take a total of 10 UT measurements of plating, in locations designated by the Coast Guard Inspector, in accordance with SFLC Std Spec 0740. Use Coast Guard TP 3563 as guidance and note that the Sewage Atmospheric tank wall material is stainless steel (316L), 0.250” thick. Chalk out the boundary of the corroded plating where the remaining thicknesses are less than 75% of the original thickness. Submit a CFR.

3.2.2.2 Before removing any plating, obtain verification from the Coast Guard Inspector of the chalked out boundary. Provide a sketch of the intended cut and a written report of all nondestructive test findings to the Coast Guard Inspector.

3.2.3 Tank repair. Upon verification from the Coast Guard Inspector, crop and renew the chalked out boundary, approximately 2-square feet of plating, surrounding the Vacuum sewage manifold piping, in accordance with SFLC Std Spec 0740, use Coast Guard TP 3563 as guidance.

3.2.3.1 New plating shall be of similar material and mechanical properties as the adjacent material. Submit a Condition Found Report (CFR) to the Coast Guard Inspector if additional repairs are required.

3.2.4 Piping repair. Renew or repair cited piping in accordance with Coast Guard Drawing 225B-WLB 593-00 and SFLC Std Spec 0740.

3.3 The Contractor shall perform NDI of the repair welds in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

3.4 Restoration and cleaning. After all sewage components have been reinstalled from their parent locations, clean surfaces of new and affected sewage components by locally swabbing, wiping, vacuuming, etc. to obtain surfaces reasonably free of contamination and any remaining residue on the surface does not interfere with system operations or damage system components and maintain sanitary conditions in Auxiliary Machinery Room –Upper Level (4-82-0-E).

3.5 Boundary test. The Contractor shall inspect and perform a water hose test all affected boundaries in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

3.6 Operational test. In the presence of the Coast Guard Inspector, conduct an operational test of the repaired sewage ejector mounting flange assembly and disturbed components at normal operating system pressure and/or vacuum, to prove satisfactory operating condition and verify tightness in accordance with Tech Pub 3563, Tab 593-F. Repair all leaks on disturbed connections.

3.6.1 Coast Guard personnel will operate machinery for the operational test. During the operational test, verify tightness of all mechanical joints. No leaks allowed. Submit a CFR.

4. NOTES

Per Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements, the following paragraph may be applicable:

3.2.11.1 Sanitary facilities for vessel-personnel – due to disruption of grey water and sewage systems. When the shipboard grey water and sewage systems are disrupted due to repairs required by contract work, the Contractor shall provide vessel-personnel with a sanitary facility, within a five minute walking distance from the vessel, to include the amenities listed in Table 2(Sanitary Facility Amenities). Ensure the following:

- Shower stalls are equipped with privacy screens.

- Sinks are provided with fresh hot and cold water.

- Electrical convenience GFI receptacles, in accordance with NFPA 70, National Electric Code (NEC), are located in vicinity of sinks.

- Toilets have doors or privacy dividers.

- Lockers are capable of being locked.

WORK ITEM 37: Y-Strainer, Renewal

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew various Y-strainers in the sea water system.

1.2 Government-furnished property.

None

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 256-001, Rev L, 225B-WLB_256_1

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

American Society for Testing and Materials (ASTM) B61-08, 2008, Standard Specification for Steam or Valve Bronze Castings

American Society for Testing and Materials (ASTM) B62-09, 2009, Standard Specification for Bronze or Ounce Metal Castings

NAVSEA Drawing 810-1385880, Rev D; Fittings, Cu-Ni Alloy, Slip on Sleeve

NAVSEA Drawing 803-6397430, Rev ;Fittings, Copper-Nickel Socket Welds Class 400

3.1 General.

None.

3.1.2 Tech Rep. .

None.

3.1.3 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, 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 Seawater Y-strainer Renewal. Contractor must perform the following repairs:

3.2.1 Coast Guard Drawings 225B 256-1 describes the Seawater system the Y-strainers are part of. The strainers are not well documented in drawings. The Cutter personnel will identify the subject Y-strainers at start of work.

3.2.2 The subject strainers have deteriorated and must be renewed. Renewals are intended to be "in kind" with lack of specific and/or accurate details in drawing. CG Inspector will be available to assist in identifying the strainers. The following Table identifies the three Y-strainers subject to renewal:

ABLE 1 – Y STRAINERS

SIZE	LOCATION	QTY
2"	Potable Water Room	1
¾"	On Reefer Skid	2

3.2.3 New Strainer Requirements, as follows:

- "Y" Type
- Bronze ASTM B61/B62
- 250#
- Ends SB (sil-braze)
- 80 mesh monel basket
- BuShip Drawing 80064-810-841499

3.2.3.1 One known Supplier that meets the requirements is Mueller MFG#352-1/2M.

3.2.3.2 Notify Coast Guard Inspector of any recommended waiver to above requirements e.g. 80 mesh monel basket not available but other options in material mesh are.

3.2.4 The Contractor must perform the following to facilitate renewal:

- Unsweat brazed connections for bronze fittings, and cut or grind welds smooth to facilitate piping and/or fitting removals.
- Provide and furnish all required piping and fittings to facilitate installation.
- Ensure hot work does not warp, distort, or cause any damage to the adjacent structure.
- The Contractor and Coast Guard Inspector must visually inspect the installations.

3.3 Removal. Remove and discard the three (3 ea) Y-strainers and identified during inspection and noted in enclosed Figures.

3.3.1 Clean and prepare the open end of retained copper nickel alloy 90-10 piping. End preparation must be in accordance with methods described in SFLC Std Spec 0740, section 3, paragraph 3.3 (Joints), NAVSEA Drawing 810-1385880 or ASME B16.25.

3.3.2 Temporarily remove any pipe hanger(s) and support(s) located along the affected piping, and retain for reinstallation.

3.3.3 The Contractor must discard all removed components in accordance with all Federal, state, and local rules and regulations.

3.4 New installation. The Contractor must furnish and provide all required materials to facilitate renewal of the Y-strainers (Removal). Unless, otherwise specified in the specification, piping and fitting materials must be in accordance with Coast Guard Drawings 225B 256-1.

3.4.1 Welding and brazing and associated NDI shall be done in accordance with SFLC Std Spec 0740.

3.4.2 The Contractor and Coast Guard Inspector must visually inspect the installations.

3.5 Pipe flushing. After all authorized work is completed, the Contractor must accomplish the following:

3.5.1 Flush all new and disturbed seawater piping with clean fresh water until all debris is removed but not 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.

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

WARNING

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

3.6 Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all new and disturbed piping and components of the seawater piping system at a pressure of 89 psig 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.

WARNING

Do not perform the hydrostatic test of newly installed and disturbed piping until after satisfactory completion of cleaning and flushing.

NOTE

The Contractor may opt to conduct NDI of new piping in lieu of hydrostatic testing.

3.7 Operational test – post repairs. After completion of work, the Contractor must thoroughly test, in the presence of the Coast Guard Inspector the seawater system, to prove satisfactory operating condition at

normal operating system pressure to verify tightness of disturbed piping including mechanical joints. Repair all leaks on disturbed connections. Submit a CFR.

3.7.1 Coast Guard personnel will operate machinery for the operational test.

3.8 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

This section is not applicable to this work item.

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WORK ITEM 38: Weather Tight Door, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew weather tight door identified in Table 1.

TABLE 1 – WEATHER TIGHT DOOR LOCATION

DESCRIPTION	LOCATION	DRAWING
1-25-2, 26" x 66" Weather Tight Door, Steel, LH Swing, 9" Dia. Fixed Light	ATON Shop, (1-21-2-Q)	FL-1602-89

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	1-25-2, 26 IN x 6 IN Weather Tight Door, Steel, LH Swing, 9 IN Dia. Fixed Light		1 ea.	

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB-167-001, Rev M, Structural Closures

Coast Guard Drawing FL-1602-89, Rev , Fleet 26" X 66" Weathertight Door

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

Commercial Item Description (CID) A-A-59316, 2003, Abrasive Materials for Blasting

The Society for Protective Coatings (SSPC)/NACE International (NACE) 2006, Joint Surface Preparation Standard SSPC-SP 10/NACE No.2, Near-White Blast Cleaning

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2012, Power Tool Cleaning to Bare Metal

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- Bulkhead insulation
- Light switch

NOTE

Geometric dimensioning and tolerance variances and minor hardware differences are to be expected with the Government-furnished closures. These variances and differences are not limited to the following: location and physical size of the hinge assemblies; location, physical size, and number of flush mounted pockets; location, size, and orientation of securing devices.

3.2 Renewal. The Contractor must crop, remove, and dispose of the door identified in Table 1 of this work item.

3.2.1 Install door provided by unit in place of that removed..

3.2.2 Perform all necessary modifications not limited to relocation, fabrication and installation of a new securing device, and modifications to ensure all renewed items properly fit and function.

3.2.3 At the direction of the Coast Guard Inspector, perform all necessary relocation and modification of securing latches.

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

3.3 Testing. Upon complete renewal of structural closure, the Contractor must perform the following boundary tests and submit a CFR:

chalk test

water hose test

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

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

TABLE 2 – SURFACE PREPARATION AND COATING

	COATING	
SURFACE	**STEEL**	**STEEL**
DOOR EXTERIOR/	SSPC-SP10/NACE No. 2, using grit conforming to MIL-A-22262 (1.5 to 2.5 mil anchor profile) -Or- SSPC-SP 11 (1.0 mil anchor profile)	SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems)
DOOR INTERIOR	SSPC-SP 11 (1.0 mil anchor profile)	SFLC Std Spec 6310 , Appendix B (Cutter and Boat Interior Painting Systems) “Door, Joiner, Option I”

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 as defined in the following; submit a CFR.

Closures are properly secured, to prevent accidental or unintentional movement.

Securing latches adequately engage closures and positively lock into place without excessive force or manipulation by the operator.

4. NOTES

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

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WORK ITEM 39: Weather Tight Door, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew weather tight door identified in Table 1.

TABLE 1 – WEATHER TIGHT DOOR LOCATION

DESCRIPTION	LOCATION	DRAWING
02-77-3, 26" x 66" Weather Tight Door, Steel, RH Swing	PFD Locker (02-75-1-Q)	FL-1602-89

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	02-77-3, 26 IN x 66 IN Weather Tight Door, Steel, RH Swing		1 ea.	

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB-167-001, Rev M, Structural Closures

Coast Guard Drawing FL-1602-89, Rev , Fleet 26" X 66" Weathertight Door

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

Commercial Item Description (CID) A-A-59316, 2003, Abrasive Materials for Blasting

The Society for Protective Coatings (SSPC)/NACE International (NACE) 2006, Joint Surface Preparation Standard SSPC-SP 10/NACE No.2, Near-White Blast Cleaning

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2012, Power Tool Cleaning to Bare Metal

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- Bulkhead insulation
- Light switch

NOTE

Geometric dimensioning and tolerance variances and minor hardware differences are to be expected with the Government-furnished closures. These variances and differences are not limited to the following: location and physical size of the hinge assemblies; location, physical size, and number of flush mounted pockets; location, size, and orientation of securing devices.

3.2 Renewal. The Contractor must crop, remove, and dispose of the door identified in Table 1 of this work item.

3.2.1 Install door provided by unit in place of that removed..

3.2.2 Perform all necessary modifications not limited to relocation, fabrication and installation of a new securing device, and modifications to ensure all renewed items properly fit and function.

3.2.3 At the direction of the Coast Guard Inspector, perform all necessary relocation and modification of securing latches.

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

3.3 Testing. Upon complete renewal of structural closure, the Contractor must perform the following boundary tests and submit a CFR:

- chalk test
- water hose test

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

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

TABLE 2 – SURFACE PREPARATION AND COATING

	COATING	
SURFACE	**STEEL**	**STEEL**
DOOR EXTERIOR/	SSPC-SP10/NACE No. 2, using grit conforming to MIL-A-22262 (1.5 to 2.5 mil anchor profile) -Or- SSPC-SP 11 (1.0 mil anchor profile)	SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems)
DOOR INTERIOR	SSPC-SP 11 (1.0 mil anchor profile)	SFLC Std Spec 6310 , Appendix B (Cutter and Boat Interior Painting Systems) “Door, Joiner, Option I”

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 as defined in the following; submit a CFR.

Closures are properly secured, to prevent accidental or unintentional movement.

Securing latches adequately engage closures and positively lock into place without excessive force or manipulation by the operator.

4. NOTES

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

WORK ITEM 40: Compartment Decks, Preserve

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to preserve all deck surfaces for compartments identified in Table 1.

TABLE 1 - COMPARTMENTS

LOCATION	APPROX SQFT
ATON Shop (1-21-2-Q)	175
ATON Storeroom (1-16-4-A)	150

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 601-002, Rev N, Booklet of General Drawings

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

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

- 3.2 (Ultrasonic thickness (UT) measurement).

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 below-listed:

- Work Bench
- Two Vidmar lockers
- Two Stand up Lockers
- AtoN Battery rack
- CO2 Extinguisher brackets

3.2 Ultrasonic thickness (UT) measurement. After surface preparation and prior to coating application, the Contractor must take 50 UT measurements, in locations designated by the Coast Guard Inspector, in accordance with SFLC Std Spec 0740, Appendix C. Submit a CIR.

NOTE

These decks will use the provision allowed by Note 16 tied to the "Metal Decks- No application of deck coverings" system in SS 6310, which authorizes use of inorganic zinc on steel decks which are subject to abuse by calling out the "Chain locker" system in its place.

3.3 Surface preservation. The Contractor must prepare and coat the deck surfaces, including approximately six inches up adjacent bulkheads and welded equipment foundations, using the system specified for "Chain lockers", in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select finish/top coat color to match buoy deck surfaces.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 41: Bow Thruster Ventilation, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew sections of the ventilation system in Table 1.

TABLE 1

SYSTEM DESIGNATION	EXTENT OF RENEWAL
Bow thruster natural exhaust ducting	Renew approximately 45 square feet from main deck down
	Renew approximately 24 square feet of lower horizontal and vertical surfaces

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225-WLB-512-16, Rev B, Ventilation Mods to Focsle Deck

NAVSEA Drawing 804-5773932, Rev A, Acoustic & Thermal Insulation for Ducts Installation Details

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

ASTM International (ASTM) F683, 2010, Standard Practice for Selection and Application of Thermal Insulation for Piping and Machinery

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

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 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):

None.

3.1.2 Technical Representative.

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:

- Weather deck drain
- Insulation
- Electrical wiring
- Gooseneck

3.1.5 Temporary Ventilation. The Contractor must provide all equipment and services necessary, to ensure continuous positive ventilation in all spaces/compartments (affected directly and indirectly by contract work) in accordance with SFLC Std Spec 0000, paragraph 3.3 (Work control requirements).

3.2 Work to be accomplished. In accordance with referenced Coast Guard Drawings, Publications, and Other References in section 2 (References) and identified by the Coast Guard Inspector, The Contractor must perform the following:

3.2.1 Ventilation renewal. The Contractor must renew the ventilation ducting in 1.1 (Intent), as designated by the Coast Guard Inspector and in accordance with referenced Coast Guard Drawings, Publications, and Other References in section 2 (References). Hot work must be in accordance with SFLC Std Spec 0000, section 3.3 (Work control requirements). All welding must be in accordance with SFLC Std Spec 0740.

3.2.1.1 Remove the gooseneck and submit a CFR. If a Change Request has been authorized and released by the KO renew as identified, preserve interior and exterior in accordance with SFLC Std Spec 6310 and retain for reinstallation.

3.2.1.2 Crop out, scrap, and renew bow thruster natural exhaust ducting and lower horizontal and vertical surfaces between frames 15 and 18 as identified by the Coast Guard Inspector. The Contractor must dispose of the scraped ducting in accordance with all applicable Federal, state, and local regulations.

3.2.1.3 The Contractor must renew and install all covers, gaskets, pins, chains, hardware, and labels on all ducting in accordance with referenced drawing.

3.2.1.4 Reinstall the gooseneck.

3.3 NDE. The Contractor must perform NDE of the ventilation welds in accordance with SFLC Std Spec 0740, Appendix C. If selected NDE method requires coating removal, perform subsequent touch-up preservation in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs). Submit a CFR.

NOTE

Common NDE methods not requiring coating removal include, but are not limited to the following:

a. Radiographic Testing (RT).

b. Ultrasonic Testing (UT).

c. Eddy Current Testing (ET).

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

3.5 Ducting insulation installation. The Contractor must install new insulation material over the exposed duct surfaces as shown on NAVSEA Drawing 804-5773932. . Coat the newly installed insulation using the system specified for “Insulation Surfaces, Fiberglass Sheet/Closed Cell PVC Foam” in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems).

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

3.7 Operational test – post repairs. After completion of work, the Contractor must witness an operational test by Coast Guard personnel of all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to prove that they are in satisfactory operating condition in according to General Requirements.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 42: Tanks (Grey Water Holding), Preserve "Partial"

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to prepare and preserve the following tank(s):

TABLE 1 – TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (Gallons)	LOW SUCTION (Gallons)
Grey Water Tank	4-82-2-W	2,798	106
Grey Water Tank	4-48-1-W	11,250	350
Grey Water Tank	4-48-2-W	11,250	350

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System Diagram

Coast Guard Drawing 225B WLB 593-009, Rev B, Sewage Holding Tank

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- Piping.
- Pump(s).
-

3.1.5 Temporary access openings. Due to limited access to work areas, the Contractor may, with express permission of the KO (via submission of a CFR), cut access holes to facilitate accomplishment of the work specified herein. Perform all work required to open and close the access openings in accordance with SFLC Std Spec 8636.

NOTE

This item is written to be used as an "Option" item, in conjunction with the clean and inspect "Definite" item. Requirements for tank opening and closing, content disposal, and inspection are covered in the clean and inspect work item.

3.2 Surface preservation. The Contractor must, referring to Coast Guard drawings 225B WLB 593-001 and 225B WLB 593-009 for guidance, prepare and coat up to 33 % of the interior surfaces of each of the designated tanks, using the system specified for "Tanks and Voids (Grey Water, Sewage, and CHT Tanks), Option I", in SFLC Std Spec 6310, Appendix B (Cutters and Boat Interior Paint Systems). Power tool clean all affected surfaces to "bare metal", 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. Select finish/top coat color to match existing adjacent surfaces.

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). Surfaces being preserved are considered "critical-coated surfaces".

4. NOTES

Per Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements, the following paragraph may be applicable:

3.2.11.1 Sanitary facilities for vessel-personnel – due to disruption of grey water and sewage systems. When the shipboard grey water and sewage systems are disrupted due to repairs required by contract work, the Contractor shall provide vessel-personnel with a sanitary facility, within a five minute walking distance from the vessel, to include the amenities listed in Table 2(Sanitary Facility Amenities). Ensure the following:

- Shower stalls are equipped with privacy screens.

- Sinks are provided with fresh hot and cold water.

- Electrical convenience GFI receptacles, in accordance with NFPA 70, National Electric Code (NEC), are located in vicinity of sinks.

- Toilets have doors or privacy dividers.

- Lockers are capable of being locked.

WORK ITEM 43: Tanks, Grey Water Holding, Preserve 100 Percent

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to prepare and preserve 100% of the surfaces of the following tank(s):

TABLE 1 – TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (Gallons)	LOW SUCTION (Gallons)
Grey Water Tank	4-82-2-W	2,798	106
Grey Water Tank	4-48-1-W	11,250	350
Grey Water Tank	4-48-2-W	11,250	350

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 593-001, Rev D, Sewage and Waste Water System Diagram

Coast Guard Drawing 225B WLB 593-009, Rev B, Sewage Holding Tank

COAST GUARD PUBLICATIONS

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

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

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

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):

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). The Contractor must be aware that interferences in way of work include, but are not limited to the following:

- Piping
- Pump(s)
-

3.2 Temporary access openings. Due to limited access to work areas, the Contractor may, with express permission of the KO (via submission of a CFR), cut access holes to facilitate accomplishment of the work specified herein. Perform all work required to open and close the access openings in accordance with SFLC Std Spec 8636.

NOTE

Requirements for tank opening and closing, content disposal, and inspection are covered in the clean and inspect item.

3.3 Surface preservation. The Contractor must accomplish the following tasks for the tanks listed in paragraph 1.1 (Intent), and refer to Coast Guard drawings 225B WLB 593-001 and 225B WLB 593-009 for guidance in accomplishing this work item.

3.3.1 Remove and retain the tank manhole cover(s).

3.3.2 Prepare and coat all (100%) tank interior surfaces (including internal surfaces of manhole cover(s), manhole cover hull ring(s) extending outward to the weld line that ties the hull ring into the tank plating on the tank exterior), using the system specified for "Tanks and Voids (Grey Water, Sewage, and CHT Tanks), Option I", in SFLC Std Spec 6310, Appendix B (Cutters and Boat Interior Paint Systems). Select finish/top coat color to match existing.

3.3.3 Prepare and coat all manhole cover external surfaces to match existing adjacent surfaces, using the system specified for “Decks, Metal Interior and Non-Skid Areas (Steel and Aluminum Decks)”, in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select finish/top coat color to match existing adjacent surfaces.

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

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

4. NOTES

Per Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020, General Requirements, the following paragraph may be applicable:

3.2.11.1 Sanitary facilities for vessel-personnel – due to disruption of grey water and sewage systems. When the shipboard grey water and sewage systems are disrupted due to repairs required by contract work, the Contractor shall provide vessel-personnel with a sanitary facility, within a five minute walking distance from the vessel, to include the amenities listed in Table 2(Sanitary Facility Amenities). Ensure the following:

- Shower stalls are equipped with privacy screens.

- Sinks are provided with fresh hot and cold water.

- Electrical convenience GFI receptacles, in accordance with NFPA 70, National Electric Code (NEC), are located in vicinity of sinks.

- Toilets have doors or privacy dividers.

- Lockers are capable of being locked.

WORK ITEM 44: Compartment Insulation Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew insulation in designated compartments.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B-WLB 601-001, Rev J, General Arrangement, Inbd and Outbd Profiles

Coast Guard Drawing 225B-WLB 635-001, Rev D, Hull Thermal & Acoustic Insulation Schedule

Coast Guard Drawing 225B-WLB 509-001, Rev A, Duct, Truck, & Machinery Insulations Details

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

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2018, General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2018, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

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

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

- Sheathing.
- Piping.
- Light fixtures.
- Vent ducts.
- Electrical equipment and wiring.

3.2 Work Location. The concerned work areas are shown in **TABLE 1** below. See the CG Dwgs above, for guidance and details.

TABLE 1

ITEM	LOCATION	QUANTITY EST. (SQFT)
1	Galley (1-57-1-Q) Overhead	288
2		
3		
4		
	TOTAL	288

3.3 Insulation renewal. The Contractor shall accomplish the following tasks using Coast Guard Drawings and references listed above as guide:

3.3.1 Insulation inspection. Visually inspect the insulation in the areas described in paragraph 3.2. Mark out the boundary of the distressed insulation. Submit a CFR.

3.3.1.1 Before removing any insulation, obtain verification from the Coast Guard Inspector of the marked out boundary. Provide a sketch of the removal and a written report of all findings to the Coast Guard Inspector.

3.3.2. Removal. Remove and dispose of all existing insulation material to be renewed in the work areas shown in the **TABLE 1** in accordance with Federal, State and local ordinances.

3.3.3 Substrate preservation. Prepare and coat all exposed and disturbed bulkhead and overhead surfaces, including all adjacent structural members, using the system specified in SFLC Std Spec 6310 for “Insulation Surfaces” in Appendix B (Cutter and Boat Interior Painting Systems), respectively, and as applicable.

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

3.3.4 Insulation. Install approximately 288 square feet of new insulation material over the coated surfaces, in accordance with Coast Guard Drawing 225B-WLM 635-001, 225B-WLB 509-001 and NAVSEA Drawing 804-5773931 as applicable, in the locations and amount specified in **TABLE 1**. Coat the newly installed insulation, using the system specified for "Insulation Surfaces, Fiberglass Sheet/Closed Cell PVC Foam" SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems).

3.4 Touch-up preservation. The Contractor shall prepare and coat all new and disturbed exterior and interior surfaces to match existing adjacent surfaces, in accordance SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems) and Appendix B (Cutter and Boat Interior Painting Systems), respectively, and as applicable. Abide by all touch-up requirements outlined in SFLC Std Spec 0000, Appendix A (Requirements for Preservation of Ship Structures).

4. NOTES

This section is not applicable to this work item.

WORK ITEM 45: Tanks, Potable Water Preserve, 100 Percent

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to prepare and coat 100% of the surfaces of the following tank(s):

TABLE 1 - TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (GALLONS)	LOW SUCTION (GALLONS)
Potable Water	2-25-1-W	4,028	80
Potable Water	2-25-2-W	4,028	80

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 601-001, Rev F, General Arrangement Inboard & Outboard Profiles

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

American National Standards Institute/NSF International (ANSI/NSF) 61, 2008, Drinking Water System Components - Health Effects

American National Standards Institute/American Water Works Association (ANSI/AWWA) C652, 2011, Disinfection of Water-Storage Facilities

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).

3.2 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). Surfaces being preserved are considered "critical-coated surfaces".

3.3 Temporary access openings. Due to limited access to work areas, the Contractor may, with express permission of the KO (via submission of a CFR), cut access holes to facilitate accomplishment of the work specified herein. Perform all work required to open and close the access openings in accordance with SFLC Std Spec 8636.

3.4 Tank content removal. The Contractor must remove and dispose of all tank contents in accordance with all applicable Federal, State, and local regulations. The Contractor must notify the Dockmaster prior to filling or draining the potable water tank(s).

3.5 Surface preservation. The Contractor must accomplish the following tasks for the tanks listed in paragraph 1.1 (Intent):

3.5.1 Remove and retain the tank manhole cover(s).

3.5.2 Prepare and coat all tank interior surfaces (including internal surfaces of manhole cover(s), manhole cover hull ring(s) extending outward to the weld line that ties the hull ring into the tank plating on the tank exterior), using the system specified for "Tanks and Voids (Potable Water Tanks)" in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select finish/top coat color to match existing.

3.5.3 Prepare and coat all manhole cover external surfaces to match existing adjacent surfaces, using the system specified for "Decks, Metal Interior and Non-Skid Areas (Steel and Aluminum Decks - Wet

Areas, Food Preparation Areas, Exit Areas, and Areas Subject To Condensation)", in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select finish/top coat color to match existing adjacent surfaces.

3.5.4 Heated air must be used if necessary to maintain the proper temperature during cure. Ventilation must be a continuous airflow with a minimum of one complete air change every four (4) hours.

3.5.5 Fully coated tanks must be cured in accordance with the manufacturer's instructions for NSF/NEHC certification under the same conditions before being filled.

NOTE

Typical curing times are at least 7 days, and range up to 14 days (or longer), depending on the paint selected and environmental conditions.

3.5.6 Curing time must be based on paint manufacturer's recommendations for the specific application.

CAUTION

Verify application and cure requirements with paint manufacturer prior to paint purchase and application. Lack of attention to environmental conditions can adversely impact paint system cure, cause unnecessary contract time delays, and negatively impact crew health and vessel habitability when tanks are put back into service.

DO NOT assume paint Product Data Sheet to be accurate. Contact paint manufacturer directly to verify, as formulations change and new application information may be available.

3.5.7 Freshly painted potable water tanks must be rinsed at least twice with freshwater before being disinfected and put into service.

3.6 Inspection. After surface preparation and before coating application, the Contractor must visually inspect all interior surfaces; including, but not limited to bulkheads, floor and overhead plating, structural members, manhole cover surfaces, fasteners and gasket seating surfaces. Submit a CFR including the following, as applicable:

- Structural condition
- Inaccessible areas
- Tank level indicator (TLI) and/or float switch condition
- Sounding tube and striker plate condition
- Suction and discharge piping.

3.7 Tank closing. The Contractor must ensure that the tank(s) remain open for at least 24 hours after completion of the tasks specified above. Notify the COR at least 24 hours prior to closing the tank(s). After satisfactory inspection by the Coast Guard Inspector and after all authorized repairs, accomplish the following:

- Reinspect all TLIs, as applicable, to verify proper operation. Submit a CFR.
- Close tank manhole cover(s) with new gasket material conforming to ANSI/NSF 61 and new stud cotton grommets (where applicable).

3.6 Tank disinfecting. After all other work involving the potable water system and tank closing have been completed, the Contractor must disinfect and treat the affected potable water tank(s) and associated disturbed piping and components, as necessary, to meet or exceed the requirements of AWWA C652. After tank disinfecting, remove and dispose of all treated water in accordance with all Federal, state and local regulations. Ensure that no one enters the tanks once disinfection is completed.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 46: Tanks, Potable Water, Preserve, Partial,

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to prepare and coat a portion of the surfaces of the following tank(s) as designated:

TABLE 1 - TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (GALLONS)	% OF TANK COATING REPAIR	LOW SUCTION (GALLONS)
Potable Water	2-25-1-W	4,028		80
Potable Water	2-25-2-W	4,028		80

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 225B WLB 601-001, Rev F, General Arrangement Inboard & Outboard Profiles

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

American National Standards Institute/NSF International (ANSI/NSF) 61, 2008, Drinking Water System Components - Health Effects

American National Standards Institute/American Water Works Association (ANSI/AWWA) C652, 2011, Disinfection of Water-Storage Facilities

3. REQUIREMENTS

3.1 General. The Contractor must refer to Coast Guard Drawing 225B WLB 601-001 for guidance.

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).

3.2 Temporary access openings. Due to limited access to work areas, the Contractor may, with express permission of the KO (via submission of a CFR), cut access holes to facilitate accomplishment of the work specified herein. Perform all work required to open and close the access openings in accordance with SFLC Std Spec 8636.

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

3.4 Tank content removal. The Contractor must remove and dispose of all tank contents in accordance with all applicable Federal, State, and local regulations. The Contractor must notify the Dockmaster prior to filling or draining the potable water tank(s).

3.5 Surface preservation. The Contractor must remove and retain the tank manhole cover(s). Prepare and coat the designated tank interior surfaces, using the system specified for "Tanks and Voids (Potable Water Tanks)" in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Power tool clean all affected surfaces to “bare metal”, 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. Select finish/top coat color to match existing adjacent surfaces.

3.5.1 The Contractor must ensure heated air is used if necessary to maintain the proper temperature during application and cure. Ventilation must be a continuous airflow with a minimum of one complete air change every four (4) hours.

3.5.2 The Contractor must ensure tanks are cured in accordance with the manufacturer's instructions for NSF/NEHC certification under the same conditions before being filled.

NOTE

Typical curing times are at least 7 days, and range up to 14 days or longer, depending on the paint selected, amount of surface area covered, and environmental conditions. See paint manufacturer's recommendations for specific application.

CAUTION

Verify application and cure requirements with paint manufacturer prior to paint purchase and application. Lack of attention to environmental conditions can adversely impact paint system cure, cause unnecessary contract time delays, and negatively impact crew health and vessel habitability when tanks are put back into service.

DO NOT assume paint Product Data Sheet to be accurate. Contact paint manufacturer directly to verify, as formulations change and new application information may be available.

3.5.3 The Contractor must ensure freshly painted potable water tanks are rinsed at least twice with freshwater before being disinfected and put into service.

3.6 Inspection. After surface preparation and before coating application, the Contractor must visually inspect all interior surfaces; including, but not limited to bulkheads, floor and overhead plating, structural members, manhole cover surfaces, fasteners and gasket seating surfaces. Submit a CFR including the following, as applicable:

- Structural condition
- Inaccessible areas
- Tank level indicator (TLI) and/or float switch condition
- Sounding tube and striker plate condition
- Suction and discharge piping.

3.7 Tank closing. The Contractor must ensure that the tank(s) remain open for at least 24 hours after completion of the tasks specified above. Notify the COR at least 24 hours prior to closing the tank(s). After satisfactory inspection by the Coast Guard Inspector and after all authorized repairs, accomplish the following:

- Reinspect all TLIs, as applicable, to verify proper operation. Submit a CFR.
- Close tank manhole cover(s) with new gasket material conforming to ANSI/NSF 61 and new cotton stud grommets (as applicable).

3.8 Tank disinfecting. After all other work involving the potable water system and tank closing have been

completed, the Contractor must disinfect and treat the affected potable water tank(s) and associated disturbed piping and components, as necessary to meet or exceed the requirements of AWWA C652. After disinfecting the tank(s), remove and dispose of all treated water in accordance with all Federal, state and local regulations. Ensure no one enters the tanks once disinfection is completed.

4. NOTES

This section is not applicable to this work item.