USCGC STRATTON (WSML-752)

DOCKSIDE (DS) Repair FY22

70Z08522QP4504100

NOTICE FOR FILING AGENCY PROTESTS
United States Coast Guard Ombudsman Program

It is the policy of the United States Coast Guard (USCG) to issue solicitations and make contract awards in a fair and timely manner. The Ombudsman Program for Agency Protests (OPAP) was established to investigate agency protest issues and resolve them without expensive and time-consuming litigation. OPAP is an independent reviewing authority that is empowered to grant a prevailing protester essentially the same relief as the Government Accountability Office (GAO).

Interested parties are encouraged to seek resolution of their concerns within the USCG as an Alternative Dispute Resolution (ADR) forum rather than filing a protest with the GAO or some external forum. Interested parties may seek resolution of their concerns informally or opt to file a formal agency protest with the Contracting Officer or Ombudsman.

Informal Forum with the Ombudsman. Interested parties who believe a specific USCG procurement is unfair or otherwise defective should first direct their concerns to the applicable Contracting Officer. If the Contracting Officer is unable to satisfy their concerns, interested parties are encouraged to contact the U.S. Coast Guard Ombudsman for Agency Protests. Under this informal process the agency is not required to suspend contract award performance. Use of an informal forum does not suspend any time requirement for filing a protest with the agency or other forum. In order to ensure a timely response, interested parties should provide the following information to the Ombudsman: solicitation/contract number, contracting office, Contracting Officer, and solicitation closing date (if applicable).

Formal Agency Protest with the Ombudsman. Prior to submitting a formal agency protest, protesters must first use their best efforts to resolve their concerns with the Contracting Officer through open and frank discussions. If the protester's concerns are unresolved, an Independent Review is available by the Ombudsman. The protester may file a formal agency protest to either the Contracting Officer or as an alternative to that, the Ombudsman under the OPAP program.
Contract award or performance will be suspended during the protest period unless contract award or performance is justified, in writing, for urgent and compelling reasons or is determined in writing to be in the best interest of the Government. The agency's goal is to resolve protests in less than 35 calendar days from the date of filing. Protests shall include the information set forth in FAR 33.103(d) (2). If the protester fails to submit the required information, resolution of the protest may be delayed or the protest may be dismissed. To be timely protests must be filed within the period specified in FAR 33.103(e). Formal protests filed under the OPAP program should be submitted electronically to OPAP@uscg.mil and the Contracting Officer or by hand delivery to the Contracting Officer.

Election of Forum. After an interested party protests a Coast Guard procurement to the Contracting Officer or the Ombudsman, and while the protest is pending, the protester agrees not to file a protest with the GAO or other external forum. If the protest is filed with an external forum, the agency protest will be dismissed.

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This is a combined synopsis/solicitation for commercial items prepared in accordance with Federal Acquisition Regulation (FAR) subpart 12.6 and subpart 13.5 as supplemented with additional information included in this notice. This announcement constitutes the only solicitation; quotations are being requested and a written solicitation will not be issued. Solicitation number 70Z08522QP4504100 is issued as a Request for Quotations (RFQ). This solicitation document and incorporated provisions and clauses are those in effect through **Federal Acquisition Circular (FAC) 2021-07 effective September 10, 2021, Department of Homeland Security Acquisition Regulation (HSAR) effective May 2021, Homeland Security Acquisition Manual (HSAM) 2021-07 effective July 30, 2021, Coast Guard Acquisition Procedures (CGAP) 2017-02 effective September 29, 2017, FAR Class Deviation 14-01 (DEC 2014), FAR Class Deviation 2019-01 Rev 1 (AUG 2020), FAR Class Deviation 20-04 Rev 1(APR 2020), FAR Class Deviation 2020-05 (APR 2020), and FAR Class Deviation 2020-05 Rev 1(AUG 2020)**.

NORTH AMERICAN INDUSTRY CLASSIFICATION STANDARD CODE:

The applicable North American Industry Classification Standard Code is 336611. The small business size standard is 1,250 employees. This solicitation is issued as a 100% Total Small Business Set-Aside. All responsible small business sources may submit a quotation, which shall be considered by the agency.

It is anticipated that one (1) firm fixed price contract will be awarded as a result of this synopsis/solicitation.
The following documents are attached:

Attachment 1: Schedule of Services
Attachment 2: Specification (SOW)
Attachment 3: Non-Disclosure Agreement

AGENCY INFORMATION:

A. Halim Toulas	Marcella V. Brown	LTJG Stephen J. Bruno
Contract Specialist	Contracting Officer	Contracting Officer's Representative
(757) 628-4946	(510) 437-5420	510-437-5872
Abdul.H.Toulas@uscg.mil	Marcella.V.Brown@uscg.mil	Stephen.J.Bruno@uscg.mil

PERIOD OF PERFORMANCE: The period of performance for this contract is 16 March 2022 to 2 August 2022.

IMPORTANT: Dates determined per NIWC draft schedule dated 8/30/2021, shifted by 9 days

- WI 5 Deck Covering (Slip-Resistant), Renew – CIWS Deck

Must be complete on or before 5/31.

Did not shift dates—still allows 10.5 weeks for work.

- WI 5 Deck Covering (Slip-Resistant), Renew – Pilot House Top

Must be complete on or before 5/31.

Did not shift dates—still allows 10.5 weeks for work.

- WI 9 Dual Point Davit, Replace

Any work obstructing access to the CIWS deck via the boat deck must start after completion of CIWS deck.

- WI 6 FAS and Boat Deck, Vertical Surfaces, Preserve

Any work obstructing access to the CIWS deck via the boat deck must start after completion of CIWS deck.

- WI 5 Deck Covering (Slip-Resistant), Renew – STBD Hanger

Must start on or after 6/21.

- WI 5 Deck Covering (Slip-Resistant), Renew – Port Hanger

Must start on or after 5/3.

- WI 10 MPDE Exhaust Silencer, Replace

Must start on or after 5/3.

- WI 8 Hangar BERP, Install

Must start on or after 5/3.

- WI 7 Deck Covering (Slip-Resistant), Renew

Must start on or after 5/3.

- WI 4 Tenting, Provide

As per locations for exterior preservation.

PLACE OF PERFORMANCE: USCG Base Alameda, Coast Guard Island, Alameda CA 94501.

REQUEST FOR DRAWINGS: The last day to request drawings regarding this solicitation is (08 October 2021). After this date, further requests may not be accepted due to time constraints. To request drawings, contact the Contract Specialist. All requests should identify the solicitation number 70Z08522QP4504100. Some references listed in the Specification, under "Consolidated List of References," are subject to Export Control limitations or have otherwise restricted distribution, and have been deemed "limited access" and "export controlled" packages.

In order to access these documents, vendors must be certified as a US or Canadian contractor by the Joint Certification Program (JCP) administered by the Defense Logistic Information Service (DLIS). Instructions and procedures for being certified by JCP can be found at https://www.dla.mil/HQ/LogisticsOperations/Services/JCP/. Only those vendors that have current certification by JCP will be able to be granted explicit access to these packages by the USCG.

Requests for drawings, to include the Joint Certification Program number and fully completed Attachment (3), Non-Disclosure Agreement, must be submitted to A. Halim Toulas, Abdul.H.Toulas@uscg.mil and Marcella Brown, Marcella.V.Brown@uscg.mil no later than 1:00 p.m. PST Monday, 08 October 2021.

QUESTIONS: Questions regarding this solicitation shall be submitted by 19 October 2021. After this date, further requests may not be accepted due to time constraints. For questions regarding this solicitation, please contact the Contract Specialist or the Contracting Officer. All requests should identify the solicitation number **70Z08522QP4504100**.

SUBMISSION OF QUOTES: E-mail quotations shall be sent to the Contract Specialist and Contracting Officer. Please indicate **70Z08522QP4504100** in the subject line. **Contractor must**

affirm that the pricing provided from the quote shall be valid up to the date of contract award. Quotes shall be submitted by Novermber 01, 2021 no later than 1:00 p.m. PST.

Statement of Requirement
The proposed contract to be awarded by the United States Coast Guard (USCG) shall be for DOCKSIDE Repair to the USCGC STRATTON (WSML-752) as specified in Attachment 2 – Statement of Work (SOW) - Specification. The contractor shall provide all labor, materials, equipment, etc. necessary to meet the requirements of the specification. All quotes submitted in response to this solicitation shall stand firm for 60 calendar days from the close date of the solicitation.

The following clauses, provisions, and addenda applies to this acquisition:

52.212-1 Instructions to Offerors - Commercial Items (Tailored) OCT 2018

Clause 52.212-1 is tailored as follows:

Instructions to Quoters—Commercial Items
(a) *North American Industry Classification System (NAICS) code and small business size standard.* The NAICS code(s) and small business size standard(s) for this acquisition appear elsewhere in the solicitation. However, the small business size standard for a concern which submits an offer in its own name, but which proposes to furnish an item which it did not itself manufacture, is 500 employees.

(b) Submission of quotations. Submit quotations to the office specified in this solicitation at or before the exact time specified in this solicitation. Quotations may be submitted on the SF 1449, letterhead stationery, or as otherwise specified in the solicitation. As a minimum, quotations must show-

(1) The solicitation number;
(2) The time specified in the solicitation for receipt of quotations;
(3) The name, address, and telephone number of the quoter;
(4) All required technical documentation as identified in the "technical capabilities" evaluation factor;
(5) Terms of any express warranty;
(6) Price and any discount terms;
(7) "Remit to" address, if different than mailing address;
(8) A completed copy of the representations and certifications at FAR 52.212-3 (see FAR 52.212-3(b) for those representations and certifications that the quoter shall complete electronically);
(9) Acknowledgment of Solicitation Amendments;
(10) Past performance information, when included as an evaluation factor, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information); and
(11) If the quotation is not submitted on the SF 1449, include a statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation. Quotations that fail to furnish required representations or information, or reject the terms and conditions of the solicitation may be excluded from consideration.

(c) Reserved.

(d) Product samples. When required by the solicitation, product samples shall be submitted at or prior to the time specified for receipt of quotations. Unless otherwise specified in this solicitation, these samples shall be submitted at no expense to the Government, and returned at the sender's request and expense, unless they are destroyed during preaward testing.

(e) Multiple quotations. Quoters are encouraged to submit multiple quotations presenting alternative terms and conditions or commercial items for satisfying the requirements of this solicitation. Each quotation submitted will be evaluated separately.

(f) Late submissions.

(1) Quoters are responsible for submitting quotations so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that quotations are due.

(2) Any quotation received at the Government office designated in the solicitation after the exact time specified for receipt of quotations is late and will not be considered unless it is received before award is made and the Contracting Officer determines that accepting the late quotation would not unduly delay the acquisition.

(3) If an emergency or unanticipated event interrupts normal Government processes so that quotations cannot be received at the Government office designated for receipt of quotations by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of quotations will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(g) Issuance of Purchase Order. The Government intends to evaluate quotations and issue a purchase order based on the initial quotations received. Therefore, the quoter's initial quotation should contain the quoter's best terms from a price and technical standpoint. The Government reserves the right to request revised quotations from, or negotiate final purchase order terms with, one or more, but not all, quoters if determined by the Contracting Officer to be necessary. The Contracting Officer will not establish a competitive range, conduct discussions, or otherwise use the procedures described at FAR 15. The Government may reject any or all quotations if such action is in the public interest; and issue a purchase order to other than the quoter with the lowest priced quotation.

(h) Multiple awards. The Government may issue a purchase order for any item or group of items of a quotation, unless the quoter qualifies the quotation by specific limitations. Unless otherwise provided in the Schedule, quotations may not be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity quoted, at the unit prices quoted, unless the quoter specifies otherwise in the quotation.

(i) Availability of requirements documents cited in the solicitation.

(1)(i) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to-

GSA Federal Supply Service Specifications Section

Suite 8100
470 East L'Enfant Plaza, SW
Washington, DC 20407
Telephone (202) 619-8925
Facsimile (202) 619-8978.
(ii) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (h)(1)(i) of this provision. Additional copies will be issued for a fee.
(2) Most unclassified Defense specifications and standards may be downloaded from the following ASSIST websites:
(i) ASSIST (https://assist.dla.mil/online/start/).
(ii) Quick Search (http://quicksearch.dla.mil/).
(iii) ASSISTdocs.com (http://assistdocs.com).
(3) Documents not available from ASSIST may be ordered from the Department of Defense Single Stock Point (DoDSSP) by-
(i) Using the ASSIST Shopping Wizard (https://assist.dla.mil/wizard/index.cfm);
(ii) Phoning the DoDSSP Customer Service Desk (215) 697-2179, Mon-Fri, 0730 to 1600 EST; or
(iii) Ordering from DoDSSP, Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.
(4) Nongovernment (voluntary) standards must be obtained from the organization responsible for their preparation, publication, or maintenance.

(j) Data Universal Numbering System (DUNS) Number. (Applies to all quotations exceeding $3,000, and quotations of $3,000 or less if the solicitation requires the Contractor to be registered in the System for Award Management (SAM) database.) The quoter shall enter, in the block with its name and address on the cover page of its quotation, the annotation "DUNS" or "DUNS+4" followed by the DUNS or DUNS+4 number that identifies the quoter's name and address. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the quoter to establish additional SAM records for identifying alternative Electronic Funds Transfer (EFT) accounts (see FAR Subpart 32.11) for the same concern. If the quoter does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A quoter within the United States may contact Dun and Bradstreet by calling 1-866-705-5711 or via the internet at http://fedgov.dnb.com/webform. A quoter located outside the United States must contact the local Dun and Bradstreet office for a DUNS number. The quoter should indicate that it is a quoter for a Government contract when contacting the local Dun and Bradstreet office.

(k) System for Award Management. Unless exempted by an addendum to this solicitation, by submission of a quotation, the quoter acknowledges the requirement that a prospective awardee shall be registered in the SAM database prior to award, during performance and through final payment of any contract resulting from this solicitation. If the Quoter does not become registered in the SAM database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Quoter. Quoters may obtain information on registration and annual confirmation requirements via the SAM database accessed through https://www.acquisition.gov.

(l) Requests for information. The contracting officer will not notify unsuccessful quoters that responded to this solicitation. Quoters may request information on award(s) resulting from this solicitation from the contracting officer.

The provision at Federal Acquisition Regulation (FAR) 52.212-2 Evaluation of Commercial Items (OCT 2014) is not applicable to this solicitation. In lieu of this provision, quotes will be evaluated in accordance with FAR 13.106-2 based on the criteria listed below.

Evaluation Criteria

The Government will award a contract resulting from this solicitation to the responsible contractor whose quote is the most advantageous best value to the Government, price and non-price factors considered. The following factors shall be used to evaluate quotes:

A. Technical Capabilities
B. Past Performance
C. Price

Technical Capabilities:

Technical Acceptability will be evaluated to determine an overall rating. This will be determined by evaluating the ability of the contractor to provide a sound, compliant approach that meets all requirements listed in the Specification and demonstrates a thorough knowledge and understanding of the requirements. It is the contractor's responsibility to ensure that their quote clearly demonstrates their ability to perform these requirements. All contractors must provide the following minimum information and documentation with their quotes to be considered technically acceptable:

Technical Approach:

Technical Evaluation Factors	
Technical Approach	Submit a legible Planning Document (PD) with the following characteristics: • Graphical in format • Shows overall period of performance for each CLIN, with start and stop dates of major sub-tasks. • Contains due dates for Critical Inspection Reports (CIR) and any events requiring Coast Guard Inspector presence. • Identifies all work item time periods that require OEM Tech Rep assistance. • Identifies the critical paths for the project. • Shows calculations for the float along the critical paths and labels the critical paths with the number of delay days the critical paths can absorb without affecting the final delivery date. • Shows start/finish or finish/start relationships and dependences for all tasks that have work constraints or require coordination of work activities.

Past Performance:
Past performance will be evaluated in accordance with the above 52.212-1 and FAR 13.106-2(b)(3). The Government reserves the right to limit or expand the number of references it decides to utilize in determining past performance within the last two years at time of solicitation closing date. Any past performance ratings less than satisfactory may not be considered for award.

Price:
The contractor shall provide pricing as requested in Attachment 1, Schedule of Services 70Z08522QP4504100. Contractor's price shall represent the best price in response to the request for quote. The price shall be evaluated to determine fairness and reasonableness. Options. The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. The Government may determine that an offer is unacceptable if the option prices are significantly unbalanced. Evaluation of options shall not obligate the Government to exercise the option(s).

Evaluation Method
The Government will evaluate proposals using a tradeoff process to determine the best overall value and consider award to other than the lowest priced offeror or than the highest technically rated offer. The relative importance of technical and past performance combined, are more important than cost or price. The evaluation factors above are the mandatory minimum requirement for eligibility for evaluation. Failure to comply with the requirement may lead to outright rejection of the quote. The Government reserves the right to make award without holding discussions.

Quoters are required to include a completed copy of the provision at FAR 52.212-3 – OFFEROR REPRESENTATIONS AND CERTIFICATIONS -- COMMERCIAL ITEMS. (FEB 2021) WITH ALTERNATE I (OCT 2014)

The offeror shall complete only paragraphs (b) of this provision if the Offeror has completed the annual representations and certification electronically via the System for Award Management (SAM) Web site located at http://www.sam.gov/portal. If the Offeror has not completed the annual representations and certifications electronically, the Offeror shall complete only paragraphs (c) through (u) of this provision.

The clause at 52.212-4, Contract Terms and Conditions – Commercial Items (OCT 2018), applies to this acquisition and includes the following addenda:

(c) Changes – ship repair

(1) The Contracting Officer may, at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract, in any one or more of the following:

(a) Drawings, designs, or specifications, when the supplies to be furnished are to be specially manufactured for the Government in accordance with the drawings, designs, or specifications;

(b) Method of shipment or packing;

(c) Place of performance of the work;

(d) Time of commencement or completion of the work; and

(e) Other requirements within the general scope of the contract.

(2) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract accordingly.

(3) The contractor must submit any proposal for adjustment under this clause within 5 days from the date of receipt of the written order. At the Contracting Officer's discretion, the 5-day period may be shortened. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(4) If the contractor's proposal includes the cost of property rendered obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(5) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the contractor from proceeding with the contract as changed.

(w) Required Insurance

Prior to start of performance, the Contractor shall, at its own expense, procure and maintain the following kinds of insurance with respect to performance under the contract. In accordance with HSAR 3052.217-95, Liability and Insurance, and 3052.228-70, Insurance the Contractor shall furnish the Contracting Officer with proof of insurance for the duration of the contract, including:

(1) Ship Repairer's Liability - $500,000 per occurrence.
(2) Comprehensive General Liability - $500,000 per occurrence.
(3) Full insurance coverage in accordance with the United States' Longshoremen's and Harbor Worker's Act.
(4) Full insurance coverage in accordance with the State's Workmen's Compensation Law (or its equivalent) for all places of performance under this contract.

The insurance certificate must provide the name of the US Coast Guard vessel and the contract and/or solicitation number as specifically insured.

(x) Change Request (CR) – Growth Work

(1) **The Contractor shall not perform growth work without the Contracting Officer's authorization.** This clause applies to Change Requests (CR), also known as growth and emergent work ordered by the Contracting Officer pursuant to the Changes clause. The Contractor shall perform

the CR at the labor billing rates designated in the Schedule, as described in paragraph (2) of this clause. All growth work shall be paid at the prices stated in the Schedule.

(2) The CR composite labor rate is a flat, hourly rate used to price direct production labor hours. Contractors shall provide a detailed breakdown that fully supports the quoted CR composite labor rate. The CR composite labor rate shall be burdened to include the cost of direct production labor, all associated indirect costs, and profit/fee as described below:

a. Direct production labor is defined as work that is directly related to the alteration, modification, and repair tasks performed directly on, or in direct support of, components or systems identified in the CR or elsewhere in the contract. Examples of direct production labor include the following: abrasive cleaning/water blasting, tank cleaning, welding, burning, brazing, blacksmithing, machining (inside and outside), carpentry, electrical/electronic work, crane operation, ship-fitting, lagging/insulating, painting, boiler-making, pipe fitting, engineering (production), sheet-metal work, installation and removal of staging/scaffolding, rigging, material handling (shop to ship and within the worksite in support of labor task), set-up (moving tools and equipment from shop to ship to perform a task), fire watch, general labor (including general support of journeyman tasks), cleaning (including debris pickup and removal), and pattern making.

b. Indirect costs are defined as all non-direct production costs and support functions, defined as functions that do not directly contribute to the alteration, modification, or repair of the item or system identified. Examples of indirect costs include the following: planning, estimating, supervision, management, ship superintendent functions, clerical, surveying, security, transportation, supervision, labor costs, worker-compensation, taxes, inventory control, warehousing, licensing, insurance, all other support items and functions, fixed asset costs, rentals on items normally owned as fixed assets such as tools and hand operated power tools, electrical generators and compressors for operating tools (for dry-docks), jigs and fixtures fabricated and used in shop to support production functions, security, contractor facility upkeep and utilities, workman’s compensation, taxes, office supplies, etc.

c. Direct consumables and expendables: supply items, manufactured or procured by the Contractor that are consumed or expended in conjunction with direct production (e.g. rags, gloves, respirators/masks, etc.)

(3) Detailed pricing for the following shall be priced and itemized separately to include all costs and profit/fee as described below and shall not be included in the CR composite labor rate:

a. Direct materials: supply items, manufactured or procured by the Contractor, that are installed in conjunction with direct production, or are otherwise turned over to the Coast Guard (e.g. plate, angle iron, welding rods, paint, pumps, motors, engine and gearbox oil, engine jacket water, etc.)

b. Direct subcontracted services: direct production service items and procured by the Contractor to support the contract (e.g. gas-free engineering services, rented crane services, rented temporary air conditioning units and other rented tools not normally owned as fixed assets, etc.)

(4) CRs do not include replacement work performed pursuant to HSAR 3052.217- 92 Inspection and Manner of Doing Work clause or HSAR 3052.217-100 Guarantees clause.

(5) It is the Government's intention to award any growth work identified during the contract performance period to the contractor, if a fair and reasonable price can be negotiated for such work, based on Schedule rates. If a fair and reasonable price cannot be negotiated, the Government may, at its discretion, obtain services outside of the contract. Such services may be performed while the ship is undergoing repair in the contractor's facility pursuant to the Access to Vessels clause.

(6) Change Requests shall be transmitted electronically via email. The bullets below display the process of how change requests are to be followed during the availability:
CR Process will occur in the following order:

a. **Condition Found Report (CFR)-**Generated by the Contractor and provided to COR
b. **Condition Report Reply(CRR)-**Generated by the COR and provided to Contractor
c. **Change Request-** CR and IGE are generated by the COR and forwarded to KO
d. **COR provides copy of Change Request to the Contractor.**
e. **Contractor's Quote-** Provided to the KO for the identified tasking on CR
f. **Negotiations-** If needed, take place to establish pricing
g. **Approved Work Request-** Forwarded to Contractor and COR by the KO
h. **Modification to Contract-** The KS/KO will issue a modification covering all CR's.

(7) The contractor shall submit to the Contracting Officer the following information in all CR quotes:

a. The number of direct production labor hours that will be used to accomplish the tasks specified in the CR.
b. A list of each direct material, direct subcontracted service, and direct consumable and expendable item that will be used to accomplished the CR, and a corresponding price for each item. The Contracting Officer may request evidence in support of the offered prices such as material receipts and quotes received from subcontractor.
c. Any proposed changes to the Schedule of Work.

(8) The contractor shall not be entitled to payment for any hours ordered pursuant to this clause until such time as a written contract modification is executed.

(y) Schedule of work

1. Notwithstanding other requirements specified in this contract, the contractor shall provide to the Contracting Officer and COR the following documents within three (3) working days of the vessel's arrival at the contractor's facility for dry-dock availabilities and at the arrival conference for dry-dock availabilities:
   a. Production Schedule.
   b. Work Package Network.
   c. Total Manpower Loading Curve.
   d. Trade Manning Curves.
   e. Subcontracting List.
2. The Production Schedule shall list the earliest, latest, and scheduled start and completion date for each work item awarded and shall identify the critical path. The Work Package Network shall show the work items, milestones, key events, and activities and shall clearly identify the critical path. The Total Manpower Loading Curve shall show the required manning for the

duration of the contract. The Trade Manning Curves shall show the required manning for each trade for the duration of the contract. The Subcontracting List shall show work items, milestones, key events, and activities to be accomplished by subcontractors.

3. Additional Item Requirements ordered and agreed upon, whether or not yet formalized via a change order (contract modification), shall be added to the Production Schedule, Trade Manning Curves, and Subcontracting List and submitted to the Contracting Officer and COR at each weekly Progress Meeting. Any anticipated or unanticipated deviation (greater than two (2) calendar days) from the Production Schedule shall be immediately brought to the attention of the Contracting Officer and COR.
4. Any deviation in the Production Schedule which results in a delay in the completion of work on a vessel past the established performance period completion date may entitle the Government to remedies for late performance under subparagraph (f) of this clause titled *Excusable delays*.

(z) Access to the Vessel

(1) As authorized by the Contracting Officer, a reasonable number of officers, employees and personnel designated by the Government, or representatives of other contractors and their subcontractors shall have admission to the facility and access to the vessel at all reasonable times to perform and fulfill their respective obligations to the Government on a noninterference basis. The contractor shall make reasonable arrangements to provide access for these personnel to office space, work areas, storage or shop areas, and other facilities and services reasonable and necessary to perform their duties. All such personnel shall comply with contractor rules and regulations governing personnel at its shipyard, including those regarding safety and security.

(2) The contractor further agrees to allow a reasonable number of officers, employees, and designated personnel of offerors on other contemplated work, the same privileges of admission to the contractor's facility and access to the vessel(s) on a noninterference basis, subject to contractor rules and regulations governing personnel in its shipyard, including those regarding safety and security.

(aa) Temporary Services

(1) Temporary services are services incidental to the performance of work which are required in the schedule or specifications to be provided by the contractor. Temporary services may include the furnishing of water, electricity, telephone service, toilet facilities, garbage removal, and office space, parking places or similar facilities.

(2) If performance time is extended due to Government-caused delay, the contractor may request an equitable adjustment for providing temporary services at the rate stated in the Schedule.

(ab) Contract Deficiency Report

The Contracting Officer or Contracting Officer’s Representative (COR) may issue a Contract Deficiency Report (CDR), SFLC Form 005. The Contractor shall respond in writing within 24hours of receipt, unless otherwise approved by the Contracting Officer, to the COR. The COR will comment on the Contractor's response and will forward the Deficiency Report and comments to the Contracting Officer, with a copy to the Contractor and Availability Program Manager. The Contracting Officer will render a final determination and provide it to the Contractor and COR in writing.

(ac) Option for Increased Quantity – Separately Priced Line Item

The Government may require the performance of the numbered line items, identified in the Schedule as option items, at the unit prices stated in the Schedule. The option quantities shown in the Schedule are estimates only. The Government has the right to require performance of these items at the quantities deemed necessary. Therefore, the Government may exercise an option item on more than one occasion during the contract performance period. The Contracting Officer will provide initial notification of the exercise of an option either verbally, by facsimile, or both. When time is of essence initial notification will be provided verbally followed within 24 hours by a facsimile of confirmation. A contract modification will be executed shortly thereafter to include those options wherein exercise notification was provided. Such options may be exercised at any phase during the contract performance period as stated herein, or any extension of the performance period. To maintain the contract performance period the Contractor shall commence performance of an option item immediately upon receiving initial notification; but, not later than 24 hours thereafter, unless proper sequencing of the work requires a delay in beginning performance of the option. In that case, the option item shall be commenced as soon as proper sequencing permits. The exercise of any option item listed in the Schedule will not normally extend the contract performance period. However, the Contracting Officer may consider a request by the Contractor for contract extension if an option is exercised after 50% of the contract performance period has expired.

(ad) Facility Access Instructions for USCG Base Alameda

A. For access to USCG Base Honolulu or Coast Guard Island, Alameda, the contract shall have RAPIDGate credentials. All personnel that need access to the base, such as on-site personnel, subcontractors (including second and third-tier subcontractors) and suppliers will need RAPIDGate credentials. This process must be completed prior to the start of work. Therefore, the Contractor shall begin the RAPIDGate registration process no less than 45 calendar days before on-site work is to commence. For enrollment into the RapidGate program for base access privileges, information can be found at www.rapidgate.com or by calling the RAPIDGate program at 1-877-727-4342. Please note that all costs associated with registration and participation in the RAPIDGate Program is at the sole expense of the contractor.

B. The Contractor shall provide a list of all on-site personnel, sub-contractors (including second and third tier subcontractors), and suppliers, to the contracting officer and Contracting Officer's Representative no less than 30 calendar days before on-site work is to commence. The Contractor shall update this list when changes occur and ensure all personnel satisfy base access standards, and have RAPIDGate credentials.
C. Contractor personnel not listed and without RAPIDGate credentials may be denied access to the Coast Guard Facility. Contractor personnel will be restricted to designated working areas. Any personnel violating this policy may lose access to the Coast Guard Facility. Contractor personnel shall have photo identification at all times while working on Coast Guard facilities. Special identification requirements may be needed to obtain the RAPIDGate credentials.
D. Contractor and delivery personnel may be required to present personal photo identification to gain access to a Coast Guard installation. Valid forms of identification are current passport or driver's license that meet Real ID Act requirements. The Real ID Act of 2005 established minimum security standards for license issuance and production and prohibits Federal agencies

from accepting, for certain purposes, driver's licenses and identification cards from states not meeting the Act's minimum standards. Anyone requiring access to a military facility under this contract, to include subcontractors, who holds a driver's license from any state without approved licenses will be required to provide identification other than that driver's license to gain access. Government IDs annotated with "Federal Limits Apply" will not be accepted for access purposes. It is the responsibility of the Contractor to ensure that their personnel have federally acceptable personal photo identification and comply with any other requirements for base access. TWIC and DBIDS identification cards are not sufficient forms of identification for access to Coast Guard Island, Alameda.

E. If identification does not indicate United States citizenship, Coast Guard Security may require proof of the legal right to work in the United States. Contractor and delivery personnel also may be subjected to an immigration status and outstanding criminal warrants check.

F. Contractors shall provide the Contracting Officer's Representative with 24 hours of advance notice of every delivery to the site (e.g. concrete, lumber, parts, etc) and provide the company name, delivery person. And phone number of the firm(s) making deliveries. All vehicle access to Government property requires vehicle registration and proof of liability insurance. Otherwise access to the Coast Guard facility may be denied.

Please contact the Port Engineer, Stephen Bruno, at 510-437-5872, or by email at Stephen.J.Bruno@uscg.mil for additional information and processes on base access protocols.

(ae) Environmental Compliance Requirements USCG Base Alameda

The items below are to inform Base tenants and contractors of the many environmental requirements while working onboard Base Alameda. The items below represent the most common areas but are not all encompassing:

***Garbage*:**
• Blue dumpsters & fenced refuse sorting areas on the pier are for Coast Guard use only
• Additional dumpsters must be covered at all times

Hazardous Materials:
• Hazardous materials shall be stored, labeled, and segregated properly
• Inventories of hazardous materials must be maintained & accessible at all times
• Liquid hazardous material shall have secondary containment

Hazardous Waste:
• Hazardous waste cannot be stored in quantities greater than 55 gallons per waste stream at single location (This applies to containers' volume even when not full)
• A minimum of 5 days prior notification is required for hazardous waste offloads
• All hazardous waste manifests shall be signed by the Base Alameda Hazardous Materials Coordinator
Please contact Stephen Bruno, at 510-437-5872, or by email at Stephen.J.Bruno@uscg.mil for scheduling

***Air*:**
• Maintain a record of hours ran and fuel consumed for portable equipment >50HP
• Equipment operating record shall be made available at all times
• Portable equipment shall have secondary containment

***Water*:**
• No contaminants can enter the estuary.
• No soaps or detergents can be used unless captured & properly disposed
• Equipment may not be hosed off or pressure washed as loose dirt & oils could be released
• Every effort shall be made to prevent debris of any kind from entering the estuary

All Federal, State, and Local laws and regulations shall be strictly adhered to.

(af) Contractor COVID-19 Prevention and Response Plan
The Contractor shall adhere to CDC, OSHA, state, and local guidance regarding COVID-19 precautions. Aboard the vessel, the Contractor shall be prepared to adhere to requirements prescribed by the Commanding Officer as discussed at the Arrival Conference. Based on current guidance and USCG policy at the time of solicitation, the Contractor should be prepared to expect mandatory wear of cloth face coverings by all personnel, although this requirement could be partially or fully waived based upon individual vaccination statuses and other factors. Finally, the Contractor shall prepare a COVID-19 Prevention and Response Plan specific to this contract which details the Contractor's prevention and response plans and procedures. This document shall be submitted no later than the Arrival Conference date, which is usually the first day of the period of performance.

(End of FAR 52.212-4 Addendum)

The clause at 52.212-5 Contract Terms and Conditions Required To Implement Statutes or Executive Orders—Commercial Items (SEP 2021), applies to this acquisition and the additional FAR clauses cited in the clause are applicable to the acquisition:

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017) (section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions)).

(2) 52.204-23, Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (Jul 2018) (Section 1634 of Pub. L. 115-91).

(3) 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (Aug 2020) (Section 889(a)(1)(A) of Pub. L. 115-232).

(4) 52.209-10, Prohibition on Contracting with Inverted Domestic Corporations (Nov 2015).

(5) 52.233-3, Protest After Award (Aug 1996) (31 U.S.C. 3553).

(6) 52.233-4, Applicable Law for Breach of Contract Claim (Oct 2004) (Public Laws 108-77 and 108-78 (19 U.S.C. 3805 note)).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(End of clause)

Full Text Clauses

52.203-17 Contractor Employee Whistleblower Rights and Requirement to Inform Employees of Whistleblower Rights (JUN 2020) (DHS-USCG Deviation 14-01)

(a) This contract and employees working on this contract will be subject to the whistleblower rights and remedies in the pilot program on Contractor employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L. 112-239) and FAR 3.908.

(b) The Contractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712, as described in section 3.908 of the Federal Acquisition Regulation.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in all subcontracts over the simplified acquisition threshold.

(End of clause)

52.204-21 Basic Safeguarding of Covered Contractor Information Systems (JUN 2016)

(a) Definitions. As used in this clause–

"Covered contractor information system" means an information system that is owned or operated by a contractor that processes, stores, or transmits Federal contract information.

"Federal contract information" means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government, but not including information provided by the Government to the public (such as on public websites) or simple transactional information, such as necessary to process payments.

"Information" means any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual (Committee on National Security Systems Instruction (CNSSI) 4009).

"Information system" means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information (44 U.S.C. 3502).

"Safeguarding" means measures or controls that are prescribed to protect information systems.

Safeguarding requirements and procedures.

(1) The Contractor shall apply the following basic safeguarding requirements and procedures to protect covered contractor information systems. Requirements and procedures for basic safeguarding of covered contractor information systems shall include, at a minimum, the following security controls:

(i) Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).

(ii) Limit information system access to the types of transactions and functions that authorized users are permitted to execute.

(iii) Verify and control/limit connections to and use of external information systems.

(iv) Control information posted or processed on publicly accessible information systems.

(v)Identify information system users, processes acting on behalf of users, or devices.

(vi) Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.

(2) Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.

(i) Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.
(i) Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.
(ii) Monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.
(iii) Implement sub networks for publicly accessible system components that are physically or logically separated from internal networks.
(iv) Identify, report, and correct information and information system flaws in a timely manner.
(v)Provide protection from malicious code at appropriate locations within organizational information systems.
(vi) Update malicious code protection mechanisms when new releases are available.
(vii) Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.
(3) Other requirements. This clause does not relieve the Contractor of any other specific safeguarding requirements specified by Federal agencies and departments relating to covered contractor information systems generally or other Federal safeguarding requirements for controlled unclassified information (CUI) as established by Executive Order 13556.
(b) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts under this contract (including subcontracts for the acquisition of commercial items, other than commercially available off-the-shelf items), in which the subcontractor may have Federal contract information residing in or transiting through its information system.

(End of Clause)

52.204-23 PROHIBITION ON CONTRACTING FOR HARDWARE, SOFTWARE, AND SERVICES DEVELOPED OR PROVIDED BY KASPERSKY LAB AND OTHER COVERED E NTITIES (DEVIATION 20-05)

(a) *Definitions.* As used in this clause

"Covered article" means any hardware, software, or service that

(1) Is developed or provided by a covered entity;

(2) Includes any hardware, software, or service developed or provided in whole or in part by a covered entity; or

(3) Contains components using any hardware or software developed in whole or in part by a covered entity.

"Covered entity" means

(1) Kaspersky Lab;

(2) Any successor entity to Kaspersky Lab;

(3) Any entity that controls, is controlled by, or is under common control with Kaspersky Lab; or

(4) Any entity of which Kaspersky Lab has a majority ownership.

(b) *Prohibition.* Section 1634 of Division A of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91) prohibits Government use of any covered article. The Contractor is prohibited from

(1) Providing any covered article that the Government will use on or after October 1, 2018; and
(2) Using any covered article on or after October 1, 2018, in the development of data or deliverables first produced in the performance of the contract.

(c) *Reporting requirement.*
(1) In the event the Contractor identifies covered article provided to the Government during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report, in writing, via email, to the Contracting Officer, Contracting Officer's Representative, and the Enterprise Security Operations Center (SOC) at NDAA_Incidents@hq.dhs.gov , with required information in the body of the email. In the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil . For indefinite delivery contracts, the Contractor shall report to the Enterprise SOC, Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) and Contracting Officer's Representative(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
(2) The Contractor shall report the following information pursuant to paragraph (c)(1) of this clause:
(i) Within 1 business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; brand; model number (Original Equipment Manufacturer (OEM) number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
(ii) Within 10 business days of submitting the report pursuant to paragraph (c)(l) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of a covered article, any reasons that led to the use or submission of the covered article, and any additional efforts that will be incorporated to prevent future use or submission of covered articles.

(d) *Subcontracts.* The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts, including subcontracts for the acquisition of commercial items.

(End of clause)

52.204-25 PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (DEVIATION 20-05)

(a) *Definitions.* As used in this clause—
"Backhaul" means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).
"Covered foreign country" means The People's Republic of China.
"Covered telecommunications equipment or services" means–
(1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
(2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and

telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
(3) Telecommunications or video surveillance services provided by such entities or using such equipment; or
(4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
"Critical technology" means–
(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-
(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
(ii) For reasons relating to regional stability or surreptitious listening;
(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
(6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).
"Interconnection arrangements" means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.
"Reasonable inquiry" means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.
"Roaming" means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.
"Substantial or essential component" means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) *Prohibition.*
(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115–232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment,

system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.
(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115–232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.

(c) *Exceptions.* This clause does not prohibit contractors from providing—
(1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
(2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(d) *Reporting requirement.*
(1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause in writing via email to the Contracting Officer, Contracting Officer's Representative, and the Enterprise Security Operations Center (SOC) at mailto:NDAA.Incidents@hq.dhs.gov, with required information in the body of the email. In the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Enterprise SOC, Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) and Contracting Officer's Representative(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
(2) The Contractor shall report the following information pursuant to paragraph (d)(l) of this clause
(i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered

telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts.* The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)

52.219-14 Limitations on Subcontracting (SEP 2021)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) *Definition*. As used in this clause—

"Similarly situated entity" as used in this clause, means a first-tier subcontractor, including an independent contractor, that-

(1) Has the same small business program status as that which qualified the prime contractor for the award (e.g., for a small business set-aside contract, any small business concern, without regard to its socioeconomic status); and

(2) Is considered small for the size standard under the North American Industry Classification System (NAICS) code the prime contractor assigned to the subcontract.

(c) *Applicability*. This clause applies only to—

(1) Contracts that have been set aside for any of the small business concerns identified in 19.000(a)(3);

(2) Part or parts of a multiple-award contract that have been set aside for any of the small business concerns identified in 19.000(a)(3);

(3) Contracts that have been awarded on a sole-source basis in accordance with subparts 19.8, 19.13, 19.14, and 19.15; and

(4) Orders expected to exceed the simplified acquisition threshold and that are—

(i) Set aside for small business concerns under multiple-award contracts, as described in 8.405-5 and 16.505(b)(2)(i)(F);or

(ii) Issued directly to small business concerns under multiple-award contracts as described in 19.504(c)(1)(ii);

(5) Orders, regardless of dollar value, that are—

(i) Set aside in accordance with subparts 19.8, 19.13, 19.14, or 19.15 under multiple-award contracts, as described in 8.405-5 and 16.505(b)(2)(i)(F); or

(ii) Issued directly to concerns that qualify for the programs described in subparts 19.8, 19.13, 19.14, or 19.15 under multiple-award contracts, as described in 19.504(c)(1)(ii); and

(6) Contracts using the HUBZone price evaluation preference to award to a HUBZone small business concern unless the concern waived the evaluation preference.

(d) *Independent contractors.* An independent contractor shall be considered a subcontractor.

(e) *Limitations on subcontracting*. By submission of an offer and execution of a contract, the Contractor agrees that, in performance of a contract assigned a North American Industry Classification System (NAICS) code for—

(1) Services (except construction), it will not pay more than 50 percent of the amount paid by the Government for contract performance to subcontractors that are not similarly situated entities. Any work that a similarly situated entity further subcontracts will count towards the prime contractor's 50 percent subcontract amount that cannot be exceeded. When a contract includes both services and supplies, the 50 percent limitation shall apply only to the service portion of the contract;

(2) Supplies (other than procurement from a non-manufacturer of such supplies), it will not pay more than 50 percent of the amount paid by the Government for contract performance, excluding the cost of materials, to subcontractors that are not similarly situated entities. Any work that a similarly situated entity further subcontracts will count towards the prime contractor's 50 percent subcontract amount that cannot be exceeded. When a contract includes both supplies and services, the 50 percent limitation shall apply only to the supply portion of the contract;
(3) General construction, it will not pay more than 85 percent of the amount paid by the Government for contract performance, excluding the cost of materials, to subcontractors that are not similarly situated entities. Any work that a similarly situated entity further subcontracts will count towards the prime contractor's 85 percent subcontract amount that cannot be exceeded; or
(4) Construction by special trade contractors, it will not pay more than 75 percent of the amount paid by the Government for contract performance, excluding the cost of materials, to subcontractors that are not similarly situated entities. Any work that a similarly situated entity further subcontracts will count towards the prime contractor's 75 percent subcontract amount that cannot be exceeded.
(f) The Contractor shall comply with the limitations on subcontracting as follows:
(1) For contracts, in accordance with paragraphs (c)(1), (2), (3), and (6) of this clause – *Contracting Officer check as appropriate*.
____ By the end of the base term of the contract and then by the end of each subsequent option period; or
__X_ By the end of the performance period for each order issued under the contract.
(2) For orders, in accordance with paragraphs (c)(4) and (5) of this clause, by the end of the performance period for the order.
(g) A joint venture agrees that, in the performance of the contract, the applicable percentage specified in paragraph (e) of this clause will be performed by the aggregate of the joint venture participants.
(End of clause)

52.232-40 Providing Accelerated Payments to Small Business Subcontractors (DEVIATION 2020-04 REV 1) (APR 2020)

(a)(l) In accordance with 31 U.S.C. 3903 and 10 U.S.C. 2307, upon receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract in accordance with the accelerated payment date established, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, with a goal of 15 days after receipt of a proper invoice and all other required documentation from the small business subcontractor if a specific payment date is not established by contract.

(1) The Contractor agrees to make such payments to its small business subcontractors without any further consideration from or fees charged to the subcontractor.

(b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.
(c) Include the substance of this clause, including this paragraph (c), in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial items.

(End of clause)

52.237-1 Site Visit (APR 1984)

This RFQ is for Dockside Upgrade, Switchboard of the USCGC STRATTON (WSML-752) hereinafter referred to as "vessel." The vessel's home pier is located at Coast Guard Island, Alameda, CA 94501. The point of contact for site surveys is **LTJG Stephen Bruno** who can be reached at **510-437-5872** or via email at Stephen.J.Bruno@uscg.mil. Contractors are urged and expected to inspect the site where services are to be performed and to satisfy themselves regarding all general and local conditions that may affect the cost of contract performance, to the extent that the information is reasonably obtainable. The vessel will be unavailable for a ship check during the solicitation period; as a result, the following similar vessels are available for contractors to perform a ship check:

USCGC WAESCHE in Alameda, CA

In no event shall failure to inspect the site constitute grounds for a claim after contract award. Site Visits/Ship Check should be scheduled and completed **NLT 13 October 2021.**

52.252-6 Authorized Deviations in Clauses (NOV 2020)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Homeland Security Acquisition Regulation (48 CFR 30) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

Homeland Security Acquisition Regulation (HSAR) Clauses (May 2021)

HSAR 3052.212-70 Contract Terms and Conditions Applicable To DHS Acquisition of Commercial Items (SEP 2012)

The Contractor agrees to comply with any provision or clause that is incorporated herein by reference to implement agency policy applicable to acquisition of commercial items or components. The provision or clause in effect based on the applicable regulation cited on the date the solicitation is issued applies unless otherwise stated herein. The following provisions and clauses are incorporated by reference:

(b) Clauses.
3052.204-71 Contractor Employee Access
3052.205-70 Advertisement, Publicizing Awards, and Releases 3052.217-91 Performance
3052.217-92 Inspection and Manner of Doing Work 3052.217-93 Subcontracts
3052.217-94 Lay Days
3052.217-95 Liability and Insurance 3052.217-96 Title
3052.217-97 Discharge of Liens 3052.217-98 Delays
3052.217-99 Department of Labor Safety and Health Regulations for Ship Repair
3052.217-100 Guarantee (USCG)
3052.228-70 Insurance
3052.242-72 Contracting Officer's Technical Representative

(End of Clause)

HSAR 3052.217-100 Guarantee (USCG).

(a) In the event any work performed or materials furnished by the contractor prove defective or deficient within 60 days from the date of redelivery of the vessel(s), the Contractor, as directed by the Contracting Officer and at its own expense, shall correct and repair the deficiency to the satisfaction of the Contracting Officer.
(b) If the Contractor or any subcontractor has a guarantee for work performed or materials furnished that exceeds the 60 day period, the Government shall be entitled to rely upon the longer guarantee until its expiration.
(c) price. Failure to agree upon an equitable reduction shall constitute a dispute under the Disputes clause of this contract.
(d) With respect to any individual work item identified as incomplete at the time of redelivery of the vessel(s), the guarantee period shall run from the date the item is completed.
(e) If practicable, the Government shall give the Contractor an opportunity to correct the deficiency.
(1) If the Contracting Officer determines it is not practicable or is otherwise not advisable to return the vessel(s) to the Contractor, or the Contractor fails to proceed with the repairs promptly, the Contracting Officer may direct that the repairs be performed elsewhere, at the Contractor's expense.
(2) If correction and repairs are performed by other than the Contractor, the Contracting Officer may discharge the Contractor's liability by making an equitable deduction in the price of the contract.
(f) The Contractor's liability shall extend for an additional 60-day guarantee period on those defects or deficiencies that the Contractor corrected.
At the option of the Contracting officer, defects and deficiencies may be left uncorrected. In that event, the Contractor and Contracting Officer shall negotiate an equitable reduction in the contract.

(End of clause)

HSAR 3052.223-70 Removal or Disposal of Hazardous Substances – Applicable Licenses and Permits (JUN 2006)

The Contractor shall have all licenses and permits required by Federal, state, and local laws to perform hazardous substance(s) removal or disposal services. If the Contractor does not currently possess these documents, it shall obtain all requisite licenses and permits within [ten days] after date of award. The Contractor shall provide evidence of said documents to the Contracting Officer or designated Government representative prior to commencement of work under the contract.

Solicitation Provisions Incorporated by Reference

52.252-1 Solicitation Provisions Incorporated by Reference (FEB 1998)
This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the

appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this address: http://acquisition.gov/far/index.html.

52.252-2 Clauses Incorporated by Reference (FEB 1998)
This solicitation incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also the full text of the clause may be accessed electronically at Internet address http://acquisition.gov/far/index.html.

52.204-9	Personal Identity Verification of Contractor Personnel
52.245-1 w/ Alt I	Government Property
52.245-9	Uses and Charges
HSAR 3052.211-70	Index for Specifications
HSAR 3052.217-90	Delivery and Shifting of Vessel
HSAR 3052.222-70	Strikes or Picketing Affecting Timely Completion of the Contract Work
HSAR 3052.222-71	Strikes or Picketing Affecting Access to a DHS Facility
HSAR 3052.223-90	Accident and Fire Reporting

Contract Administration

(a) Invoicing Instructions

(1) The contractor shall prepare a proper invoice IAW FAR 52.212-4, and in addition to the information required by FAR 52.212-4(g) as cited in the contract. All invoices shall be itemized to correlate to the Schedule of Supplies/Services. The invoice shall include:

- Vessel Name
- Name of the Contract Specialist, Contracting Officer, and COR
- Contractor DUNS Number
- Name, title, phone number and mailing address of Contractor point of contact for invoicing questions
- CLIN Number, CLIN description, quantity, unit price, and extended price.
- Percentage completion of each CLIN being invoiced
- Description of any invoice deductions.
- **10% of the total contract price will be withheld until all deliverables are received and accepted.**
- **The Contractor's final invoice submitted under the contract shall be marked as follows: "THIS INVOICE CONSTITUTES THE FINAL INVOICE – UPON PAYMENT OF THIS INVOICE NO OTHER MONIES ARE DUE UNDER CONTRACT NUMBER (to be assigned upon contract award).**

(2) Invoices shall be submitted electronically as follows:

- Invoices shall be submitted to the USCG Finance Center Website at https://www.fincen.uscg.mil/centralinv/centrinv_start.htm

- The web submission requires the Contractor to complete the Invoice Receipt Cover Form, select the Invoice Routing Code, and attach a PDF file of the invoice and any other supporting documentation.
- The Contractor must select the correct Invoice Routing Code for timely invoice processing. The Invoice Routing Code for this contract is **SFLC-2.** Failure to do so will delay invoice payment.
- The Contractor shall attach a single PDF file no larger than 1MB as the official invoice.
- The Contractor shall email a copy of the invoice and supporting documentation to the Contract Specialist and the Contracting Officer's Representative (COR).
- **A CLIN may not be invoiced until a minimum of 25% completion. This percentage minimum may be waived on a case-by-case basis by the Contracting Officer for large dollar CLINS. In addition, 10% of the total contract price will be withheld until all deliverables are received and accepted.**
- A sample of the Invoice Receipt Cover Form is provided below. Mandatory information to be completed is highlighted in red on the website.
  https://www.fincen.uscg.mil/centralinv/centrinv_start.htm

Contractor Invoice Submission Form

Directions: Please complete as much information as possible. All blocks in red text are required entries.
Note: Web-Invoices are accepted only for Coast Guard Contracts over the Simplified Acquisition Threshold (Document Type 24).
THIS WEB FORM IS NOT AN OFFICIAL INVOICE. THE OFFICIAL INVOICE MUST BE ATTACHED

Invoice Information

Invoice Routing Code: SFLC-2 (help)
Invoice Number: (help)
Contract Number: (help)
Invoice Date: MM/DD/YY (help)
BPA Number: (help)
Invoice Amount: 0.00 (help)
Delivery/Task Order Number: (help)
Discount Terms: 00.00 %
Discount Days: 0 Net Days: 30 (help)

Company Information | **Attachment of Official Invoice**

Company Name: (help) DUNS: Plus 4: (help) Point of Contact Name: (help) Point of Contact Email: (help) Phone: (help) Fax: (help)	Please verify your entry on the next page. Attach invoice and any supporting documentation after verification. • Attachment must be a single PDF file no larger than 3 MB. Grey-scale PDFs are not compatible. This will be our official invoice. Supporting documentation must be combined in the single PDF file or submitted to your contracting office separately via email. • Need help creating a PDF file? Click here for instructions.
Verify Reset	

(b) Contractor Performance Assessment Report (CPAR)

(a) GENERAL: The U.S. Coast Guard Surface Forces Logistic Center (SFLC) will monitor and evaluate the successful contractors past performance of this contract and prepare a Contractor Performance Assessment Report (CPAR) in accordance with FAR Part 42.1502. All information contained in this assessment may be used, within the limitations of FAR 42.1502, by the government for future source selections and in accordance with FAR 15.304, when past performance is an evaluation factor for award.

(b) NOTIFICATION: Upon completion of the contract, the contractor will be notified of the assessment. The contractor will be allowed 60 days to respond to the SFLC's assessment of its performance entered into CPARS. The contractor's response, if any, will be made part of the CPAR system.

(c) INFORMATION: Information included in the CPAR may include, but is not limited to, the contractor's record of conforming to contract requirements and to standards of good workmanship; the contractor's record of forecasting and controlling costs; the contractor's adherence to contract schedules, including the administrative aspects of

performance; the contractor's history of reasonable and cooperative behavior and commitment to customer satisfaction; the contractor's record of integrity and business ethics, and generally, the contractor's business-like concern for the interest of the customer.

(d) RELEASE OF DATA: CPARS information is considered business sensitive and will not be released except: (1) to other Federal procurement activities which request it; (2) when SFLC must release pursuant to a Freedom of Information Act (FOIA) request; or (3) when prior written consent is requested and obtained from the contractor.

Full Text Provisions

52.211-3 Availability of Specifications Not Listed in the GSA Index of Federal Specifications, Standards and Commercial Item Descriptions. (JUN 1988)

U.S. Coast Guard standard specifications can be downloaded by copying the following link to a web browser: http://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Engineering-Logistics-CG-4-/Logistic-Centers/Surface-Forces-Logistics-Center/Contracting-Links/Standard-Specifications/. Orders for reference drawings must be placed by 12 FEB 2021. To request drawings, contact the Contract Specialist using the Drawings Request Document with a physical address. All requests should identify the solicitation number 70Z08522QP4504100. U.S. Coast Guard specification reference drawings are available in CD-ROM format and are provided free of charge. The CD-ROM(s) contain WINDOWS compliant raster/vector formats (e.g. *.TIF, *.TIF (group4), *.DWG, and *.DWF, etc.). Drawing measurements should be verified by the Contractor prior to ordering materials.

USCGC STRATTON (WMSL 752)

SPECIFICATION FOR DOCKSIDE REPAIRS

FY2022

Developed By: Adam E Black

(Rev-0, 07 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 418A-WMSL-100-001 Rev A, General Arrangement

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

Coast Guard Drawing 418A-WMSL-167-7, Rev -, Hangar BERP Installation L3 Port Bhd / Fr 57

Coast Guard Drawing 418A-WMSL-512-001, Rev -, HVAC System Diagram

Coast Guard Drawing 418A-WMSL-540-001, Rev A, Fuel Oil Diagram

Coast Guard Drawing 418A-WMSL-540-002, Rev -, Diesel Eng And Gas Turb LO Fill, Trans, & Service Sys

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

Coast Guard Drawing 418A-WMSL-555-001, Rev A, Foam System Diagram

Coast Guard Drawing 418A-WMSL-555-003, Rev -, AFFF Bilge Sprinkling Modifications

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

Coast Guard Drawing 750-WMSL 100-062, Rev B, Topside Configuration for NSC 3 Only (AS3100004)

Coast Guard Drawing 750-WMSL 100-064, Rev B, Topside Configuration (NSC 2 SRD) (ASC100004B)

Coast Guard Drawing 750-WMSL 612-003, Rev C, Helo Landing Area Safety Nets & Wheel Stops Arr and Details (ASC612003)

Coast Guard Drawing 750-WMSL_320_10, Rev G, Power Sys Deck Plan – Second Dk, Aft of Fr 52 (ASC3200016)

Coast Guard Drawing 750-WMSL_320_12, Rev G, Power Sys Deck Plan – Main Deck Fwd of Fr 52 (ASC320007)

Coast Guard Drawing 750-WMSL_320_16, Rev F, Power Sys Deck Plan – 01 Level (ASC320009)

Coast Guard Drawing 750-WMSL_582_2, Rev H, Mooring and Towing Arrangement (ASC582002)

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

Coast Guard Drawing 750-WMSL-100-045, Rev H, 2nd Dk to Main Dk - Fr 82 to Aft (ASC100333)

Coast Guard Drawing 750-WMSL-100-053, Rev J, Unit 4420 Structure – 01 Level And Abv – Fr 52 To Fr 67 (ASC100442)

Coast Guard Drawing 750-WMSL-100-068, Rev -, Topside Configuration (NSC 3 SRD) (ASC100004C) (UNSIGNED)

Coast Guard Drawing 750-WMSL-100-35, Rev K, Unit 2340 Structure - Main Deck to 01 Level - FR 52 to FR 64 (ASC100234)

Coast Guard Drawing 750-WMSL-100-500, Rev, Mod Incidental to install of Welin Lambie Davit

Coast Guard Drawing 750-WMSL-100-508, Rev H, Unit 2340 Structure – Main Deck To 01 Level – Fr 52 To Fr 64 (ASC100234)

Coast Guard Drawing 750-WMSL-167-007, Rev C, Hatch & Scuttle List Ship Wide, NSC 3 and Follow (AS3167003)

Coast Guard Drawing 750-WMSL-167-503, Rev A, Structural, Door List (ASC167002)

Coast Guard Drawing 750-WMSL-259-003, Rev G, Main Prop DSL / SS DSL Gen Air Intake / Exhaust Diagram (ASC259003)

Coast Guard Drawing 750-WMSL-259-011, Rev D, Main Engine Combustion Air Intake & Exhaust ARR, Dets & L/M Below 2nd Deck (ASC259009)

Coast Guard Drawing 750-WMSL-259-012, Rev B, Main Engine Combustion Air Intake Supports Details & L/M Below 2nd Deck (ASC259010)

Coast Guard Drawing 750-WMSL-259-013, Rev B Main Engine Combustion Air Intake & Exhaust ARR, Dets & L/M 2nd Deck Up - 02 LVL (ASC259011)

Coast Guard Drawing 750-WMSL-259-014, Rev C, Main Engine Combustion Air Intake & Exhaust Supports, Dets & L/M 2nd Deck Up – 02 Lvl (ASC259012)

Coast Guard Drawing 750-WMSL-259-014, Rev C, Main Engine Combustion Air Intake & Exhaust Supports, Dets & L/M 2nd Deck Up - 02 LVL (ASC259012)

Coast Guard Drawing 750-WMSL-259-015, Rev D, Main Engine Comb Air Intake & EXH ARR, DETS & L/M ABV 02 LVL (ASC259013)

Coast Guard Drawing 750-WMSL-259-502, Rev , MDE Silencer Removal as delivered Details

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

Coast Guard Drawing 750-WMSL-303-002, Rev D, Coordination of Protective Devices (ASC303004)

Coast Guard Drawing 750-WMSL-320-040, Rev C, Electrical One Line Diagram (NSC3 - SRD) (ASC320001C) (UNSIGNED)

Coast Guard Drawing 750-WMSL-320-508, Rev -, Electrical Mod Incidental to Installation of Welin Lambie Davit

Coast Guard Drawing 750-WMSL-485-001, Rev L, Sleeves – Pipe Structure Penetration (SP485000)

Coast Guard Drawing 750-WMSL-501-005, Rev G, Machinery Arrangements (ASC501001)

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

Coast Guard Drawing 750-WMSL-508-001, Rev C, Piping and Machinery Insulation Schedule and L/M (ASC508001)

Coast Guard Drawing 750-WMSL-509-001, Rev A, HVAC Insulation Schedule and L/M (ASC509001)

Coast Guard Drawing 750-WMSL-512-001, Rev H, HVAC System Diagram

Coast Guard Drawing 750-WMSL-512-004, Rev A, Vent and Air Conditioning Standard Instruction (ASC512007)

Coast Guard Drawing 750-WMSL-512-019, Rev C, Vent & Air Cond Arr Mn Dk Unit 1240 (ASC512124)

Coast Guard Drawing 750-WMSL-512-035, Rev B, Vent & Air Conditioning Arr 2nd Platf, Unit 3110 (ASC512311)

Coast Guard Drawing 750-WMSL-512-036, Rev C, Vent & Air Cond Arr 1st Platf Unit 3120 (ASC512312)

Coast Guard Drawing 750-WMSL-512-037, Rev F, Vent & Air Cond Arr 2nd Dk Unit 3130 (ASC512313)

Coast Guard Drawing 750-WMSL-512-045, Rev E, Vent & Air Conditioning 01 Level, Unit 4210 (ASC512421)

Coast Guard Drawing 750-WMSL-512-051, Rev B, Vent Arr Stack Unit 4430 (ASC512443)

Coast Guard Drawing 750-WMSL-512-528, Rev A, HVAC Modifications to Protective Clothing Storeroom

Coast Guard Drawing 750-WMSL-512-529, Rev B, HVAC Modifications to Cleaning Gear Locker

Coast Guard Drawing 750-WMSL-520-001, Rev H, Seawater Cooling System Diagram (ASC520001)

Coast Guard Drawing 750-WMSL-555-016, Rev D, Foam System Unit 2230 (ASC555223-AF)

Coast Guard Drawing 750-WMSL-555-020, Rev D, Foam System Unit 2330 (ASC555233-AF)

Coast Guard Drawing 750-WMSL-555-026, Rev C, Foam System Unit 3130 (ASC555313-AF)

Coast Guard Drawing 750-WMSL-555-030, Rev B, Foam System Unit 3230 (ASC555323-AF)

Coast Guard Drawing 750-WMSL-555-038, Rev D, Foam System Unit 4420 (ASC555442-AF)

Coast Guard Drawing 750-WMSL-555-040, Rev C, Foam System Unit 2110 (ASC555211-AF)

Coast Guard Drawing 750-WMSL-555-042, Rev B, Foam System Unit 2210 (ASC555221-AF)

Coast Guard Drawing 750-WMSL-555-044, Rev D, Foam System Unit 2310 (ASC555231-AF)

Coast Guard Drawing 750-WMSL-555-505, Rev -, AFFF Low Point Drains Installation

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

Coast Guard Drawing 750-WMSL-582-001, Rev D, Anchoring, Mooring, and Towing Arrangement (ASC582001)

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

Coast Guard Drawing 750-WMSL-583-502, Rev D Modifications Incidental to the Installation Of Allied Dual Point Davit

Coast Guard Drawing 750-WMSL-583-512, Rev C Small Boat Handling Arrangements (ASC583001) (UNSIGNED)

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

Coast Guard Drawing 750-WMSL-602-001, Rev C, Fab & Instl of Ships Name & Draft Markings (ASC602001)

Coast Guard Drawing 750-WMSL-622-009, Rev D, Gratings & Handrails Uptakespace (ASC622009)

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

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

Coast Guard Drawing 750-WMSL-635-001, Rev -, Thermal & Acoustic Insulation (ASC635001)

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

Coast Guard Fleet Drawing FL 2804-022, Rev -, Consolidated Visual ID for Cutters (Vessels 65 FT and Over in Length)

Naval Air Warfare Center (NAVAIR) Drawing 627927, Rev C, Visual Landing Aids Installation and Clearance Requirements

NAVSEA Drawing 803-1623053, Rev -, Scuttle, WT, Raised, Quick Acting, 12 Dia 15 psi-Arrangement

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

NAVSEA Drawing No 803-1385828, Rev P, Nozzles AFFF and Washdown System

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American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2020, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2020, 2020, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

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

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

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

Coast Guard Technical Publication (TP) 3943, 27 FEB 2019, Twin Pivot Arm Davit - Type TW.PIV 5.0B (REF. NO. 5558-1 THRU 5558-15), Welin Lambie Ltd.

Coast Guard Technical Publication (TP) 7065, SWBS 582, Jun 2007, Forward & Aft Capstan – Model 20834

Coast Guard Technical Publication (TP) 7108A, SWBS 573, Mar 2016, Stores Elevator - Model 20833

Coast Guard Technical Publication (TP) 7165, 7-Feb 2019, Ship Service Switchboards 1S, 2S, 3S and 1SP Shore Power Volume 1

Coast Guard Technical Publication (TP) 7166, 7-Feb 2019, Ship Service Switchboards 1S, 2S, 3S and 1SP Shore Power Volume 2

Coast Guard Technical Publication (TP) 7167, 7-Feb 2019, Ship Service Switchboards 1S, 2S, 3S and 1SP Shore Power Volume 3

Coast Guard Technical Publication (TP) 7902A, Dual Point Davit – Models DDP11000CTS & SP2200 (S/N – 2313 & 2315) (Hulls: 752 Only)

Coast Guard Technical Publication 7028, 31-MAY-07, Main Diesel Engine - Workshop Manual

MIL-PRF-1149, Jun 1998, Gasket Materials, Synthetic Rubber, 50 and 65 Durometer Hardness

MIL-PRF-900, Mar 1991, Rubber Gasket Material, 45 Durometer Hardness

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

MIL-STD-1627, 30 Sept 1994, Bending Of Pipe or Tube for Ship Piping Systems

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-58, 2020, Pipe Hangers and Supports - Materials, Design, Manufacture, Selection, Application, and Installation

NOTE

OTHER REFERENCES

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2020 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 0850 (SFLC Std Spec 0850), 2020, General Requirements for Drawing Preparation

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2020, Shipboard Electrical Cable Test

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3401), 2020, Shipboard Electrical Cable Test

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

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

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

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

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

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

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

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

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American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2016, Personnel Qualification and Certification in Nondestructive Testing

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

ASTM International (ASTM) A53, July 2020, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless

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

ASTM International (ASTM) F708, 2018, Standard Practice for Design and Installation of Rigid Pipe Hangers

ASTM International (ASTM) F718-07, 2007 (Reapproved 2017), Standard for Shipbuilders and Marine Paints and Coatings Product/Procedure Data Sheet

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

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

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

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

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

Federal Specification (Fed Spec) HH-P-151, Mar 1991, Rubber-Sheet, Cloth Insert

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

MIL-A-22262, Mar 1996; Abrasive Blasting Media Ship Hull Blast Cleaning

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

MIL-DTL-24244, May 2000, Insulation Material, With Special Corrosion, Chloride, and Fluoride Requirements

MIL-DTL-24643, Aug 2007, Cables and Cords, Electric, Low Smoke, For Shipboard Use, General Specification for

MIL-I-16411, Nov 1988, Insulation Felt, Thermal, Glass Fiber

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

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

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

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MIL-STD-22D, Aug 1979, Department of defence Desisg Criteria: Welded Design Joint

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

MIL-Y-1140, Sep 1985, Yarn, Cord, Sleeving, Cloth, And Tape- Glass

Naval Sea Systems Command (NAVSEA) 0640-LP-111-4501, Apr 2012, NAVSEA OP 4 Rev 10, Ammunition And Explosives Safety Afloat

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Schneider Electric Maintenance and Field Testing Guide for Masterpact NT and NW Circuit Breaker Instruction Bulletin No.06131B1202 Aug 2015

The Society for Protective Coatings (SSPC) Paint Application Specification No. 1 (SSPC-PA Guide 1), 2004, Shop, Field, and Maintenance Painting of Steel

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2013, Power Tool Cleaning to Bare Metal

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

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

CONSOLIDATED LIST OF GOVERNMENT-FURNISHED PROPERTY

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

WORK ITEM	MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
9	Y	Twin Pivot Arm Davit. 440 Volt AC, Three Phase, 60Hz, (Approximate Weight Deck Frame: 11682 Lbs., FWD Davit Arm: 3388 Lbs., AFT Davit Arm: 3388 Lbs.)	TW.PIV 5.0B	1 ea.	611,168.00
9	Y	Deck Machinery Modification Kit	99-845-8402	1	28,540.00
9	Y	CB-OTH Mark IV (Coast Guard Drawing 26B-CB-IV-801-001)	N/A	1 ea.	N/A
10	Y	Exhaust Silencer, Manufactured by G+H Schall Schutz, Approximate Weight 900 Kg.	QANF-900-25	2 ea.	140,000.00
14	N	12 in D Raised Quick-Acting Watertight Scuttle, w/ Coaming 12”x3/16”, Steel, 15 psi	Juniper P/N : JE31890-SRQXB02	2 ea.	3,400.00 (incl. S&H)

***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	Circuit Breakers (Draw Out), Inspect and Test
3	SSDG Flexible Hoses, Renew
5	Deck Covering (Slip-Resistant), Renew
6	FAS and Boat Deck, Vertical Surfaces, Preserve
7	Deck Covering (Slip-Resistant), Flight Deck, Renew
14	RQAWTS 12 D (1-93-1 and 1-93-2), Renew

PRINCIPAL CHARACTERISTICS

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

General Requirements

1. SCOPE

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

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

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

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

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 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 Contractor-provided fire watch personnel. The Contractor must provide fire watch personnel and equipment.

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

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

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

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

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

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

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

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

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

3.5.2 Test and procedures. The Contractor 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.

USCGC STRATTON (WMSL-418) DOCKSIDE AVAILABILITY FY2022

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

USCGC STRATTON (WMSL-418) DOCKSIDE AVAILABILITY FY2022

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: Circuit Breakers (Draw Out), Inspect and Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and test draw out circuit breakers listed in Table 1.

TABLE 1 – LIST OF CIRCUIT BREAKERS

FUNCTION	MANUFACTURER / MODEL NO	DESCRIPTION	LOCATION
No. 1 Ship Service Diesel Generator	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2400 Amp Trip, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5.	Ship Service Switchboard No.1S Auxiliary Machinery Room (5-36-01-E)
No. 2 Ship Service Diesel Generator	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2400 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.2S Forward Main Machinery Room (5-44-01-E)
No. 3 Ship Service Diesel Generator	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2400 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.3S Ship Service Diesel Generator Room (2-75-5-Q)
Bus Tie Breaker 1S/2S	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2400 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.1S Auxiliary Machinery Room (5-36-01-E)
Bus Tie Breaker 1S/3S	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2850 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.1S Auxiliary Machinery Room (5-36-01-E)
Bus Tie Breaker 2S/1S	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2400 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.2S Forward Main Machinery Room (5-44-01-E)
Bus Tie Breaker 2S/3S	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2400 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.2S Forward Main Machinery Room (5-44-01-E)
Bus Tie Breaker 3S/1S	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2850 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.3S Ship Service Diesel Generator Room (2-75-5-Q)
Bus Tie Breaker 3S/2S	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2400 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.3S Ship Service Diesel Generator Room (2-75-5-Q)

FUNCTION	MANUFACTURER / MODEL NO	DESCRIPTION	LOCATION
Shore Power Breaker	SQUARE D / NW32H2	Electrically Operated, Draw-Out Circuit Breaker, 2850 Amp Trip, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5.	Ship Service Switchboard No.3S Ship Service Diesel Generator Room (2-75-5-Q)
Bow Thruster	SQUARE D/ NW08H2	Electrically Operated, Draw-Out Circuit Breaker, 800 Trip Amp, 3-Pole, 450 Volt, 60 Hz with Micro Logic Trip Unit 5	Ship Service Switchboard No.1S Auxiliary Machinery Room (5-36-01-E)

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

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

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

Coast Guard Drawing 750-WMSL-303-002, Rev D, Coordination of Protective Devices (ASC303004)

Coast Guard Drawing 750-WMSL-320-040, Rev C, Electrical One Line Diagram (NSC3 - SRD) (ASC320001C) (UNSIGNED)

COAST GUARD PUBLICATIONS

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

Coast Guard Technical Publication (TP) 7165, 7-Feb 2019, Ship Service Switchboards 1S, 2S, 3S and 1SP Shore Power Volume 1

Coast Guard Technical Publication (TP) 7166, 7-Feb 2019, Ship Service Switchboards 1S, 2S, 3S and 1SP Shore Power Volume 2

Coast Guard Technical Publication (TP) 7167, 7-Feb 2019, Ship Service Switchboards 1S, 2S, 3S and 1SP Shore Power Volume 3

OTHER REFERENCES

Schneider Electric Maintenance and Field Testing Guide for Masterpact NT and NW Circuit Breaker Instruction Bulletin No.06131B1202 Aug 2015

NFPA 70E: 2015 Edition Standard for Electrical Safety in the Work Place

3. REQUIREMENTS

3.1 General.

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

- 3.3 Inspection.

3.1.2 Tech Rep. The Contractor must provide the services of a certified Tech Rep, who is familiar with the Schneider Electric Masterpact NW Circuit Breakers to accomplish the following tasks – on site:

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

3.1.2.1 Ensure that the Tech Rep is a Certified Representative of Schneider Electric.

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

3.1.2.3 Point of Contact :

- David J. Rudolph
- District Operations Manager - San Diego
- EESS, Eaton Corporation
- 4863 Shawline Street - STE E
- San Diego, CA 92111
- Mobile: (925) 321-9014
- DavidJRudolph@eaton.com

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

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

3.1.5 Reference documents. The Contractor must refer to the drawings referenced in Section 2 for guidance in accomplishing this work item. Time current curves for circuit breaker are shown on Coast Guard Drawing 750-WMSL-303-002. Electrical single line diagram is shown in the Figure 3 for reference.

3.1.6 Advance notice. Notify the Coast Guard Inspector 48 hours prior to starting work on this item.

3.1.7 The Contractor must follow safe electrical work practice in accordance with the NFPA 70E.

3.1.8 The Tech Rep must inspect and test circuit breakers listed Table 1 in accordance with Figure 2.

3.1.9 The Contractor must provide rigging services to remove/re-install circuit breakers from the switchboards to suitable test facility.

3.1.10 Outages. Coordinate the disconnection and removal of the circuit breakers listed in Table 1 with the Coast Guard Inspector to ensure orderly shutdown of equipment.

3.1.11 Essential circuits. Unless actively being serviced by other work items, minimize the interruption of power to the following circuits:

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

3.1.11.2 Fire (Circuits F and SM), flooding (Circuit FD), and general (Circuit G) alarms.

3.1.11.3 Main announcing (Circuit 1MC) and dial telephone (Circuit J) systems.

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

3.1.11.5 Electric fire pump (unless temporary fire fighting water supply is connected).

3.1.11.6 Surveillance cameras and IT network

3.1.12 Test plan. At the Arrival Conference, the Contractor must provide the Test Plan to test the circuit breakers listed in the Table 1 to the Coast Guard Inspector for approval.

3.1.13 Circuit breakers removal and re-installation. Ship Force will remove and re-install circuit breakers listed Table 1 from the Switchboards for inspection and testing by the Contractor. The Contractor must test circuit breakers at suitable shop and after completion of the satisfactory testing; the Contractor must turn over circuit breakers to Ship Force for installation to the Switchboards.

3.1.14 Circuit breaker test sequence plan. For Cutter's operational requirement, the Contractor with Tech Rep support and Ship Force must perform testing in following sequence to test circuit breakers listed in Table 1.

- Test ship service breakers while maintaining shore power.
    - Group One: 1S-3S Bus Tie. No.1 SSDG Breaker. Bow Thruster Breaker.
    - Group Two: 1S-2S Bus Tie. 2S-1S Bus Tie. No.2 SSDG Breaker.
    - Group Three: 2S-3S Bus Tie. 3S-2S Bus Tie. No.3 SSDG Breaker.
    - Group Four: 3S-1S Bus Tie.
    - Group Five: Shore Power Breaker.
- Temporarily place 3S-1S bus tie in shore power breaker position to maintain shore power. (Note: Ship will need go dark or be on generator power to conducted shore breaker swaps. Approx. 5 minutes. Two separate times)
- Work flow plan with SSDG No.1 or No.2 available
    - Group One: No.1 SSDG Breaker. Bow Thruster Breaker. 1S-2S Bus Tie. 2S-1S Bus Tie.
    - Group Two: No.2 SSDG Breaker. 2S-3S Bus Tie. 3S-2S Bus Tie.
    - Group Three: No. 3 SSDG Breaker. Shore Power Breaker. 3S-1S Bus Tie. 1S-3S Bus Tie.
    - For Group three, Ship will need to be on No.1 or No.2 SSDG for power and Shore power will not be available.

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

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

3.2 Removal. Prior to the removal of each circuit breaker listed in Table 1 above, record location (Position or Circuit Identifier), wiring information, and if adjustable, as found pickup and time delay settings. Record all setting of Micrologic 5.0 trip unit (i.e. Figure 1). Retain all mounting and connecting hardware for later reuse. Submit a CFR with all recorded data to the Coast Guard Inspector.

3.2.1 Ship Force will remove the circuit breakers listed in Table 1 for testing by the Contractor/Tech Rep. Temporarily cover or insulate switchboard or panel board openings created by the removal of circuit breakers to prevent personnel contact with energized conductors and the entry of debris from other ongoing industrial activities.

3.3 Inspection. Perform the visual external inspections of circuit breakers listed in Table 1.

- Inspect circuit breaker cradle
- Check for cracks in the circuit breaker case
- Inspect the enclosure cleanness and dryness
- Verify all covers and trim pieces should in place
- Check for overheating while equipment is energized
- Perform visual inspection of the contacts (Micrologic 5.0 Trip unit displays the contact wear under Maintenance Manu)
- Verify settings on Micrologic trip unit in accordance with Coast Guard Drawing 750-WMSL-303-002
- Replace battery of each Micrologic 5.0 unit

3.3.1 Record any deficiencies found, including those corrected on the spot and Submit a CIR.

3.3.4 Testing. After satisfactory visual inspection, perform 5 year preventative maintenance on each breaker listed in the Table 1 in accordance to Table 5, 6 and 7 of Schneider Electric Circuit Breaker Instruction Bulletin No.06131b1202. The Contractor/Tech Rep must provide electrical power required for OEM Full Function Test Stand (i.e. Figure 4: Universal Circuit Breaker Test) at the Coast Guard Pier.

3.3.4.1 Figure 2 shows Table 5, 6 and 7 of circuit breaker Instruction Bulletin No.06131b1202 for reference.

3.3.4.2 Record the following test 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

3.3.4.3 Provide Coast Guard Inspector with Circuit Breaker test certification as outlined in 3.3.4.2.

3.4 Reinstallation. After completion of testing, the Contractor and Tech Rep must return the circuit breakers to Ship Force to install in the switchboard to its original operating condition.

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

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

3.5.1 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. Submit a CFR.

4. NOTES

Micrologic 5.0A Trip Unit

The Micrologic 5.0A trip unit provides selective (LSI) protection and a built-in ammeter.

A. Trip unit name
B. Alphanumeric display
C. Three-phase bar graph
D. Scroll button
E. Menu button
F. Long-time pickup (Ir) switch
G. Long-time delay (tr) switch
H. Short-time pickup (Isd) switch
I. Short-time delay (tsd) switch
J. Instantaneous pickup (Ii) switch
K. Test plug receptacle
L. Overload indicator light
M. Reset button for battery status check and trip indicator LED
N. Self-protection indicator light
O. Short-time or instantaneous trip indicator light
P. Long-time trip indicator light

Figure 4: 5.0A Trip Unit

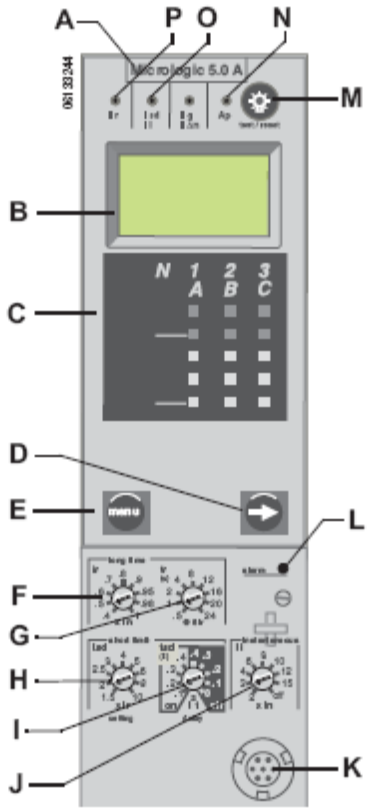


FIGURE 1: MICROLOGIC TRIP UNIT.

Table 1: Preventive Maintenance

Maintenance Type	Done By	Operating Conditions	Frequency
Type II	Certified customer employee	Normal	Every year
		Favorable	Every two years
		Severe	Twice a year
Type III	Certified customer employee	Normal	Every two years
		Favorable	Every four years
		Severe	Every year
Type IV	Schneider Electric Service	All	• Every five years • After tripping due to a short-time or instantaneous short-circuit • After five trips due to overloads.
Storage Check	Certified customer employee	All	After prolonged storage

Check	Year					Tool
Device	1	2	3	4	5[1]	
Check the general condition of the device (accessory cover, trip unit, case, cradle, connections)	X	X	X	X	X	None
Mechanism						
Open/close device manually and electrically	X	X	X	X	X	None
Charge device electrically	X	X	X	X	X	None
Check complete closing of device's poles	X	X	X	X	X	None
Check number of device operating cycles	X	X	X	X	X	Operation counter
Breaking Unit (Arc Chutes + Contacts)						
Check the filters cleanliness and the attachment of the arc-chute	X	X	X	X	X	Racking crank
Control Accessories						
Check auxiliary wiring and insulation	X	X	X	X	X	None
Trip Unit						
Trip trip unit using test tool and check operation of contacts SDE and SDE2	X	X	X	X	X	HHTK or FFTK
Check ground fault protection function (Micrologic 6.0)	X	X	X	X	X	None
Device Locking						
Open and close keylocks installed on device	X	X	X	X	X	None
Open and close padlock system installed on device	X	X	X	X	X	None
Cradle (For Drawout Circuit Breakers)						
Remove device from cradle and put it back	X	X	X	X	X	None
Check operation of position contacts (CE, CT, CD, EF)	X	X	X	X	X	None
Check operation of safety shutters	X	X	X	X	X	None
Cradle Locking						
Open and close keylocks installed on cradle	X	X	X	X	X	None
Operate padlocking system	X	X	X	X	X	None

[1] These checks and tests will be carried out by Schneider Electric Services in case of diagnostic the fifth year (see page 13).

FIGURE 2A: TABLE 1 AND 5 OF CIRCUIT BREAKER INSTRUCTION BULLETIN NO.06131B1202

Table 6 – Level III Preventive Maintenance

Check	Year					Tool
Mechanism	1	2	3	4	5[1]	
Check spring charging motor charging time at 0.85 of rated voltage		X		X	X	Stopwatch + external power supply
Check general condition of mechanism		X		X	X	Screwdriver
Breaking Unit (Arc Chutes + Contacts)						
Check condition of breaking unit		X		X	X	Screwdriver
Control Accessories						
Check operation of indication contacts (OF / PF / MCH)		X		X	X	External power supply
Check closing operation of control auxiliary XF		X		X	X	Ohmmeter
Check opening operation of control auxiliary MX at 0.70 of rated voltage		X		X	X	External power supply
Check operation of control auxiliary MN/MNR between 0.35 and 0.7 of rated voltage		X		X	X	External power supply
Check delay of MNR devices at 0.35 and 0.7 of rated voltage		X		X	X	External power supply
Check MX tripping time		X		X	X	Tester
Trip Unit						
Check tripping curves using test tool, signaling LED (tripped, overload). Save results on PC		X		X	X	FFTK FFTK report generator
Cradle (For Drawout Circuit Breakers)						
Remove dirt and any foreign material, then regrease cradle		X		X	X	Mobilith® SHC00
Regrease disconnecting contact clusters (specific case of corrosive atmosphere)		X		X	X	Mobilith SHC00
Power Connections						
Check and tighten loose connections	Only after a visual inspection showing overheating marks					Racking crank

[1] These checks and tests will be carried out by Schneider Electric Services in case of diagnostic the fifth year (see page 13).

Table 7 – Level IV Preventive Maintenance

Check	Year					Tool
Case	5	10	15	20	25	
Measure insulation resistance	X	X	X	X	X	Ohmmeter
Mechanism						
Check tripping forces (crescent shaped part)	X	X	X	X	X	Tester
Breaking Unit (Arc Chutes + Contacts)						
Measure resistance of input/output contact	X	X	X	X	X	Ohmmeter + injection unit
Control Accessories						
Check the service life of the accessories XF, MX, MN	X	X	X	X	X	"service life" software
Preventative replacement of control accessories	—	—	X	—	—	None
Micrologic Trip Unit						
Check continuity of the tripping chain by primary injection for each phase	X	X	X	X	X	Injection unit
Cradle (For Drawout Circuit Breakers)						
Check connection/disconnection torque	X	X	X	X	X	Racking crank
Clean and regrease racking screw	X	X	X	X	X	Grease

FIGURE 2B: TABLE 6 AND 7 OF CIRCUIT BREAKER INSTRUCTION BULLETIN NO.06131B1202

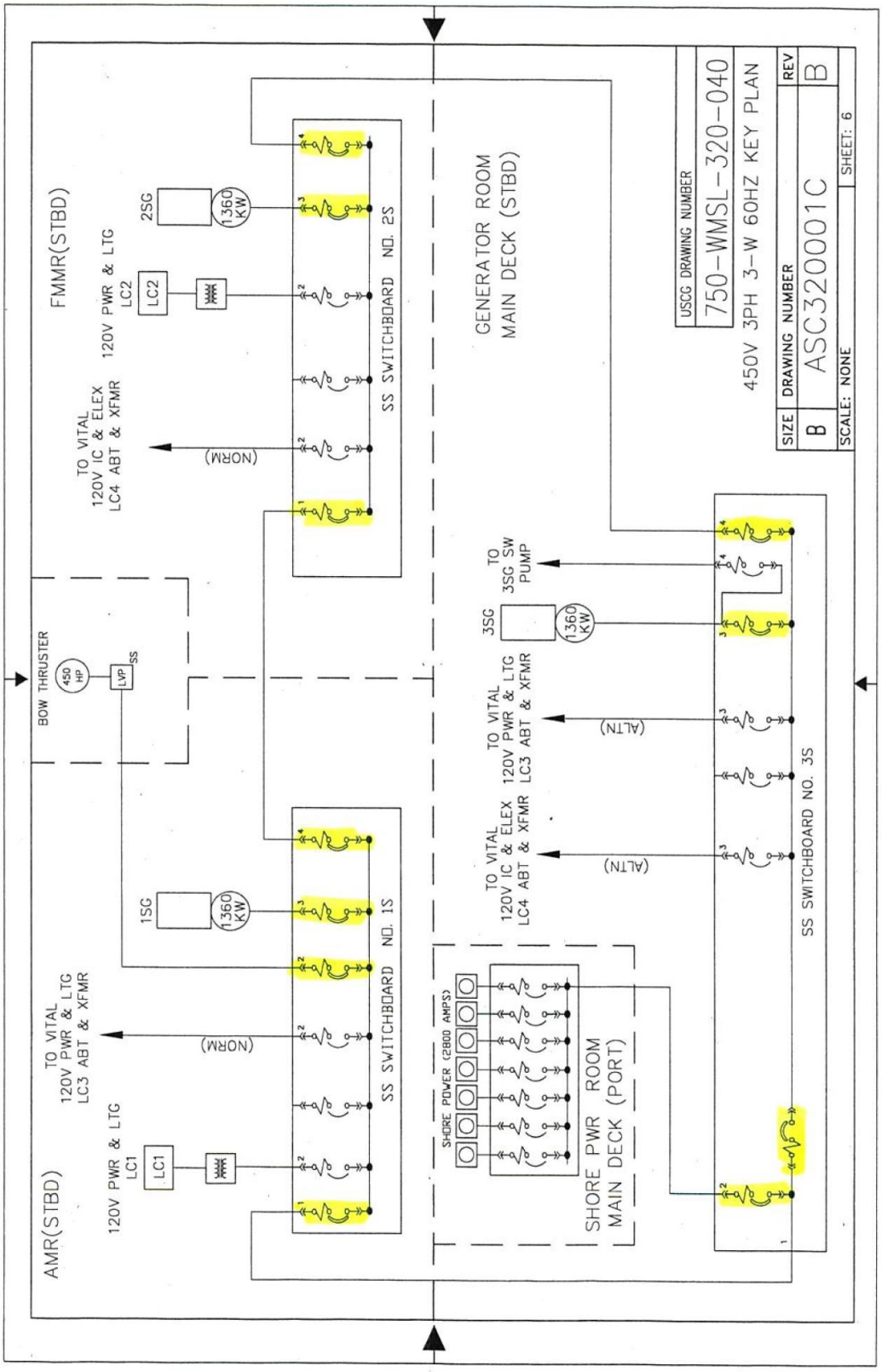
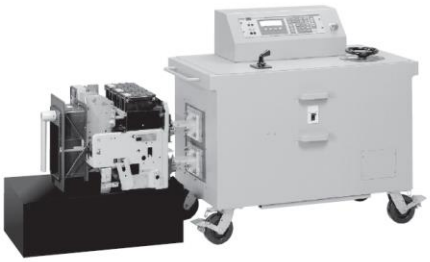


FIGURE 3: ELECTRICAL SINGLE LINE DIAGRAM

Megger

DDA-3000 and DDA-6000
Universal Circuit Breaker Test Sets

DDA-3000 and DDA-6000
Universal Circuit Breaker Test Sets



- Model DDA-1 Digital Data Acquisition Instrumentation and Control System
- High-current output: 60,000 A for Model DDA-6000; 35,000 A for Model DDA-3000
- Digital signal processing (DSP) technology
- Variable pulse time and firing angle output current control
- Compliant with NEMA AB-4 test guidelines

SPECIFICATIONS

Input

Model No.	Input Voltage (single-phase)	Input Frequency	Input Current
DDA-3000	460 V±5%	60 Hz	200 A
DDA-3001	380 V±5%	50 Hz	200 A
DDA-3002	415 V±5%	50 Hz	200 A
DDA-6000	460 V±5%	60 Hz	350 A
DDA-3001	380 V±5%	50 Hz	350 A
DDA-6002	415 V±5%	50 Hz	350 A
DDA-6004	575 V±5%	60 Hz	350 A

Model No.	WEIGHT		DIMENSIONS	
	lb	kg	H X W X D (in.)	H X W X D (cm)
DDA-3000 Series	1000	454	46 X 46 X 28 in.	117 X 117 X 71 cm
DDA-6000 Series	1200	545	46 X 55 X 28 in.	117 X 140 X 71 cm

FIGURE 4: SQUARE D CIRCUIT BREAKER TEST SET

WORK ITEM 2: Cargo Handling Elevator, Annual Inspection and Test, Perform

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and perform annual preventive maintenance on the cargo handling elevator.

1.2 Government-furnished property.

None

2. REFERENCES

COAST GUARD DRAWINGS

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

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 7108A, SWBS 573, Mar 2016, Stores Elevator - Model 20833

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

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

3. REQUIREMENTS

3.1 General.

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

None.

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

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

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

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

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

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

- Electrical wiring

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

- Deck Covering (Slip-Resistant), Renew

CAUTION

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

WARNING

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of the Jered Industries (i.e. Model 20833) cargo handling elevator to demonstrate existing operational condition. Submit a CFR.

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

- Hoist machinery assemblies
- Doors and interlocks
- Platform assembly, rails and guides
- Sheave Assembly

- Limit switches
- Level and Master control stations
- Overspeed governor and wire rope assembly
- Slack Rope assemblies
- Brake
- 90-Degree gear Reducer

3.4 Elevator wire rope inspection. The Contractor must inspect and measure the elevator wire ropes, in accordance with Coast Guard TP 7108A, paragraph 4.4.1. Ensure there is equal tension between each of the elevator wire ropes. Submit a CFR.

3.5 Overspeed governor wire rope inspection. The Contractor must inspect and measure the overspeed governor wire ropes, in accordance with Coast Guard TP 7108A, paragraph 4.4.1. Ensure there is equal tension between each of the governor wire ropes. Submit a CFR.

3.6 Gear box oil and component lubrication. The Contractor must perform the Semi-Annual Maintenance Requirements for the tension sheaves, hoist wire ropes, motor couplings, guide rails, slack rope assembly, and door fittings in accordance with Coast Guard TP 7108A, paragraph 4.2.2.

3.7 Electric motor inspection. The Contractor must take insulation resistance readings on the motor. Readings must be taken with power removed from the motors. Readings must be above 2 Megaohms for continued operation. Submit a CFR.

3.8 Hoist controller inspection. The Contractor must open the motor controller and inspect for loose wires, loose components, charred or burned components, dirt or other abnormal conditions. Submit a CFR if abnormal conditions requiring repair are observed, otherwise return motor controller to original condition.

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. Thoroughly test and prove all functions and safety features of the cargo handling elevator to be in a satisfactory operating condition. Submit a CFR.

3.9.1 No-load test. The Contractor must witness Coast Guard personnel operate the elevator in normal mode, and verify safety devices, emergency stop, and interlocks are properly installed and operational. As the car travels, observe the equipment to detect any unusual noise or vibration. The motor should start immediately when the power is applied and the drum should stop within 0.5 seconds after power is removed. Carefully observe the hoist motor, bearing, and brake for any signs of overheating.

3.9.2 Weight test. The Contractor must, in the presence of the Coast Guard Inspector, perform the following weight test in accordance with American Society of Mechanical Engineers (ASME) A17.2.

- Static Weight Test: 150% of rated capacity (rated capacity: 4,000 lbs) held for 10 minutes.
- Dynamic Weight Test: 150% of rated capacity with elevator raised and lowered at maximum speed for (2) complete cycles.

- Rated Load Test: 100% of rated capacity with elevator ran through all cycles of operation.

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

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

- Cargo Handling Elevator

4. NOTES

This section is not applicable to this work item.

WORK ITEM 3: SSDG Flexible Hoses, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew the designated hose assemblies and expansion joints for equipment listed in the Table 1.

TABLE 1 – LIST OF EQUIPMENT FOR HOSE RENEWAL

EQUIPMENT	LOCATION	MATERIAL	HOSE LISTING
Ship Service Diesel Generator No. 1	5-36-01-E	Synthetic Rubber	Table 2
Ship Service Diesel Generator No. 2	5-44-01-E	Synthetic Rubber	Table 3

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-540-001, Rev A, Fuel Oil Diagram

Coast Guard Drawing 418A-WMSL-540-002, Rev A, Diesel Eng And Gas Turb LO Fill, Trans, & Service Sys

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

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

Coast Guard Drawing 750-WMSL-520-001, Rev H, Seawater Cooling System Diagram (ASC520001)

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 Machinery Systems

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

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

- 3.3.1 Hose inspection and verification

3.1.2 Tech Rep.

Not applicable.

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

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

- Deck plates
- Piping
- Electrical wiring & cables
- Machinery

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.3 Hose renewal. The Contractor must renew the hose assemblies and expansion joints for the equipment listed in Table 1 in accordance with SFLC Std Spec 5000, Appendix C, Paragraph C2.2 (Hose assemblies). Notify the CG Inspector at least 24 hours prior to removing hoses.

3.3.1 Hose inspection and verification. The attached tables show an approximation of hose lengths, sizes, part numbers, and fittings to be renewed that are listed for bidding purposes only. The Contractor must validate the hoses and fittings requiring renewal, noting any deviations from the tables. Submit a CIR with the proof of procurement of materials for new hoses.

3.3.2 Prior to each hose disconnection, the Contractor must record equipment, supply, and return line information for use in later reconnection. Temporarily tag/label the hoses and transfer tags/labels to the new hoses to aid in reinstallation.

3.3.3 System fluid disposal. The Contractor must drain all existing fluids from the designated hoses; dispose of removed fluids in accordance with all applicable Federal, state, and local regulations. In the process of removal of hoses, the Contractor must not dispose any fluid in tanks or bilges. Submit a CFR documenting the amount of fluids removed.

NOTE

Some systems may require complete draining to remove hoses. Additional fluid required to be removed (outside of the designated hoses) will be subject to a change request.

3.3.4 Immediately after disconnecting or removing hoses, the Contractor must completely seal all openings to the rest of the system using threaded caps, threaded plugs, or bolt-on blanks made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

Plastic bags, rubber gloves, and rags of any kind are prohibited from being used to prevent leaking from hoses and for system protection.

3.3.5 The Contractor must template new hose length from each removed hose. New hose type and size must be determined from hose removed. Select hoses may require in-place measurement and remain in place until replacement hose is ready for installation to minimize system down time. If hose has excess length, verify with CG inspector if excess length is required. Renew hose end fittings. Renew all o-rings, seals, two part clamps, and mounting bolts. Dispose of removed hoses in accordance with all applicable Federal, state, and local regulations. Submit a CFR for any additional hose connections that require replacement not on the renewed hose.

3.3.6 Hydrostatic test. The Contractor must hydrostatically test all new hose assemblies with their attached fittings. Test pressure must be 150% of the rated working pressure of the hose. Ensure no leakage from or permanent deformation of pressure-containing parts by repairing all leaks and discrepancies. Submit a CFR documenting all certifications of pressure test results.

3.3.7 Flush the hoses following hydrostatic testing and cap the ends to prevent contamination. Flush hydraulic system hoses in accordance with SFLC Std Spec 5000.

3.3.8 The Contractor must install fire sleeves to all fuel oil and lube oil hoses.

3.3.9 Fluid renewal. The Contractor must renew all removed system fluids. Hydraulic fluid must be renewed, sampled, and tested in accordance with SFLC Std Spec 5000, Appendix C, Paragraphs C2.1 (Fluids), C2.1.1, and C2.1.3. The fluid must meet the acceptance criteria as stated in SFLC Std Spec 5000, Appendix C, Paragraph C2.1.4. Verify the replacement fluid type and quantity with the Coast Guard Inspector prior to reintroduction into the system.

3.3.10 Hose tags. The Contractor must provide and install new hose tags, in accordance with SFLC Std Spec 5000, Paragraph C2.2.1.4. Ensure tag color coding of black on natural or black on white. Ensure that tags are attached using materials that will not damage hose assembly in any way, or interfere with the normal flexing motion of the hose. Stamp, engrave, or etch the following information on each tag. Hand written information on each Tag is NOT acceptable.

- Hose Log Item Number (Serial Number)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date (DD/MM/YY)
- Service Life (Replacement Date) Date (QTR "Q"/FY)

3.4 Hose fitting documentation. For each renewed hose assembly, the Contractor must submit the information listed below in Microsoft Excel format. A template for the information will be provided by the COR. Submit a CFR.

- Hose Number
- System
- Description (i.e. #1 A/C Inlet)
- Location (Compartment Number)
- Length (in.)
- Part No.
- Material
- Size (in.)
- Fitting #1
- Fitting #2
- Design Pressure (psi)
- Hydrostatic Pressure (psi)

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

4. NOTES

TABLE 2 – SHIP SERVICE DIESEL GENERATOR NO. 1 (COMPARTMENT: 5-36-01-E)

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	PART NUMBER	NSN	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
1 SSDG-A-001	18.5	2					300
1 SSDG-A-001	20	2					300
1 SSDG-A-002	36	1/4					3000
1 SSDG-A-003	20	1/4					3000
1 SSDG-F/O-001	33	1/2					3000
1 SSDG-F/O-001	14.75	3/4					3000

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	PART NUMBER	NSN	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
1 SSDG-F/O-001	16	3/4					3000
1 SSDG-F/O-002	33	¾					3000
1 SSDG-F/O-002	33	¾					3000
1 SSDG-F/O-003	33	¾					3000
1 SSDG-F/O-004							
1 SSDG-F/O-005	18	½					3000
1 SSDG-F/O-006							
1 SSDG-G-001	20	¼					
1 SSDG-J/W-001	24	1					3000
1 SSDG-J/W-002	120	1					3000
1 SSDG-J/W-003	10	¼					3000
1 SSDG-J/W-004	10	¼					3000
1 SSDG-J/W-005	60	3/8					
1 SSDG-J/W-006	120	1					
1 SSDG-J/W-007	24	1					
1 SSDG-J/W-008	20	3/8					2000
1 SSDG-J/W-009							
1 SSDG-L/O-001	38	1.5			1 1/2" ANSI B16.5 150# FLG	1 1/2" ANSI B16.5 150# FLG	
1 SSDG-L/O-002	44	2			2" ANSI B16.5 150# FLG	2" ANSI B16.5 150# FLG	

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	PART NUMBER	NSN	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
1 SSDG-L/O-003	12	1					3000
1 SSDG-L/O-004	18	¾					3000
1 SSDG-L/O-005	30	½					3000
1 SSDG-L/O-005	30	½					3000
1 SSDG-L/O-006	20	½					150
1 SSDG-L/O-007	20	½					2000
1 SSDG-L/O-008	30	½					2000
1 SSDG-L/O-009	20	½					2000
1 SSDG-L/O-010	30	½					2000
1 SSDG-L/O-011	20	2					150
1 SSDG-L/O-012	20	2					150
1 SSDG-L/O-013	30	2					150
1 SSDG-L/O-014	8	2					
1 SSDG-L/O-015	8	2					
1 SSDG-L/O-016	12	½					3000
1 SSDG-S/W-001	40	3			3" ANSI B16.5 150# FLG	3" ANSI B16.5 150# FLG	1500
1 SSDG-S/W-001	40	3			3" ANSI B16.5 150# FLG	3" ANSI B16.5 150# FLG	1500
1 SSDG-S/W-002	25	3			3" ANSI B16.5 150# FLG	3" ANSI B16.5 150# FLG	1500

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	PART NUMBER	NSN	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
1 SSDG-S/W-002	14.25	3			3" ANSI B16.5 150# FLG	3" ANSI B16.5 150# FLG	1500
1 SSDG-S/W-003	21	2			2" ANSI B16.5 150# FLANGE	2" ANSI B16.5 150# FLANGE	350
1 SSDG-S/W-003	21	2			2" ANSI B16.5 150# FLANGE	2" ANSI B16.5 150# FLANGE	350
1 SSDG-S/W-004	72	3/16					2000
1 SSDG-S/W-005	72	3/8					500
1 SSDG-S/W-006	10	3/4					3000

TABLE 3 – SHIP SERVICE DIESEL GENERATOR NO. 2 (COMPARTMENT: 5-44-01-E)

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	PART NUMBER	NSN	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
2 SSDG-A-001	18.5	2					300
2 SSDG-A-001	20	2					300
2 SSDG-A-002	20	¼					3000
2 SSDG-A-003	33	¼					3000
2 SSDG-F/O-001	33	½					3000
2 SSDG-F/O-002	33	¾					3000
2 SSDG-F/O-003	33	¾					3000
2 SSDG-F/O-004							
2 SSDG-F/O-005	18	½					3000
2 SSDG-F/O-006							

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	PART NUMBER	NSN	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
2 SSDG-G-001	20	1/4					
2 SSDG-J/W-001	3/4	22.5					3000
2 SSDG-J/W-002	24	1					3000
2 SSDG-J/W-003	10	¼					3000
2 SSDG-J/W-004	10	¼					3000
2 SSDG-J/W-005	60	3/8					
2 SSDG-J/W-006	120	1					
2 SSDG-J/W-007	24	1					
2 SSDG-J/W-008	20	3/8					2000
2 SSDG-J/W-009							
2 SSDG-L/O-001	38	1.5			1 1/2" ANSI B16.5 150# FLG	1 1/2" ANSI B16.5 150# FLG	150
2 SSDG-L/O-002	44	2			2" ANSI B16.5 150# FLG	2" ANSI B16.5 150# FLG	150
2 SSDG-L/O-003	20	1					3000
2 SSDG-L/O-004	18	¾					3000
2 SSDG-L/O-005	30	½					3000
2 SSDG-L/O-005	30	½					3000
2 SSDG-L/O-006	20	½					150
2 SSDG-L/O-006	30	½					150

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	PART NUMBER	NSN	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
2 SSDG-L/O-007	20	½					2000
2 SSDG-L/O-008	30	½					2000
2 SSDG-L/O-009	20	½					2000
2 SSDG-L/O-010	30	½					2000
2 SSDG-L/O-011	20	2					150
2 SSDG-L/O-012	20	2					150
2 SSDG-L/O-013	30	2					150
2 SSDG-L/O-014	8	2					
2 SSDG-L/O-015	8	2					
2 SSDG-L/O-016	12	3/8					3000
2 SSDG-S/W-001	40	3			3" ANSI B16.5 150# FLG	3" ANSI B16.5 150# FLG	1500
2 SSDG-S/W-001	21	3			3" ANSI B16.5 150# FLG	3" ANSI B16.5 150# FLG	1500
2 SSDG-S/W-002	40	3			3" ANSI B16.5 150# FLG	3" ANSI B16.5 150# FLG	1500
2 SSDG-S/W-002	40	3			3" ANSI B16.5 150# FLG	3" ANSI B16.5 150# FLG	1500
2 SSDG-S/W-003	25	3			2" ANSI B16.5 150# FLANGE	2" ANSI B16.5 150# FLANGE	350
2 SSDG-S/W-003	14.25	2			2" ANSI B16.5 150# FLANGE	2" ANSI B16.5 150# FLANGE	350
2 SSDG-S/W-004	21	3/16					2000

HOSE SERIAL #	LENGTH (IN.)	SIZE (IN.)	PART NUMBER	NSN	FITTING #1	FITTING #2	DESIGN PRESS (PSI)
2 SSDG-S/W-005	21	3/8					500
2 SSDG-S/W-006	12	3/4					3000

WORK ITEM 4: Tenting, Provide

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to provide suitable working condition and protect environment from project materials and processes by tenting work areas as listed in Table 1, during the completion of Work Items as follows:

TABLE 1: TENTING FOR EXTERIOR DECKS

LOCATION
FAS Deck
Boat Deck
Athwart ship Passage Way
Exterior FWD Hanger Bulkhead
CIWS Deck (Located Between Frames 48-67 on 04 Level)
Tops of Pilot House (Pilot House Top Deck Located Between Frames 48-67 on 03 Level).
Flight Deck

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

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

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

Coast Guard Drawing 750-WMSL-100-068, Rev -, Topside Configuration (NSC 3 SRD) (ASC100004C) (UNSIGNED)

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

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

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

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

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

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

3. REQUIREMENTS

3.1 General.

3.1.1 CIR. 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).

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

3.1.6 Materials, tools, and services. The Contractor must provide service, tools, and materials to accomplish the requirements in this work item. New components, parts, materials, and paints with the same color, comparable and matching material properties as the existing components/parts. Use references in Sections 1, 2 and SFLC Std Spec 6310 for guidance, required materials, and details.

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

- FAS and Boat Deck, Vertical Surfaces, Preserve
- Dual Point Boat Davit (Allied Marine Crane Model 11000 CTS), Replace
- Deck Covering (Slip Resistant), Renew
- Deck Covering (Slip Resistant) Flight Deck, Renew

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

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

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

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

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

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

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

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

3.5. 2 Control plan. The Contractor must submit an ambient condition control plan to the COR at Pre-Work Conference prior to initiating ambient condition control process.

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

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

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 5: Deck Covering (Slip-Resistant), Renew

1. SCOPE

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

TABLE 1: SLIP-RESISTANT DECK COVERING

LOCATION	COMPONENTS	SYSTEM/APPENDIX (SFLC STD SPEC 6310)	TOPCOAT COLOR	PRESERVE LEVEL	NOTE
CIWS Deck (Located Between Frames 48-67 ON 04 Level)	Decks, Tops	Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel)	Dark Gray 36076 Match existing adjacent surfaces	Full	MIL-PRF-24667 Type V Comp. G Non-skid
Tops of Pilot House (Pilot House Top Deck Located Between Frames 48-67 ON THE 03 Level).	Decks, Tops	Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel)	Dark Gray 36076 Match existing adjacent surfaces	Full	MIL-PRF-24667 Type V Comp. G Non-skid
Hangar Stbd & Port incl. Helo Spare Store Rooms	Decks	Weather Decks (Weather Deck Non-Skid, MIL-SPEC Coating for Steel)	Dark Gray 36076 Match existing adjacent surfaces	Full	MIL-PRF-24667 Type V Comp. G Non-skid

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

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

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

Coast Guard Drawing 750-WMSL 100-062, Rev B, Topside Configuration for NSC 3 Only (AS3100004)

NAVSEA Drawing No 803-1385828, Rev P, Nozzles AFFF and Washdown System

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

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

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

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2013, Power Tool Cleaning to Bare Metal

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

ASTM International (ASTM) F718-07, 2007 (Reapproved 2017), Standard for Shipbuilders and Marine Paints and Coatings Product/Procedure Data Sheet

3. REQUIREMENTS

3.1 General.

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

- 3.3 Operational test – initial
- 3.4 Inspection

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

- NDE Operator/Level 1 certified and qualified in accordance with ASNT No. SNT-TC-1A
- CIP Level 3. Provide the services of an independent Certified Coating Inspector, having successfully completed the NACE-International Coating Inspector Program (CIP), Level 3 - Peer Review with Marine Specialty.

3.1.2.1 Qualifications/certifications. Submit the Tech Rep's qualifications/certifications to the COR at Pre-Work Conference.

- Coating Tech Rep's qualifications/certifications in accordance with SFLC Std Spec 0000, 3.2.4.2.2.3 and 3.2.4.2.4, include name, certificate number and documented completion of NACE Marine Coating Technology Course and Exam.
- Accomplish applicable requirements in SFLC Std Spec 0000, Paragraph 3.2.4.2.2 (Coating Tech Rep).

3.1.2.2 Dates of services. Include the dates of services in which qualified and certified Tech Reps and personnel must be on site as per their subcontract documentation.

3.1.4 Protective measures. The Contractor must furnish and install all protective measures in accordance with SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection). Specific areas/equipment/components to be protected include, but are not limited to:

- Weapons and controls (e.g. ESM systems, and controls)
- Machinery and equipment (e.g. navigation aids and lights, ventilations, fire extinguishers and foundations)
- Ventilation systems (e.g. ventilation inlets/outlets, and trunks)
- Ordinance marks
- Ammo racks and foundations
- Ready service lockers
- Wash down counter measure fittings Add verbiage for covers in accordance with Navy Drawing
- Drains, covers, and plugs
- C4IT Equipment
- Antennas and controls
- Navigation aids and lights, flood lights
- Plaques, plates, and labels

3.1.4.1 The Contractor must plug or cover all deck drains to prevent entry of blast grit or debris.

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

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

3.1.4.4 Wash down counter measure fittings. The Contractor must use parts 4 and 5 in NAVSEA Drawing No 803-1385828, to protect the wash down counter measure fittings.

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

3.1.5 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:

- Weapons and controls (e.g. ESM systems, and controls)
- Machinery and equipment (e.g. navigation aids and lights, ventilations, fire extinguishers, , and foundations)
- Ventilation systems (e.g. ventilation inlets/outlets, and trunks)
- Ordinance marks
- Ready service lockers
- Wash down counter measure fittings

- Drains, covers, and plugs
- Closures (e.g. doors, hatches and scuttles)
- Rails and supports
- Ladders and supports
- Outfits, foundations, and fittings
- Switches, controls, and terminals
- Lights, alarms, cameras, speakers, sensors, switches, and supports
- Piping and supports
- Cables and supports

NOTE

Coast Guard personnel will coordinate to remove all pyrotechnics from ready service lockers prior to commencement of the works.

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

3.1.7 Work coordination. The Contractor must perform work in conjunction with the following Work Items:

- Tenting, Provide
- Hanger Bolt Equipment Removal Plate, Install
- Cargo Handling Elevator, Annual Inspection and Test Perform

3.1.8 Materials. The Contractor must provide any new components, parts, materials, and paints with the same color, comparable and matching material properties as the existing components/parts. Use references in section 1, 2 and SFLC Std Spec 6310 for guidance, required materials, and details.

3.1.9 Work plan. The Contractor must provide a work plan for the Deck Covering (Slip-Resistant) Renewal areas listed in the Table 1 to COR before or on Arrival Conference.

WARNING

Flight Deck surfaces are constructed of HY-AH-36 or HSLA-80 steel and may NOT be heated to remove the existing covering.

3.1.9.1 Pre-work Preservation Conference. Prior to the start of any preservation work, the Contractor must facilitate a conference meeting with the KO, COR, Coast Guard Inspector(s), Contractor and Contractor's representative able to speak to technical preservation details and requirements. The requirements of SFLC Std Spec 0000 3.2.4.2.2.3, Contractor's QC/ QA Program (as outlined in SFLC Std Spec 0000, 3.2.4 QC/ QA Program), Material Receipt Conformance (as outlined in SFLC Std Spec 6310, 3.1.1.2 Material Receipt Conformance), Preservation plan (as outlined in SFLC Std Spec 6310, 3.2 Preservation plan), SFLC Std Spec 6310 3.1.1.3.1 and 3.1.9 must be formally reviewed and approved by the KO. Contractor must only submit Manufacturer's Product Data Sheets (PDS) if NAVSEA approved ASTM F718 sheets are not available.

3.1.9.2 Daily Reports. At the conclusion of each work day coating has been applied, the Contractor must provide Daily Reports generated and signed by the Coating Inspector. Daily reports must summarize

work accomplished that current day, work to be accomplished the following day, any and all materials used during work that day, any and all readings taken and/or data collected (i.e. environmental readings, DFT, WFT, etc…) identifications of work locations, time and type of any inspections conducted with the results of such inspection(s) and must also include descriptions any events of non-conformance in relation to the specification, applicable references, standards, and technical data sheets (i.e. ASTM F718s).

3.1.9.3 Environmental Readings. Environmental Readings must be accomplished within agreed upon working hours according to the interval outlined in SFLC Std Spec 6310, Appendix D3.1.

NOTICE

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

3.2 Quality assurances and controls. The Contractor must abide by all the safety, preservation, and quality control requirements specified in SFLC Std Spec 0000, paragraph 3.2.4.2 (In-process QC measures for "critical-coated surfaces"), and the quality controls specified in SFLC Std Spec 6310, paragraph 3.1.10 (Coating inspection) and 3.1.15 (Coating system tests).

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

3.3.1 Prior to removal of any coatings, the Contractor must use photography, drawings and sketches as needed to document markings and lettering on affected areas. After application of deck covering, the markings and lettering must be restored as indicated on paragraph 3.7 of this work item.

- Contractor must include a description of the initial deck condition as outlined below with the documentation required in 3.3
- Visual or Pictorial Representation including measurements and locations of slip-resistant exempt surfaces (a.k.a. waterways) and Deck weapon, safety, and other markings (3.7) of the original coating system.
- Visual or Pictorial Representation including measurements and locations of intended differentiating surface preparation levels and coating systems (i.e. stripe coating application (SFLC Std Spec 6310, 3.1.1 Stripe coat application)) over the original coating system using chalk or chalk based marking instrument.

3.4 Inspection. After removing/cleaning deck covering and prior to priming deck surfaces and in the presence of Coast Guard Inspector and NACE III, the Contractor must inspect all exposed deck areas listed in Table 1 in accordance with SFLC Std Spec 0740. Submit CFR.

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

3.4.2 Pits. If pitting is found during visual inspection, the Contractor must measure up to 200 pits (for each location listed on Table 1) on the exposed substrates as designated by the Coast Guard Inspector using a Contractor supplied 'Pit Gauge', The results of these measurements must be included in the inspection report showing where pit measurements were taken and the depth of the pit. Photographs and sketches with dimensions may be used to indicate location of defects.

3.4.3 Ultrasonic test (UT). The Contractor must take 100 UT measurements (for each location listed on Table 1) on the exposed substrates as designated by the Coast Guard Inspector, in accordance with SFLC Std Spec 0740, Appendix C.

3.5 Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). As designated by the Coast Guard Inspector, the Contractor must repair small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), after removing insulation, coating, or deck covering in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), "Metal Repair and Hull Smoothing", MIL-PRF-24176, and manufacturers' instructions. (For estimating purposes 3 kits for each location listed on Table 1)

NOTE

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

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

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

NOTES

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

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

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

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

b. Coatings must be applied by brushing or rolling.

4. During pier side surface preparation:

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

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

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

- In addition, net barriers, when used, must be overlapped where attached to stanchions, and anchored at the bottom for the entire net's length between stanchions, to limit the clean–up and localize the blast medium.

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

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

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

- Power Tool Cleaning to Bare Metal (SSPC-SP 11) for all deck covering and coating defects, outfits/fittings, and limited access areas (including deck edges, coamings, foundations, outfits, and fittings)

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

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

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

- The ridge profile must be continuous and reasonably uniform.
- Peaks and ridges must be generally in the same direction (fore and aft), approximately 1/2 to 1 inch apart, and approximately 1/16 to 3/32 inches high.
- All weld seams must be cross-rolled from a minimum of 3 inches on either side of the weld.

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

- Areas within six inches of adjacent bulkheads, deck coaming, and deck edges.
- Areas within two inches of deck foundations (two inches measured from outermost portion of foundation, for example, foundation brackets on anchor windlass)
- Areas within two inches of deck fittings, welds, and protrusions.
- Decks inside coamings
- Deck fittings, including, but not limited to: pad eyes, label plates, net supports/foundations (e.g. drain heads/cups, helicopter tie-down fittings, talon grid cover (underside), and lifting

handles for aircraft fuel filling station)

- Deck troughs (e.g. stuffing tubes, risers, and flanges)

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

- CIWS deck
- Top of Pilot House
- Hangar Stbd & Port, incl. Helo Spare Store Rooms

3.7 Deck weapon, safety, and other markings. As designated by the Coast Guard Inspector, the Contractor must paint all deck weapon, safety, and other markings to restore them to original conditions in accordance with SFLC Std Spec 6310, COMDTINST M10360.3 (Series), Chapter 5 Cutter and Boat Safety Colors and Markings, and NAVSEA OP 4, Rev 10, Ammunition And Explosives Safety Afloat. Deck markings include, but are not limited to then following:

3.7.1 Danger stand clear of launcher deck area. For launcher areas, a "DANGER STAND CLEAR OF LAUNCHER DECK AREA" sign must be conspicuously located on each side of the launcher deck. These signs must be stenciled in 2-inch white letters centered on a red, rectangular background. The red background height and width will be determined by the particular ship's available deck area.

3.7.2 Danger circles. The Weapons Program Manager, in conjunction with NAVSEASYSCOM, is required to establish a danger circle around power-driven systems, such as gun mounts, turrets, gun/missile directors and missile launchers. The circles must meet the following requirements:

- a. The danger area must be encircled by a painted red line, 4 inches wide. The inside of the red line must be approximately 18 inches from the maximum rotating projection of the armament.
- b. The danger area must be labeled by painting the words "DANGER AREA" in 2-inch high white letters, centered within the 4-inch wide red circle line described in subparagraph a. The words "DANGER AREA" must be repeated around the circle every 4 feet.
- c. All ship's structures that come in contact with the 4-inch wide red line and vertical extension of the line to a height of 7 feet must be labeled with the words "DANGER AREA" by painting 2-inch high red letters, centered on the area, and its extremities at a height of 5 feet from the deck. The danger circle markings must be extended to adjacent horizontal or near-horizontal surface where personnel could potentially stand or sit. It is not required to connect the arc across vertical surfaces to form a continuous connected circle.
- d. If the danger circle falls inside of or on a gun tub enclosure, the outside of the enclosures must be labeled by painting a 4-inch wide danger circle with 2-inch high letters spelling "DANGER CIRCLE" centered in the circle line. The top of the danger circle must be in line with the upper edge of the gun tub and must be painted as described in subparagraphs b and c.

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.9 Operational test-post repair. After completion of work and in the presence of the Coast Guard Inspector, the Contractor must witness an operational test (by Coast Guard personnel, including C4IT personnel) of the equipment listed below to demonstrate existing operational condition. Submit a CFR.

- C4IT electrical and electronic equipment
- CMWS sprinklers
- Drain systems and piping

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 6: FAS and Boat Deck, Vertical Surfaces, Preserve

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to fully preserve vertical surfaces listed in Table 1.

TABLE 1: FAS AND BOAT DECK VERTICAL SURFACES PRESERVATION

LOCATION	SYSTEM/APPENDIX (SFLC STD SPEC 6310-OPTION I)	TOPCOAT COLOR	PRESERVATION LEVEL
FAS Deck	Freeboard/Superstructure/Mast (Freeboard/ Superstructure, Steel)	White 17925	Full
Boat Deck			
Athwart ship Passage Way			
Exterior FWD Hanger Bulkhead			

1.2 Government-furnished property.

2. REFERENCES

COAST GUARD DRAWINGS

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

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

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

Coast Guard Drawing 750-WMSL-602-001, Rev C, Fab & Instl of Ships Name & Draft Markings (ASC602001)

Coast Guard Fleet Drawing FL 2804-022, Rev -, Consolidated Visual ID for Cutters (Vessels 65 FT and Over in Length)

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 6310 (SFLC Std Spec 6310), 2020, Requirements for Preservation of Ship Structures

OTHER REFERENCES

MIL-A-22262, Mar 1996; Abrasive Blasting Media Ship Hull Blast Cleaning

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

The Society for Protective Coatings (SSPC) Surface Preparation Specification No.11 (SSPC-SP 11), 2013, Power Tool Cleaning to Bare Metal

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

ASTM International (ASTM) F718-07, 2007 (Reapproved 2017), Standard for Shipbuilders and Marine Paints and Coatings Product/Procedure Data Sheet

3. REQUIREMENTS

3.1 General.

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

- 3.5.4 Post-surface preparation cleaning and inspection

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

- NDE Operator/Level 1 certified and qualified in accordance with ASNT No. SNT-TC-1A
- CIP Level 3. Provide the services of an independent Certified Coating Inspector, having successfully completed the NACE-International Coating Inspector Program (CIP), Level 3 - Peer Review with Marine Specialty.

3.1.2.1 Qualifications/certifications. Submit the Tech Rep's qualifications/certifications to the COR at Pre-Work Conference.

- Coating Tech Rep's qualifications/certifications in accordance with SFLC Std Spec 0000, 3.2.4.2.2.3 and 3.2.4.2.4, include name, certificate number and documented completion of NACE Marine Coating Technology Course and Exam.
- Accomplish applicable requirements in SFLC Std Spec 0000, Paragraphs 3.2.4.2.1 (Painting contractor certification program requirement) and 3.2.4.2.2 (Coating Tech Rep).

3.1.2.2 Dates of services. Include the dates of services in which qualified and certified Tech Reps and personnel shall be on site as per their subcontract documentation.

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

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

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

3.1.6 Materials. The Contractor shall provide any new components, parts, materials, and paints with the same color, comparable and matching material properties as the existing components/parts. Use references in section 1, 2 and SFLC Std Spec 6310 for guidance, required materials, and details.

3.1.7 Water used in preparation and washing procedures. The Contractor shall ensure that water used in all surface preparation tasks, including pre-surface preparation wash, water jetting, and wet abrasive blasting 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.

3.1.7.1 Ensure that surface preparation water does not contain sediments or other impurities that are destructive to the proper functioning of the cleaning equipment.

3.1.7.2 Ensure that all water used in any surface preparation or cleaning procedures is captured, contained, and all spent water disposed of in accordance with all Federal, state and local regulations.

3.1.8 Surface preparation optional methods. The Contractor has the option of using either "Wet Abrasive Blasting" or "Abrasive Blasting" to achieve the required surface preparation, prior to application of the coating system specified in preservation requirements. The Contractor may apply wet abrasive blasting, for one or both of the following reasons:

- Achieving greater productivity
- Achieving the required surface profile

NOTE

Water jetting without abrasive addition does not provide any additional anchor profile to the surface, beyond what was present after the previous surface preparation.

3.1.9 Work plan. The Contractor shall provide a work plan for the Freeboard Preservation listed in Table 1 to COR before or at the arrival conference.

3.1.9.1 Pre-work Preservation Conference. Prior to the start of any preservation work, the Contractor must facilitate a conference meeting with the KO, COR, Coast Guard Inspector(s), Contractor and Contractor's representative able to speak to technical preservation details and requirements. The requirements of SFLC Std Spec 0000 3.2.4.2.2.3, Contractor's QC/ QA Program (as outlined in SFLC Std Spec 0000, 3.2.4 QC/ QA Program), Material Receipt Conformance (as outlined in SFLC Std Spec 6310, 3.1.1.2 Material Receipt Conformance), Preservation plan (as outlined in SFLC Std Spec 6310, 3.2 Preservation plan), SFLC Std Spec 6310 3.1.1.3.1 and 3.1.9 must be formally reviewed and approved by the KO. Contractor must only submit Manufacturer's Product Data Sheets (PDS) if NAVSEA approved ASTM F718 sheets are not available.

3.1.9.2 Daily Reports. At the conclusion of each work day coating has been applied, the Contractor must provide Daily Reports generated and signed by the Coating Inspector. Daily reports must summarize work accomplished that current day, work to be accomplished the following day, any and all materials used during work that day, any and all readings taken and/or data collected (i.e. environmental readings, DFT, WFT, etc) identifications of work locations, time and type of any inspections conducted with the results of such inspection(s) and must also include descriptions any events of non-conformance in relation to the specification, applicable references, standards, and technical data sheets (i.e. ASTM F718s).

3.1.9.3 Environmental Readings. Environmental Readings must be accomplished within agreed upon working hours according to the interval outlined in SFLC Std Spec 6310, Appendix D3.1.

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

- Tenting, Provide
- Dual Point Boat Davit (Allied Marine Crane Model 11000 CTS), Replace

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.1,11 Operational test, initial. Prior to commencement of work, the Contractor must witness Coast Guard personnel perform an initial operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

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

NOTICE

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

3.3 Inspection of hull identification numbers and letters. Prior to commencement of work, the Contractor shall inspect and verify whether all hull identification numbers and letters have permanent markings (weld beads or impressions), showing their location on the hull.

3.4 Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). As designated by the Coast Guard Inspector, the Contractor shall repair small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), after removing insulation, coating, or deck covering in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), "Metal Repair and Hull Smoothing", MIL-PRF-24176, and manufacturers' instructions. (approximate 4 kits)

NOTE

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

3.5 FAS and Boat Deck Vertical Surfaces preservation. The Contractor shall prepare Table 1 surfaces using the method specified in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems). Apply finish/top coat to match existing adjacent surfaces. Select option(s) as follows (Figures 1 and 2):

- Freeboard/Superstructure/Mast (Freeboard/Superstructure, Steel), Option I
- Near-White Metal Wet Abrasive Blast Cleaning SSPC-SP 10 (WAB)/NACE WAB-2
- Power Tool Cleaning to Bare Metal (SSPC-SP 11) for all coating defects, outfits/fittings, and limited access areas

3.5.1 Pre-surface preparation wash. The Contractor shall accomplish low-pressure (less than 5,000 psi) fresh water wash of all affected surfaces, to remove soluble chlorides and other surface contaminants. Refer to SSPC-SP 1, for guidance.

3.5.2 Coating removal. As designated by the Coast Guard Inspector (where there is evidence of coating failure), prior to application of the coating system, the Contractor shall clean to achieve the required surface preparation by:

- Near-White Metal Wet Abrasive Blast Cleaning SSPC-SP 10 (WAB)/NACE WAB-2, or
- Abrasive blasting to SSPC-SP 10/NACE No. 2, using grit conforming to MIL-A-22262 (1.5 to 2.5 mil anchor profile), and
- Power Tool Cleaning to Bare Metal (SSPC-SP 11) for all coating defects, outfits/fittings, and limited access areas

3.5.2.1 A blast coupon shall be provided prior to blasting, in accordance with the SFLC Std Spec 6310, 3.1.6.2 Coupon test.

3.5.3 Feathering. The Contractor shall feather edges of top coating into adjacent bare areas, to create a smooth transition.

NOTES

1. A profile suitable for over coating would be similar to what is produced by abrading the coating with 100-grit paper.

2. Water jetting without abrasive addition does not provide any additional anchor profile to the surface, beyond what was present after the previous surface preparation.

3.5.4 Post-surface preparation cleaning and inspection. After completion of surface preparation and prior to coating application, accomplish the following tasks, and submit a CIR.

3.5.4.1 Perform a visual inspection of the prepared substrate and surface.

3.5.4.2 Perform solvent cleaning of all prepared surfaces, in accordance with SSPC-SP 1. Capture, contain, and dispose of all wastes from solvent cleaning, in accordance with all federal, state and local regulations.

3.5.5 Coating. The Contractor shall coat the surfaces of freeboard using coating systems with White 17925 top coat, as specified in accordance with SFLC Standard Specification 6310.

3.5.5.1 Substrate surfaces. Prime bare substrates with specified Primer. Spot coat all exposed substrates with a "Polysiloxane Epoxy Primer/Mid-Coat" coating, in accordance with manufacturer's instructions to a thickness matching that of existing adjacent undercoating, ensuring that the primer coating extends over the feathered edges of the sound/intact coating, to minimize edge lifting and provide a better appearance. Application shall be in accordance with SFLC Std Spec 6310.

3.5.5.2 Abraded surfaces. Overcoat all primed and abraded surfaces, with "Polysiloxane Epoxy Primer/Mid-Coat" coating, White 17925, to ensure a uniform thickness throughout the entire surfaces.

3.5.5.3 Geometric shapes and weld seams. Stripe coat all geometric shapes and weld seams.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.7 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).

4. NOTES

This section is not applicable to this work item.

WORK ITEM 7: Deck Covering (Slip-Resistant), Flight Deck, Renew

1. SCOPE

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

TABLE 1 SLIP-RESISTANT DECK COVERING

LOCATION	COMPO	SYSTEM/APPENDIX (SFLC STD 6310)	TOPCOAT COLOR	PRESERVE LEVEL	NOTE
Flight Deck (outside Helo Hangar)	Deck, Gutter, TALON grid cover, Coamings	Flight Deck	Dark Gray 36076 Match existing adjacent surfaces	Full	MIL-PRF-24667 Type V Comp. G Non-skid

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 750-WMSL 100-064, Rev B, Topside Configuration (NSC 2 SRD) (ASC100004B)

Coast Guard Drawing 750-WMSL 612-003, Rev C, Helo Landing Area Safety Nets & Wheel Stops Arr and Details (ASC612003)

Naval Air Warfare Center (NAVAIR) Drawing 627927, Rev C, Visual Landing Aids Installation and Clearance Requirements

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

American Society for Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2016, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2016, 2016, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

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

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

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

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

Naval Sea Systems Command (NAVSEA) 0640-LP-111-4501, Apr 2012, NAVSEA OP 4 Rev 10, Ammunition And Explosives Safety Afloat

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

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

3. REQUIREMENTS

3.1 General.

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

- 3.3 Operational test - initial
- 3.4 Inspection

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

- NDE Operator/Level 1 certified and qualified in accordance with ASNT No. SNT-TC-1A
- CIP Level 3. Provide the services of an independent Certified Coating Inspector, having successfully completed the NACE-International Coating Inspector Program (CIP), Level 3 - Peer Review with Marine Specialty.

3.1.2.1 Qualifications/certifications. Submit the Tech Rep's qualifications/certifications to the COR at Pre-Work Conference.

- Coating Tech Rep's qualifications/certifications in accordance with SFLC Std Spec 0000, 3.2.4.2.2.3 and 3.2.4.2.4, include name, certificate number and documented completion of NACE Marine Coating Technology Course and Exam.
- Accomplish applicable requirements in SFLC Std Spec 0000, Paragraphs 3.2.4.2.1 (Painting contractor certification program requirement) and 3.2.4.2.2 (Coating Tech Rep).

3.1.2.2 Dates of services. Include the dates of services in which qualified and certified Tech Reps and personnel shall be on site as per their subcontract documentation.

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

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

- Machinery and equipment (e.g. flight deck nets, navigation aids and lights, and foundations)
- Ventilation trunks
- Ordinance marks
- Wash down counter measure fittings
- Drains, covers, and plugs
- Closures (e.g. hangar doors)
- Navigation aids and lights, flood lights
- Flight deck : drain gutters (protected while renewing slip-resistant deck covering)
- TALON grid assembly (excluding TALON grid cover)

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

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

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

3.1.3.5 Wash down counter measure (CMWD). CMWD nozzles (i.e. NAVSEA Dwg 803-1385828) shall be covered with the following:

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

NOTE

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

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

- Machinery and equipment (e.g. flight deck nets, navigation aids and lights, and foundations)
- Ventilation systems (e.g. ventilation inlets/outlets, and trunks)
- Ordinance marks

- Wash down counter measure fittings
- Drains, covers, and plugs
- Closures (e.g. hangar doors)
- Rails and supports
- Ladders and supports
- Outfits, foundations, and fittings (e.g. chocks, cleats, cat paws)
- Switches, controls, and terminals
- Lights, alarms, cameras, speakers, sensors, switches, and supports (e.g. navigation aids and lights, flood lights)
- Piping and supports
- Cables and supports
- Flight deck : flight deck safety net assemblies, talon grid cover

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

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

3.1.7 Water used for washing and surface preparation procedures. The Contractor must ensure that water used in all washing and surface preparation tasks (including pre-surface preparation wash, and wet abrasive blasting) is in accordance with SSPC/NACE Standards regarding to WJs or WABs. The water used shall be sufficient purity and quality, and it shall not prevent the surface being cleaned from achieving the required degree of surface cleanliness or non-visible contamination criteria.

- Ensure that surface preparation water does not contain sediments or other impurities that are destructive to the proper functioning of the cleaning equipment.
- Ensure that all water used in any surface preparation or cleaning procedures is captured, contained, and all spent water disposed of in accordance with all federal, state and local regulations.
- The COR shall be noticed 48 hours prior to the removal of accumulated water storage from the Coast Guard Base where work is being conducted.

3.1.8 Surface preparation optional methods. The Contractor may have the option of using either “Wet Abrasive Blasting” or “Dry Abrasive Blasting” to achieve the required surface preparation, prior to application of the coating system specified in preservation requirements.

- Achieving greater productivity
- Achieving the required surface profile

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

3.1.9.1 Pre-work preservation conference. Prior to the start of any preservation work, the Contractor shall facilitate a conference meeting with the KO, COR, Coast Guard Inspector(s), Contractor and Contractor's representative able to speak to technical preservation details and requirements.

- QC/QA Program. The requirements of SFLC Std Spec 0000 3.2.4.2.2.3, Contractor's QC/QA Program (as outlined in SFLC Std Spec 0000, 3.2.4 QC/QA Program)
- Material Receipt Conformance (as outlined in SFLC Std Spec 6310, 3.1.1.2 Material Receipt Conformance)
- Preservation plan (as outlined in SFLC Std Spec 6310, 3.2 Preservation plan), SFLC Std Spec 6310 3.1.1.3.1 and 3.1.9 shall be formally reviewed and approved by the KO
- PDS and SDS. Only submit Manufacturer's Product Data Sheets (PDS) and Safety Data Sheets (SDS) if NAVSEA approved ASTM F718 sheets are not available

3.1.9.2 Daily reports. At the conclusion of each work day coating has been applied, the Contractor shall provide Daily Reports generated and signed by the Coating Tech Rep (if applicable).

- Contents. Daily reports shall summarize work accomplished that current day, work to be accomplished the following day, any and all materials used during work that day, any and all readings taken and/or data collected (i.e. environmental readings, DFT, WFT, etc.) identifications of work locations, time and type of any inspections conducted with the results of such inspection(s) and shall also include descriptions any events of non-conformance in relation to the specification, applicable references, standards, and technical data sheets (i.e. ASTM F718s)

Environmental Readings. Environmental Readings shall be accomplished within agreed upon working hours according to the interval outlined in SFLC Std Spec 6310, Appendix D3.1

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

- Tenting, Provide
- Deck Covering-(Slip-Resistant), Renew
- Main Propulsion Diesel Engine, Exhaust Silencer, Replace
- Hanger Bolted Equipment Removal Plate, Install

3.2 Quality assurances and controls. The Contractor must abide by all the safety, preservation, and quality control requirements specified in SFLC Std Spec 0000, Paragraph 3.2.4.2 (In-process QC measures for "critical-coated surfaces"), and the quality controls specified in SFLC Std Spec 6310, Paragraph 3.1.10 (Coating inspection) and 3.1.15 (Coating system tests).

NOTICE

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

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

- CMWD sprinklers
- Drain systems and piping

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.4.1.1 Initial deck condition. The Contractor must include the description of the initial deck condition as outlined below with the documentation required in 3.4 Inspection.

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

3.4.2 Pit measurement. The Contractor must measure 400 pits on exposed substrates (after removing/ cleaning surface covering/coatings and prior to priming substrates) in accordance with SFLC Std Spec 0740, Paragraph 3.13 (Evaluation of pitting corrosion).

- Use a Contractor supplied 'Pit Gauge', if pitting is found during visual inspection.
- The results of these measurements should also be included in the inspection report showing where pit measurements were taken and the depth of the pit.
- Mark up a copy of Coast Guard Drawings to show all locations selected for measurement.
- Report the measurements including results (the depth of the pits), locations, and illustrations/marked up drawings.

NOTE

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

3.4.3 Ultrasonic test (UT). The Contractor must take 200 UT measurements on cleaned surfaces in accordance with SFLC Std Spec 0740.

- The results of these measurements should also be included in the inspection report showing where UT measurements were taken.
- Mark up a copy of Coast Guard Drawings to show all locations selected for measurement.
- Report the measurements including results (thicknesses, and cracks), locations, and illustrations/marked up drawings.

3.4.4 Flight deck pad eyes test. In the presence of the Coast Guard Inspector, the Contractor shall perform dye penetrant test on flight deck pad eyes in accordance with SFLC Std Spec 0740 and submit a CFR

3.5 Substrate fairing and repair by filling Epoxy for shallow pits and small corrosions (i.e. pits < 25% or corrosions < 25%). As designated by the COR, the Contractor shall repair small pin holes, shallow pitted substrates (with remaining plate thicknesses over 75% of required plate thicknesses), and fair corroded substrates (with remaining cross sections over 75% of required cross section areas), after removing

insulation, coating, or deck covering in accordance with SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems), "Metal Repair and Hull Smoothing", MIL-PRF-24176, and manufacturers' instructions.

- Procure 4 kits of Epoxy Fairing Compounds (e.g. Belzona 1111 or equivalent) to conduct repairs.
- Apply the remaining Epoxy Fairing Compounds over high corrosion and erosion areas. (e.g. substrates repaired by clad welding, corners, decks/sills near edges/corners, welding seams, and passages)
- Turn over all unused kits to COR.

NOTE

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

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

- Flight Deck (MIL-PRF-24667 Type V Comp. G)
- Near-White Metal Wet Abrasive Blast Cleaning SSPC-SP 10 (WAB)/NACE WAB-2, or
- Near-White Metal Abrasive Blast Cleaning SSPC-SP 10/NACE No.2, and
- Bare Metal Power Tool Cleaning (SSPC-SP 11) for all deck covering and coating defects, outfits/fittings, and limited access areas

NOTES

1. Flight Deck surfaces are constructed of HY-80 or HSLA-80 steel and may NOT be heated to remove the existing covering.

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

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

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

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

b. Coatings must be applied by brushing or rolling.

5. During pier side surface preparation :

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

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

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

- In addition, net barriers, when used, must be overlapped where attached to stanchions, and anchored at the bottom for the entire net's length between stanchions, to limit the clean–up and localize the blast medium.

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

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

3.6.2 Preparation. The Contractor must clean the entire deck areas including foundations, outfits, coaming, and fittings (e.g. drain gutters, flight deck edge coamings, talon grid cover, wash down counter measure, and tie down fittings) in accordance with :

- Near-White Metal Wet Abrasive Blast Cleaning SSPC-SP 10 (WAB)/NACE WAB-2, or
- Near-White Metal Abrasive Blast Cleaning SSPC-SP 10/NACE No.2, and
- Bare Metal Power Tool Cleaning (SSPC-SP 11) for deck covering or coating defects, and limited access areas (including deck edges, foundations, coamings, outfits, and fittings)

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

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

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

- The ridge profile shall be continuous and reasonably uniform.
- Peaks and ridges shall be generally in the same direction (fore and aft), approximately 1/2 to 1 inch apart, and approximately 1/16 to 3/32 inches high.
- All weld seams shall be cross-rolled from a minimum of 3 inches on either side of the weld.

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

- Areas within six inches of adjacent bulkheads, deck coaming, and deck edges.
- Areas within two inches of deck foundations, deck fittings, welds, and protrusions. (two inches measured from outermost portion of foundation, for example, foundation brackets on

anchor windlass)

- Decks inside coamings
- Deck fittings, including, but not limited to: pad eyes, label plates, net supports/foundations (e.g. drain heads/cups, helicopter tie-down fittings, talon grid cover (underside), and lifting handles for aircraft fuel filling station)
- Deck troughs (e.g. stuffing tubes, risers, and flanges)

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

- Flight deck : aft drain gutters (all exteriors and interiors), talon grid cover (underside), flight deck edge coamings stbd and port
- Any coating damages due to the Contractor's works

3.7 Flight deck markings and Visual Landing Aids (VLA). The Contractor must paint flight deck markings and restore Visual Landing Aids (VLA) in accordance with SFLC Std Spec 6310, COMDTINST M10360.3, NAVAIR Drawing 627927, and applicable references in section 2 as follows :

3.7.1 Flight deck markings. The Contractor must apply flight deck markings in accordance with NAVAIR Drawing 627927. Specific dimensions can be found in the current Air-Capable Ships Aviation Facilities Bulletin No. 1 and Shipboard Aviation Facilities Resume (NAEC-ENG-7576). (Figure 1)

3.7.2 Visual Landing Aids (VLA). All shipboard VLA lighting equipment should be operative for night/low-visibility operations. When conducting NVD operations, all shipboard lighting required to be illuminated shall be NVD compatible. Night VMC operations may be conducted in the event of a failure of not more than one of the lighting subsystems required for ship's facility certification, provided a visible natural horizon exists and the ship's commanding officer and the helicopter aircraft commander concur that the failed lighting system is not critical to the scheduled mission.

NOTE

Flight deck will be verified/certified by NAVAIR. See 4 NOTES.

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

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

- CMWD sprinklers
- Drain systems and pipings

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

4. NOTES

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

NAVAIRWARCENACDIVLKE
Lakehurst, N.J 08733-5000
Hot Line Action Desk (4.8.2.5)
Phone : +1 732 323-2592

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

- Ensuring no engine operation and no stack emission at any time during flight deck resurfacing
- Restricting access to the Flight Deck work area to only authorized personnel
- Coordinating Respective Area Command to contact NAVAIR and scheduling to have flight deck markings and Visual Landing Aids (VLA) verified/certified

4.3 Inspector training tool. Prior to commencement of work, the Coast Guard Inspector is encouraged to review the SFLC's web-based flight deck resurfacing training tutorial at the following web address, to become familiar with the flight deck resurfacing and quality assurance inspection procedures : http://cgweb.lant.uscg.mil/vdiv/References/Flight Deck/WebHelp/WHStart.htm

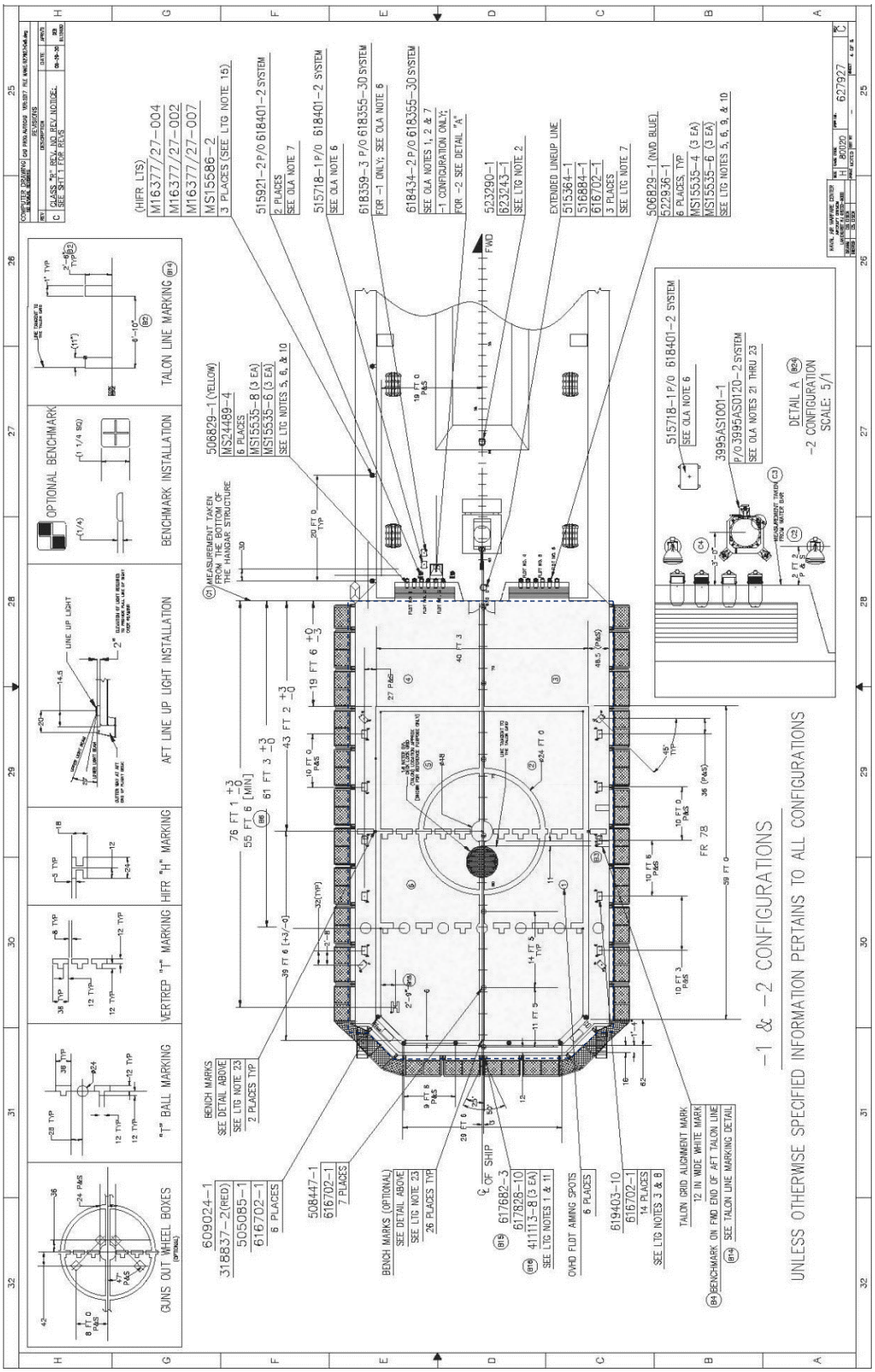


FIGURE 1 FLIGHT DECK WITH MARKINGS (NAVAIR DRAWING 627927, REV C)

WORK ITEM 8: Hangar Bolted Equipment Removal Plate, Install

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to install a bolted equipment removal plate (BERP) in the port side L3 longitudinal bulkhead between frames 56 and 58, between 01 and 02 levels.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-167-7, Rev -, Hangar BERP Installation L3 Port Bhd / Fr 57

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

Coast Guard Drawing 750-WMSL-100-053, Rev J, Unit 4420 Structure – 01 Level And Abv – Fr 52 To Fr 67 (ASC100442)

Coast Guard Drawing 750-WMSL-100-508, Rev H, Unit 2340 Structure – Main Deck To 01 Level – Fr 52 To Fr 64 (ASC100234)

Coast Guard Drawing 750-WMSL-167-503, Rev A, Structural, Door List (ASC167002)

Coast Guard Drawing 750-WMSL-259-014, Rev C, Main Engine Combustion Air Intake & Exhaust Supports, Dets & L/M 2nd Deck Up – 02 Lvl (ASC259012)

Coast Guard Drawing 750-WMSL-622-009, Rev D, Gratings & Handrails Uptakespace (ASC622009)

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

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

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

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. The Contractor must provide the services of a Qualified Technical Representative who is a NDE Inspector/Level 2 certified and qualified in accordance with ASNT No. SNT-TC-1A. Submit the Tech Rep's qualifications/certifications to the COR at the arrival conference.

3.1.3 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 drains
- Fire station and related piping
- Ship service low pressure air piping
- Electrical/lighting
- Insulation

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

- Deck Covering (Slip-Resistant), Renew
- Main Propulsion Diesel Engine Exhaust Silencer, Replace
- Deck Covering (Slip-Resistant), Flight Deck
- Tenting, Provide

3.2 Welding. The Contractor must perform all welding and allied processes accordance with Coast Guard SFLC Std Spec 0740.

3.3 NDE. The Contractor must perform NDE of all newly welded structures in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR with results of each inspected weld.

3.4 Pad eyes. The Contractor must provide and install temporary lifting eyes for removal of bulkhead and installation of the BERP, as necessary, in accordance with SFLC Std Spec 0740. Remove temporary lifting eyes after completion of the work item.

3.5 Insulation removal. The Contractor must remove insulation in way of the BERP installation. Dispose of removed insulation in accordance with all Federal, state, and local regulations.

3.6 QAWTD removal. The Contractor must crop, remove, and retain the quick acting water tight door (QAWTD) 01-57-2 in accordance SFLC Std Spec 0740. Remove and retain nameplates and labels. Cut as close to the existing edge of welding seams, plate opening or below but close to the existing connection line as possible.

3.7 Bulkhead removal. The Contractor must remove partial collars, grating supports, doubler plates, bulkhead stiffeners, exhaust guides, and bulkhead plating in accordance with Coast Guard Drawing 418A-WMSL-167-7 and SFLC Standard Spec 0740. Retain material as specified in Coast Guard Drawing 418A-WMSL-167-7.

3.8 Fabrication. The Contractor must fabricate the insert plate (132”x120”) and cover plate assembly (88”x 94”) in accordance with Coast Guard Drawing 418A-WMSL-167-7.

3.8.1 The Contractor must fabricate and install permanent cover plate lifting pads in accordance with Coast Guard Drawing 418A-WMSL-167-7. Each lifting pad must have a safe working load (SWL) of 1000 lbs, and must be pull tested to 2000 lbs for 10 minutes. Install a placard/label plate next to each lifting pad indicating pull test results. Submit a CFR.

3.8.2 Install the QAWTD 01-57-2 and its label plate onto the cover plate assembly in accordance with Coast Guard Drawings 418A-WMSL-167-7 and 750-WMSL-167-503. Adjust lock and secure mechanism for proper fit.

3.9 Installation. The Contractor must install partial collars, grating supports, doubler plates, bulkhead stiffeners, exhaust guides, and the insert plate in accordance with Coast Guard Drawing 418A-WMSL-167-7. Install the cover plate assembly upon completion of installation and inspections of the insert plate. Torque the BERP fasteners to 45 ft-lbs.

3.10 Alignment and fairness tests. In presence of Coast Guard Inspector, the Contractor must measure alignment and fairness of the newly welded structures (e.g. bulkheads/decks, frames/coamings, girders, and stiffeners) in accordance with SFLC Std Spec 0740, Paragraph 3.5 Fairness, MIL-STD-1689A, Section 12.3 Alignment and Fairness. Submit a CFR.

- Ensure that all misalignments and deviations meet requirements and do not exceed tolerance limits as specified in MIL-STD-1689A, Section 12.3 Alignment and Fairness
- Realign structures and fair plates until pass the test

3.11 Boundary test. For all new boundaries (insert plate, cover plate, QAWTD) the Contractor must perform a chalk test and water hose test, in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

3.12 Surface preservation. The Contractor must prepare and coat all exposed surfaces affected by the work performed in this work item, including adjacent structural members, using the system specified for “Bulkheads and Overheads, Un-insulated Steel (Appearance not a factor, i.e., voids) and Insulated Steel, Option II”, in SFLC Std Spec 6310 in Appendix B (Cutter and Boat Interior Painting Systems).

CAUTION

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

3.13 Bulkhead insulation renewal. The Contractor must renew the thermal insulation material, over plating surfaces and structural members in the affected areas, in accordance with Coast Guard Drawing 750-WMSL-635-002. 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).

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 9: Dual Point Boat Davit (Allied Marine Crane Model 11000 CTS), Replace

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to remove existing Dual Point Davit (i.e. Allied Marine Carne Model No. DDP 11000 CTS) and to install, inspect, start-up and test a Twin Pivot Arm Davit (i.e. Welin Lambie Ltd Model No. Type TW.PIV 5.0B).

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
Y	Twin Pivot Arm Davit. 440 Volt AC, Three Phase, 60Hz, (Approximate Weight Deck Frame: 11682 Lbs., FWD Davit Arm: 3388 Lbs., AFT Davit Arm: 3388 Lbs.)	TW.PIV 5.0B	1 ea.	611,168.00
Y	Deck Machinery Modification Kit	99-845-8402	1	28,540.00
Y	CB-OTH Mark IV (Coast Guard Drawing 26B-CB-IV-801-001)	N/A	1 ea.	N/A

2. REFERENCES

COAST GUARD DRAWINGS

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

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

Coast Guard Drawing 750-WMSL-100-500, Rev, Mod Incidental to install of Welin Lambie Davit

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

Coast Guard Drawing 750-WMSL-320-040, Rev C, Electrical One Line Diagram (NSC3 - SRD) (ASC320001C) (UNSIGNED)

Coast Guard Drawing 750-WMSL-320-508, Rev -, Electrical Mod Incidental to Installation of Welin Lambie Davit

Coast Guard Drawing 418A-WMSL-512-001, Rev H, HVAC System Diagram

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

Coast Guard Drawing 750-WMSL-583-502, Rev D Modifications Incidental to the Installation Of Allied Dual Point Davit

Coast Guard Drawing 750-WMSL-583-512, Rev C Small Boat Handling Arrangements (ASC583001) (UNSIGNED)

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

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

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

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

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

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 3041 (SFLC Std Spec 3401), 2020, Shipboard Electrical Cable Test

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

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

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

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

Coast Guard Technical Publication (TP) 7902A, Dual Point Davit – Models DDP11000CTS & SP2200 (S/N – 2313 & 2315) (Hulls: 752 Only)

Coast Guard Technical Publication (TP) 3943, 27 FEB 2019, Twin Pivot Arm Davit - Type TW.PIV 5.0B (REF. NO. 5558-1 THRU 5558-15), Welin Lambie Ltd.

OTHER REFERENCES

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

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

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

MIL-DTL-24643, Aug 2007, Cables and Cords, Electric, Low Smoke, For Shipboard Use, General Specification for

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

3. REQUIREMENTS

3.1 General.

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

None.

3.1.2 Tech Rep.

3.1.2.1 NDE Tech Rep. The Contractor must provide the services of a Qualified Technical Representative who is a NDE Inspector/Level 2 certified and qualified in accordance with ASNT No. SNT-TC-1A to perform welding NDE inspections.

3.1.2.1.1 Submit the Tech Rep's qualifications/certifications to the COR at the arrival conference

3.1.2.2 Welin Lambie Twin Pivot Arm Davit Tech Rep. The Contractor must provide the services of Original Equipment Manufacturer (OEM) Tech Rep who is familiar with the Welin Lambie Twin Pivot Arm Davit (Model TW.PIV 5.0B) to do the following, on site:

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

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

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

3.1.2.2.3 Point of Contact for Welin-Lambie

- Tim McCarty
- Technical & Service Support
- Welin Lambie, Ltd. York, PA
- Office: (717) 467-4242
- Fax: (717) 718-5065
- Mobile: (717) 887-9081
- Email: welin-lambie@comcast.net

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). The Contractor must maintain existing hydraulic system cleanliness and take all necessary precautions to prevent the introduction of contaminants into the hydraulic system. Immediately after disconnecting or removing components from the hydraulic system, the Contractor must completely seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

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

NOTE

Plastic bags may be used only when arrangement or configuration prevents the use of the other sealing methods specified above.

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

- Piping
- Electrical Cables
- Capstan
- Vent
- Ladders
- Double Bitt
- Natural Exhaust Vent
- 02 Level Catwalk Support foundation
- Speaker
- CCTV Camera
- Overhead Lights
- Exterior rails, stanchions, and life lines
- Insulations
- Deck covering
- Outfits and foundations

3.1.6 Welding requirements. The Contractor must accomplish all welding in accordance with SFLC Std Spec 0740.

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

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

3.1.8.1 Where practical run new cables in existing cableways, hangers, and bulkhead penetrations. Install electrical cable stuffing tubes, kick pipes, multi cable penetrations, and fire sealant in accordance with ABS and USCG regulations, MIL-STD-2003, and Coast Guard Drawing 750-WMSL-300-002. Nylon cable ties must not be used for the installation of cable. Only approved cable support and retention methods and materials must be allowed.

3.1.8.2 The contractor must provide miscellaneous hardware required for electrical installation (i.e. M Type Stuffing tubes, Kick pipes Capped elbows, Nipples, Box connectors, Lugs, Fasteners, Studs, Brackets, Light stools, wire nuts, tape, multi cable transit blocks, etc.).

3.1.8.3 Materials. The Contractor must supply materials listed on Coast Guard Drawing 750-WMSL-100-500 and 750-WMSL-320-508 for installation Welin Lambie Twin Pivot Arm Davit.

3.1.8.4 The Cable entrances to splash proof, spray tight and watertight enclosures shall be through plastic stuffing tubes in accordance with ASTM F 1836M.

3.1.8.5 All new cables shall be of unarmored construction with low smoke insulation conforming to MIL-DTL-24643. Each cable shall be continuous from terminal end to terminal end with no splicing permitted. Test all new cables per SFLC Standard Specification 3041.

3.1.8.6 Penetrations into new electrical enclosures and existing Switchboard may be through a BX type connector (see Figure 1B3 of DOD-STD-2003-1). The use of multi-cable penetrators or stuffing tubes is also permissible.

3.1.9 Item / material disposal. The Contractor must turn in Dual Point Davit (i.e. Allied Systems Dual Point Davit Model No. DDP 11000 CTS) with Control Hydraulic Power Unit to Coast Guard Inspector. The Contractor must all turn over all removed cables to the Coast Guard Inspector.

3.1.9.1 The Contractor must scarp of, as scrap, all items or materials removed from the cutter that are not: a) Reinstalled, b) Retained and shipped by the Contractor to a Coast Guard authorized facility, or c) Turned over to the Coast Guard Inspector.

3.1.9.2 Mandatory Turn-In Items (MTI). The Contractor must "Bag and Tag "removed equipment (i.e. Allied Systems Dual Point Davit, Hydraulic Power Unit and Control Console) from Cutter and turn over to the Coast Guard Inspector. The Contractor must package MTI in separate package with identification tag in the wooden crate. MTI will become spare items for logistical support of other Cutters.

3.1.10 Crane, rigging and GFP transport services. The Contractor must provide crane, rigging, and transport services to offload the removed Allied Dual Point Davit and Boat equipment and to on load the GFP Welin Lambie Twin Pivot Arm Davit with equipment for installation on the cutter.

3.3.11 Hose Fitting Documentation. For each hose assembly, the Contractor must submit the information listed below in Microsoft Excel format. Submit a CFR.

- Hose Number
- System and Description
- Location (Compartment Number)
- Length (in.)
- Part No.
- Material
- Size (in.)
- Fitting #1
- Fitting #2
- Design Pressure (psi)

- Hydrostatic Pressure (psi)

3.3.11.1 Hose tags. The Contractor must provide hose tags, in accordance with SFLC Std Spec 5000, Paragraph C2.2.1.4. Ensure tag color coding of black on natural or black on white. Ensure that tags are attached using materials that will not damage hose assembly in any way, or interfere with the normal flexing motion of the hose. Stamp, engrave, or etch the following information on each tag. Hand written information on each Tag is NOT acceptable.

- Hose Log Item Number (Serial Number)
- Hydrostatic Test Pressure (psi)
- Hydrostatic Test Date (DD/MM/YY)
- Service Life (Replacement Date) Date (QTR "Q"/FY)

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

3.1.13 Work coordination. The Contractor must perform work in conjunction with following Work Item:

- FAS and Boat Deck, Vertical Surfaces, Preserve
- Tenting, Provide

3.1.14 Advance notice. The Contractor must notify the Coast Guard Inspector at least 24 hours before performing work on this item.

3.1.15 Test plan. The Contractor with Tech Rep support must prepare detail Test Plan for Operational Testing, Dock Side Trials and Sea Trails testing of Welin Lambie Ltd (i.e. Model No. Type TW.PIV 5.0B) and submit Test Plan at the Arrival Conference.

3.1.16 GFP Parts (i.e. Welin Lambie Twin Pivot Arm Davit). The Contractor with Tech Rep support must verify GFP Parts listed in the Figure 1 and submit a CFR.

3.1.16.1 The Contractor with Tech Rep support must verify all cables supplied as shown on the Coast Guard Drawing 750-WMSL-320-508 (Sheet 4) and submit a CFR.

3.1.16.2 All inspection and verification of the GFP parts must be done in the presence of the Coast Guard Inspector.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.1.17 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.

NOTE

DON'T REMOVE EXISTING SEA PAINTER BOOM

3.2 Rip-Out. The Contractor must remove Dual Point Davit (i.e. Allied Systems Dual Point Davit Model No. DDP 11000 CTS) from its foundation as a one unit to turn over to the Coast Guard Inspector. The Contractor must remove all tie in points of the Allied Systems Dual Point Davit to remove as one

assembly. The Contractor must follow removal of the Dual Point Davit in the reverse order of the installation as identified in the TP 7902A (i.e. Chapter 3: Installation).

NOTE

AFTER SUCCESSFUL OPERATION TESTING OF WELIN LAMBIE TWIN PIVOT ARM DAVIT AND APPROVAL OF THE TCTO, EXISTING DAVIT HEAT EXCHANGER AND ASSOCIATED PIPING WILL BE REMOVED BY THIRD PARTY CONTRACTOR AT THE LATER DATE

3.2.1 Equipment to be ripped out includes, but is not limited to, the following: one (1) Allied Systems Dual Point Davit Model No. DDP 11000 CTS, one (1) Davit control stand and one (1) Hydraulic Power Unit, various deck and bulkhead foundations, piping, electrical cabling and equipment, as well as various handrails and lifelines.

3.2.2 Hydraulic power unit. Hydraulic fluid (i.e. Approximately 200 Gallons) must be removed from the hydraulic power unit of Allied Systems Dual Point Davit prior to rip-out and must disposed in accordance with all applicable federal, state, and local regulations. Fluids must not be drained into any space, bilge or exterior location.

3.2.3 All isolation valves must be closed and tagged out and blanking plates must be in place prior to rip out of any piping.

3.2.4 The Contractor must remove existing hydraulic power unit and install blank flange with gasket at the location as shown Detail C of Coat Guard Drawing 750-WMSL-583-518 (Matching Blank Flange to Piece No.3). Crop out all foundation of the hydraulic power unit in accordance with SFLC Std Spec 0740 and touch of all surfaces of foundation in accordance with SFLC Std SPEC 6310. Submit a CFR.

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

3.3.6 Piping rip out to Heat Exchanger. The Contractor must rip out all piping below deck as shown Plan 179-A of Coast Guard Drawing 750-WMSL-583-502 (Sheet 23) to Heat Exchanger and cap off the piping at the deck. Drain all the sea water and close supply and return valves Piece No. 205 at FWD Main Machinery Room Upper Level (5-44-01-E) Plan 179-E Coast Guard Drawing 750-WMSL-583-502 (Sheet 23).

3.2.7 Electrical modification and installation. The Contractor must perform electrical modification to install Welin Lambie Twin Pivot Arm Davit as shown on Coast Guard Drawing 750-WMSL-320-508. 750-WMSL-320-510. SFLC Std Spec 3041/3042 and TP394.

3.2.7.1 The Contractor must remove cables and equipment listed (i.e. Motor Controllers, J-Box, E-Stop Stations, Circuit Breaker. etc.) as shown on the Coast Guard Drawing 750-WMSL-320-508. Crop out the foundation of the removed equipment in accordance with SFLC Std Spec 0740 and touch up damaged surfaces in accordance with SFLC Std Spec 6310.

3.2.7.2 The Contractor must remove existing stuffing tube and install new stuffing tube for Cable (i.e. LSTSGU-100) as shown on Coast Guard Drawing 750-WMSL-320-508, 750-WMSL-320-510, 750-WMSL-320-510 and SFLC Std Spec 0740.

3.3 Installation. The new installation includes but is not limited to the following: one (1) Self-contained "palletized" Welin Lambie Twin Pivot Arm Davit Deck Frame, FWD and AFT Davi1t arms, FWD and AFT Winch Assembly, Vendor supplied hoses, cables and Control Station.

3.3.1 Government furnished equipment will be limited to the following:

- One (1) Welin Lambie Twin Pivot Arm Davit (Model TW.PIV 5.0B) as identified Figure 1.
- One (1) Deck Machinery Modification Kit

3.3.2 Structural modification and installation. The Contractor must perform structural modification to install Welin Lambie Twin Pivot Arm Davit as shown on the Coast Guard Drawing 750-WMSL-100-500 and SFLC Std Spec 0740.

3.3.2.1 Rigging of the davit for lifting aboard the cutter must be in accordance with manufacturer's instructions and must be done with Tech Rep support in the presence of the Coast Guard Inspector. Welin Lambie Tech Rep must provide guidance in installation of Twin Pivot Arm Davit skid on the Cutter.

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

3.3.2.3 New plating must be of similar material and mechanical properties as the adjacent material.

3.3.2.4 Where possible, cut all edges along existing seams. Corners must intersect plating seams at 90-degree angles. Corners that are not formed by designed plating seams must have a minimum radius of, three inches, or one-eighth of the transverse dimension of the cut, whichever is greater.

NOTE

ALL THE MOUNTING BOLTS ATTACHING THE DAVIT FRAME TO THE DECK INTERFACE AS WELL AS THE TENSION WINCHES SHOULD BE INSTALLED AND TORQUED DRY, NO ANTI-SEIZE OR LUBRICANTS APPLIED. FAILURE TO FOLLOW THIS WILL REQUIRE ALL MOUNTING BOLTS TO BE REPLACED. THE CONTRACTOR MUST COORDINATE THIS REQUIREMENT WITH TECH REP.

3.3.2.5 Welin Lambie Twin Pivot Arm Davit installation. The foundation platform for the davit must be installed such that the davit base is parallel to the centerline of the ship. With Tech Rep support, the Contractor must rig and mount GFP Welin Lambie Twin Pivot Arm Davit components (i.e. Figure 1) to its foundation in accordance with Coast Guard Drawing 750-WMSL-100-500 and TP 3943. The Contractor must rig and mount FWD & AFT Davit arms and tension winches (i.e. FWD and AFT F.T. Winch Assembly) to the Deck Frame in accordance with TP 3943. Torque all Welin Lambie Twin Pivot Arm Davit mounting bolts (i.e. Quantity 86, M20 X 75 MM Bolts, etc.) in the presence of Coast Guard Inspector and submit a CFR.

3.3.2.5.1 GFP Parts (i.e. Welin Lambie Twin Pivot Arm Davit). After installation of the Deck Frame to its foundation, the Contractor with Tech Rep support must install all GFP parts (i.e. Figure 1A and 1B) and complete assembly of the Twin Pivot Arm Davit assembly in accordance with TP 3493 (i.e. Section 2. Installation).

3.3.3 The Contractor with Tech Rep support must insure that all the GFP parts are installed on Welin Lambie Twin Pivot Arm Davit and davit assembly is complete ready for functional testing.

3.3.4 Hydraulic re-assembly. The Contractor with Tech Rep support must perform all hydraulic connection (i.e. FWD and AFT Cylinders) in accordance with TP 3943. The Contractor must provide and fill the hydraulic reservoir with hydraulic oil (i.e. Approximately 50.2 Gallons, Mobil DTE 10 Excel 46) in accordance with TP 3943.

3.3.4.1 The Contractor must provide all fluids for Hydraulic Reservoir, Main Winch Gearbox, and Both Tension Winch Gearboxes as well as grease to charge all the grease fittings in accordance with TP 3943. (Note: The main Wire ropes will come pressure lubricated).

3.3.5 Twin Pivot Arm Davit Control Station. The Contractor with Tech Rep support must mount the Twin Pivot Arm Davit Control Station as shown on the Coast Guard Drawing 750-WMSL-100-500. Coast Guard Inspector will approve mounting location of Dual Point Davit Control Stand.

3.3.5.1 The Contractor must install electrical cable from the Main Switchboard (i.e. 2S Switch Board: FWD Main Machinery Room : Upper Level : 5-44-01-E) to the davit's Control Station with the appropriate electrical wire terminals and stuffing gland in accordance with SFLC Std Spec 3042, MIL-STD-2003 and Coast Guard Drawing 750-WMSL-320-508. Install stuffing gland to the bottom of the Operator's Control Station including drilling a hole for the stuffing gland in the bottom of the Control Station. If requires, install stuffing tube through the deck in accordance with SFLC Std Spec 3042, SFLC Std SPEC 0740 and MIL-STD-2003.

3.3.6 Circuit breaker installation. The Contractor must supply and install circuit breaker (i.e. Piece No. 1 of Coast Guard Drawing 750-WMSL-320-508 on the Ship Service Switchboard (i.e. 2S). The Contractor must mount new circuit breaker at same removed location as identified in the previous Para 3.2.7.1.

3.3.7 Cable installation. The Contractor must supply and install cable (i.e. LSTSGU-100) from Ship Service Switchboard (i.e. 2S Switch Board: FWD Main Machinery Room : Upper Level : 5-44-01-E) to new Dual Point Davit Control Stand as shown on Coast Guard Drawing 750-WMSL-320-508, 750-WMSL-320-510 and SFLC Std Spec 3042.

3.3.7.1 The Contractor with Tech Rep support must install vendor supplied cables as shown on Sheet 4 of Coast Guard Drawing 750-WMSL-320-508 and TP 3943. (Note: Vendor supplied cables are partially installed and requires connection to the AFT Frame Terminal Box, FWD Frame Terminal Box and Control Station).

3.3.7.2 The Contractor with Tech Rep support in the presence of the Coast Guard Inspector must verify all Welin Lambie Twin Pivot Arm Davit installation as shown on Sheet 4 of Coast Guard Drawing 750-WMSL-320-508. Ensure that all cables are properly terminated and securely installed. Submit a CFR.

3.4 Notifications and inspections. The Contractor must be responsible for notifying the Contracting Officer at least seven (7) working days prior to said Contractor being ready for any inspections or testing. This notice must be in writing.

3.5 Acceptance testing. The contractor must conduct installation acceptance testing, as designated by the COR. All acceptance tests must be performed in the presence of the Coast Guard Inspector and OEM Tech Rep, unless otherwise noted by the COR. Submit a CFR.

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

3.5.2 Insulation resistance. Perform cable insulation resistance tests on new cables in accordance with SFLC Std Spec 3042.

3.5.3 Enclosure ground test. Perform enclosure ground tests on new electrical enclosures. The resistance of the ground path between the equipment enclosure and ship structure must not exceed 0.1 ohm.

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

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

3.5.5 Hydrostatic test. After all modifications, the contractor must hydrostatically test all new piping and components of the Twin Pivot Arm Davit Assembly 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 maximum safe operating pressure for all affected systems must be assumed to be the system design pressure Test pressures must be developed by means other than the system pumps if required pressure is greater than the maximum pressure rating of the pumps. Prior to shipboard tests, the fluid filters in the hydraulic system must be cleaned and filter elements renewed.

3.6 Sheathed thermal insulation renewal. The Contractor must renew damaged insulation material as shown on Coast Guard Drawing 750-WMSL-635-002. Coat the newly installed insulation using the system specified for "Insulation Surfaces, Fiberglass Sheet/Closed Cell PVC Foam" in SFLC Std Spec 6310.

3.6.1 Insulation. The Contractor must furnish, install, and coat new bulkhead/overhead insulation in accordance with Coast Guard Drawings 750-WMSL-635-001 and 750-WMSL-635-002.

3.7 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).

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

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

3.8.2 Load testing. The Contractor must provide OEM Tech Rep to conduct following load testing.

3.8.3 Static Load test. Davit frame must both be static load tested to 200% of the Working Load Limit to prove the structural installation on the cutter. Davit arms must be static load tested together, at full extension, with a test load added vertically.

NOTE

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

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

NOTE

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

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

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

3.8.7 Load test requirement must be in accordance with Para 2.11 of the TP 3943. The Contractor must provide certified load for testing.

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

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

NOTE

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

TABLE 1 – SMALL BOAT INFORMATION

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

3.9.2 In conjunction with the Coast Guard Inspector, the Contractor must conduct Sea Trial Acceptance Test (SAT) of the installed system (i.e. Twin Pivot Arm Davit together with existing Sea Painter Boom) demonstrating full system operations in a sea way, to include boat launch, recovery, tow, constant tension function, and operation in both automatic and manual modes. This test must comprise a series of launches and retrievals with the cutter underway under various sea conditions.

NOTE

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

3.10 Label plate. The Contractor must provide and install a label plate on each component tested to document satisfactory test completion in accordance with SFLC Std Spec 5000, Appendix B, Paragraph B2.9 (Label Plates). Engrave or stamped each label plate with the following information specific to each component tested:

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

3.11 Training. Welin Lambie Tech Rep must provide operational and troubleshoot training for 16 Hours during Dock Side trials/Sea Trails to Coast Guard personnel.

3.12 Red-lined drawing deliverable(s). The Contractor must “Red-Line” Coast Guard Drawing 750-WMSL-100-500 and 750-WMSL-320-508 to clearly reflect the work or deviations specified in this work item.

3.12.1 By 24 hours after completion of this work item, submit a draft copy of the "red-lined" drawing(s) to the COR for review and approval.

3.12.2 By 10 calendar days after receiving Coast Guard comments or completion of the availability, whichever occurs first, incorporates all comments and deliver one set of the final red-lined drawing(s) to the COR.

4. NOTES

This section is not applicable to this work item.

SECTION 2.0

INSTALLATION

2.1 Deliverables

Before commencing with installation, first check that there are no shortages from the quick reference tag list below.

2.1.1 Main deliverables check list

Item	Description	Welin Part No.	Qty	Weight approx.	☑
A	Deck frame	5631-4631	1	11682 lbs (5310 kg)	
B	Davit arm (fwd) - excluding item R	5601-1631	1	3388 lbs (1540 kg)	
C	Davit arm (aft) - excluding item S	5601-1541	1	3388 lbs (1540 kg)	
D	Horizontal sheave block	5657-3031	1		
E	Vertical sheave block	5657-2331	1		
F	Arm pivot block	5657-2531	1		
G	Cylinder bracket	5676-3931	1		
H	Main wire rope (fwd) Dia.12 x 65.07m lg	800-02033	1	82 lbs (37 kg)	
J	Main wire rope (aft) Dia.12 x 60.0m lg	800-02034	1	82 lbs (37 kg)	
K	Container (see 2.1.2)		1	288 lbs (131 kg)	
N	Handrail	5667-5021	1	22 lbs (10 kg)	
P	Handrail	5667-5221	1	33 lbs (15 kg)	
Q	Handrail	5667-4921	1	18 lbs (8 kg)	
R	Fwd F.T winch assy	5503-3902	1	708 lbs (322 kg)	
S	Aft F.T winch assy	5503-3902	1	708 lbs (322 kg)	
		Total Weight		20399 lbs (9272 kg)	

Attached to A

NOTE: ITEMS 'D', 'E', 'F' AND 'G' DESPATCHED FITTED TO DAVIT DECK FRAME 'A'. SEE SECTION 2.2.3 FITTING BRACKETS TO AFT END OF FRAME - TO SUIT 'SURFBOAT' LIFTING CENTRES.

2.1

FIGURE 1A: GFP PARTS LIST OF WELIN LAMBIE TWIN PIVOT ARM DAVIT

2.1.2 Container (K) deliverables check list

Before commencing with installation, first check that there are no shortages from the list below.

Item	Description	Welin Part No.	Qty	☑
K1	RIB Release hook	800-09948	2	
K2	Slip hook assembly	2651-0002	2	
K3	Gripe wire	800-02035	2	
K4	Turnbuckle assembly c/w tri-link	800-05017 & 2650-1111	2	
K5	Boat block assembly	5657-2101	2	
K6	Wedge and socket	800-09933	3	
K7	Lashing rope	800-02038	3	
K8	Gripe webbing sling	5799-1511	2	
K9	Gripe webbing tensioner	5795-1211	2	
K10	Web sling shackle	800-09949	4	
K11	Gripe anchorage lug	5424-7011	2	
K12	Hex hd bolt (M20 x 75 lg x St.St.A4/80)	623-20075	86	
K13	Hex nut (M20 x A4/80)	629-00020	86	
K14	Plain washer (M20 x St.St.A4)	647-00820	86	
K15	Deleted			
K16	Deleted			
K17	Charging kit c/w adaptor & hose	885-02043 885-02044 & 45	1	
K18	Pressure test kit comprising hose & 400 bar gauge	894-00507 894-00510	1	
K19	Hex hd setscrew (M12 x 30 lg x St.St.A4/70)	609-12030	10	
K20	Hex hd setscrew (M12 x 30 lg x St.St.A4/70))	609-12030	4	

FIGURE 1B: GFP PARTS LIST OF WELIN LAMBIE TWIN PIVOT ARM DAVIT

2.1.3 Commissioning spares check list

Item	Description	Welin Part No.	Qty	☑
M1	Indicator lamp (blue LED) and pilot light head	859-01951 859-02560	1 1	
M2	Indicator lamp (red LED) and pilot light head	859-01948 859-02552	1 1	
M3	Additional brake weight (if required)	5292-4811	1	
M4	Oil filter element	894-00908	1	
M5	Main winch fuses 100A	859-01381	3	
M6	Transformer fuses 32A	859-01380	1	
M7	Hydraulic power unit fuse 25A	859-01395	3	

2.3

FIGURE 1C: GFP PARTS LIST OF WELIN LAMBIE TWIN PIVOT ARM DAVIT

FIGURE 2 : HEAT EXCHANGER PIPING REMOVAL LOCATION

WORK ITEM 10: Main Propulsion Diesel Engine, Exhaust Silencer, Replace

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to replace the exhaust silencer of the Main Propulsion Diesel Engines (MPDE) listed in Table 1.

TABLE 1 – MPDE NAME PLATE DATA

EQUIPMENT	MODEL NUMBER	LOCATION
No.1 Main Propulsion Diesel Engine, 9666 HP, MTU Detroit Diesel, Inc.	20V 1163 TB 93	AFT Main Machinery Room (5-52-01-E)
No.2 Main Propulsion Diesel Engine, 9666 HP, MTU Detroit Diesel, Inc.	20V 1163 TB 93	AFT Main Machinery Room (5-52-01-E)

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
Y	Exhaust Silencer, Manufactured by G+H Schall Schutz, Approximate Weight 900 Kg.	QANF-900-25	2 ea.	140,000

2. REFERENCES

COAST GUARD DRAWINGS

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

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

Coast Guard Drawing 750-WMSL-100-35, Rev K, Unit 2340 Structure - Main Deck to 01 Level - FR 52 to FR 64 (ASC100234)

Coast Guard Drawing 750-WMSL-259-003, Rev G, Main Prop DSL / SS DSL Gen Air Intake / Exhaust Diagram (ASC259003)

Coast Guard Drawing 750-WMSL-259-011, Rev D, Main Engine Combustion Air Intake & Exhaust ARR, Dets & L/M Below 2nd Deck (ASC259009)

Coast Guard Drawing 750-WMSL-259-012, Rev B, Main Engine Combustion Air Intake Supports Details & L/M Below 2nd Deck (ASC259010)

Coast Guard Drawing 750-WMSL-259-013, Rev B Main Engine Combustion Air Intake & Exhaust ARR, Dets & L/M 2nd Deck Up - 02 LVL (ASC259011)

Coast Guard Drawing 750-WMSL-259-014, Rev C, Main Engine Combustion Air Intake & Exhaust Supports, Dets & L/M 2nd Deck Up - 02 LVL (ASC259012)

Coast Guard Drawing 750-WMSL-259-015, Rev D, Main Engine Comb Air Intake & EXH ARR, DETS & L/M ABV 02 LVL (ASC259013)

Coast Guard Drawing 750-WMSL-259-502, Rev , MDE Silencer Removal as delivered Details

Coast Guard Drawing 750-WMSL-501-005, Rev G, Machinery Arrangements (ASC501001)

Coast Guard Drawing 750-WMSL-508-001, Rev C, Piping and Machinery Insulation Schedule and L/M (ASC508001)

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

COAST GUARD PUBLICATIONS

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

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

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

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

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

Coast Guard Technical Publication 7028, 31-MAY-07, Main Diesel Engine - Workshop Manual

OTHER REFERENCES

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

The Society for Protective Coatings (SSPC) Paint Application Specification No. 1 (SSPC-PA Guide 1), 2004, Shop, Field, and Maintenance Painting of Steel

MIL-STD-22D, Aug 1979, Department of defence Desisg Criteria: Welded Design Joint

MIL-DTL-24244, May 2000, Insulation Material, With Special Corrosion, Chloride, and Fluoride Requirements

MIL-I-16411, Nov 1988, Insulation Felt, Thermal, Glass Fiber

MIL-Y-1140, Sep 1985, Yarn, Cord, Sleeving, Cloth, And Tape- Glass

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. The Contractor must provide the services of an OEM authorized/ licensed Tech Rep for MTU America Inc., specifically the MTU 20V1163TB93 Diesel Engine, to accomplish the following tasks – on site:

- Provide manufacturer's proprietary information, software, and tools pertinent to the equipment/system.
- Be present and assist with proper repair methods, and ensure compliance with manufacturer's procedures and standards during disassembly, inspection, repair, modification, calibration, and reassembly of the equipment/system.

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

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

NOTE

The MTU America Inc. Technical Representative may be present at other times in addition to the mandatory times listed above. The above represents the minimum required Technical Representative usage.

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 The Contractor must cover/protect the Helo Hanger Deck & Flight Deck work areas with plywood as needed to prevent damage to nonskid.

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

- Piping systems.
- Electrical cables
- Catwalks

- **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 all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR.

3.1.6 Scaffolding. The Contractor must, in accordance with CFR Title 29, Part 1915, Subpart E, erect suitable staging or scaffolding, as required, to facilitate work.

3.1.7 Safety precaution. The Contractor must rig suitable safety netting, to protect workers during possible falls, and to protect the Engine Room and machinery from falling tools.

3.1.8 The contractor must dispose all waste and fluids in accordance with all applicable Federal, state, and local regulations and SFLC Std Spec 0000.

3.1.9 Welding. The Contractor must perform all welding and allied processes accordance with SFLC Std Spec 0740 and MIL-STD-22.

3.1.9.1 The MPDE Exhaust System (Operating Temperature Above 650 Degree F) is classified as Class P2 which means that all welds to be butt weld full penetration air pressure tested as per Note 31 of the Coast Guard Drawing 750-WMSL-259-013.

3.1.9.2 Nondestructive inspections (NDI). In the presence of the Coast Guard Inspector, the Contractor must perform NDI of all completed welds in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

3.1.10 Rigging. The Contractor is responsible for rigging of new and used silencers, tools, materials, including GFP form and to the pier as well as from and to the engine room. When necessary, the Contractor must provide crane service to move materials, tools and GFE to and from pier, deck and engine room.

3.1.10.1 The Contractor must provide crane services to perform work on this item in accordance with the Para 3.3.9 of SFLC Std Spec 8635.

3.1.10.2 The Contractor must provide and install lifting eyes for removal and installation of the exhaust silencer in accordance with SFLC Std Spec 0740. Remove lifting eyes after completion of the work item.

3.1.11 Work plan. The Contractor must provide a work plan for this Work Item at the Arrival Conference.

3.1.12 Notification. The Contractor must give written notification to the COR, 48 hours before starting work on this item.

3.1.13 Work coordination. The Contractor must perform work in conjunction with following Work Items:

- Deck Covering (Slip-Resistant), Renew
- Deck Covering (Slip-Resistant), Flight Deck, Renew
- Hanger Bolted Equipment Removal Plate, Install
- Tenting, Provide

3.1.14 Work location. The Concern work locations are listed in the Table 2. See the Coast Guard Drawings referenced in the Section 2 for locations, details, material requirements, and guidance.

TABLE 2: - WORK LOCATION

COMPARTMENT	LOCATION
AFT Main Machinery Room (Upper Level)	5-52-01-E
AFT Main Machinery Room (Uptake Space)	2-52-0-Q
Port Hello Hanger	01-52-0-Q

3.2 Temporary access cut. The Contractor must remove bulkhead insulation as needed and cut a rectangular opening of 85” Wide x 102” High, on bulkhead to access AFT Main Machinery Room Uptake Space (2-52-0-Q). Follow requirements of SFLC Std Spec 8636 for Temporary Hull Access.

3.2.1 Lift and move removed section of bulkhead as needed within the hanger to permit work, the Contractor may use existing overhead crane.

NOTE

Removed section of bulkhead will remain inside the Hanger compartment until reinstalled.

3.2.2 Secure removed section of bulkhead using suitable restraints (Chain wire rope, clamping dogs). Save, secure bulkhead section and reinstall after completion of work.

3.3 Exhaust silencer removal. The Contractor must remove existing silencers installed on the MPDE listed in the Table 1. The Contractor must cut exhaust piping as shown in Figure 2 in accordance with SFLC Std spec 0740. Remove bolted flanges.

3.3.1 Remove and save for reinstallation existing exhaust insulation blankets around the exhaust piping and silencer flanges shown on Coast Guard Drawing 750-WMSL-529-013. Submit CFR documenting condition of insulation blankets. Protect Insulation blankets from rain.

3.3.2 The Contractor must remove existing silencers and rig out of cutter. Turn over removed silencers to COR for disposal.

3.3.3 Cleaning. After removal of the existing the exhaust silencer, the Contractor must thoroughly sweep, mechanically clean and vacuum the interior of each exhaust pipe system from the exhaust outlet to topmost location outside the vessel. Clean all adjacent stack uptake surfaces. Ensure that all tar deposits, soot deposit and all other contaminants are completely removed. The Contractor must perform visual inspection of the following components and submit a CFR.

- Exhaust stack access hatches, including all associated studs and nuts.
- All cleaned exhaust stack surfaces.
- All exhaust expansion joints, including associated bolts.
- The Contractor must demonstrate completeness of the cleaning process to the Coast Guard Inspector

3.3.5 The Contractor must rigged the MPDE exhaust silencer in accordance with Coast Guard Drawing 750-WMSL-259-502.

3.4 New exhaust silencer installation. The Contractor must install new GFP exhaust silencers on the MPDE listed in the Table 1. Outline dimension of the exhaust silencer is shown in the Figure 1 for reference. Renew all fasteners and gaskets in accordance with Coast Guard Drawing 750-WMSL-259-013 and 750-WMSL-259-014.

3.4.1 After completion of welding and inspection work, reinstall the insulation blankets and restore all disturbed insulation Coast Guard Drawing 750-WMSL-509-001 & 750-WMSL-635-002.

3.5 Diesel exhaust piping insulation installation. Where possible, the Contractor must re-install usable sections of insulation as well as new insulation as needed on all exhaust components, including fittings, flanges, flex pipe, silencers, and piping using custom-built, removable blankets that meet the following requirements (Refer to paragraph 4.1 Known Suppliers):

- Blankets are fabricated in four plies.
- First (inside) ply is made of 304 knitted stainless steel wire mesh.

- Second ply is fiberglass insulation material, conforming to MIL-I-16411, Type II.
- Third ply is a silica-based ceramic mat.
- Cold face or top covering is a high temperature, flexible, silicone-coated, silica fabric with harness satin weave conforming to MIL-Y-1140 and MIL-DTL-24244.
- All seams are secured with stainless 304 stainless steel lacing staples to facilitate field modifications and repairs.
- Blankets are cross-laced in place with stainless steel tie wire to ensure tight fit.
- Install the exhaust piping insulation in accordance with Coast Guard Drawing 750-WMLS-508-001.

3.7 Reinstall section of bulkhead. The contractor must rig section of bulkhead and weld back into original location in accordance with SFLC Std Spec 0740 and SFLC Std Spec 8636.

3.8 Bulkhead insulation. The Contractors must renew damaged insulation in accordance with Coast Guard Drawing 750-WMSL-635-002

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 perform tightness test as per Note 2 of the Coast Guard Drawing 750-WMSL-259-013. (Note 2 of Drawing for Reference : The tightness of the diesel exhaust system shall be tested by sealing off all opening and pressurizing each system with air to 15 inches water gauge. The system pressure shall not be less than 10.0 inches of water gauge after 10 minutes. If the pressure loss exceeds 5.0 inches of water gage, the system leaks shall be repaired and the system retested).

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

4. NOTES

4.1 Known suppliers. The manufacturers/suppliers in the following table provide thermal insulating blankets known to meet or exceed the requirements specified herein:

TABLE 1 – KNOWN SUPPLIERS

SOURCE	PHONE NUMBER
Advanced Thermal Products (ATP), Inc.	(800) 826-8417
Blankets, Inc.	(618) 524-7541
HITCO Carbon Composites, Inc.	(800) 421-5444
Industrial Commercial Marine(ICM)	(410) 771-8070
Janco Enterprises, Inc	(321) 504-4403
Salmi and Company	(410) 437-9326

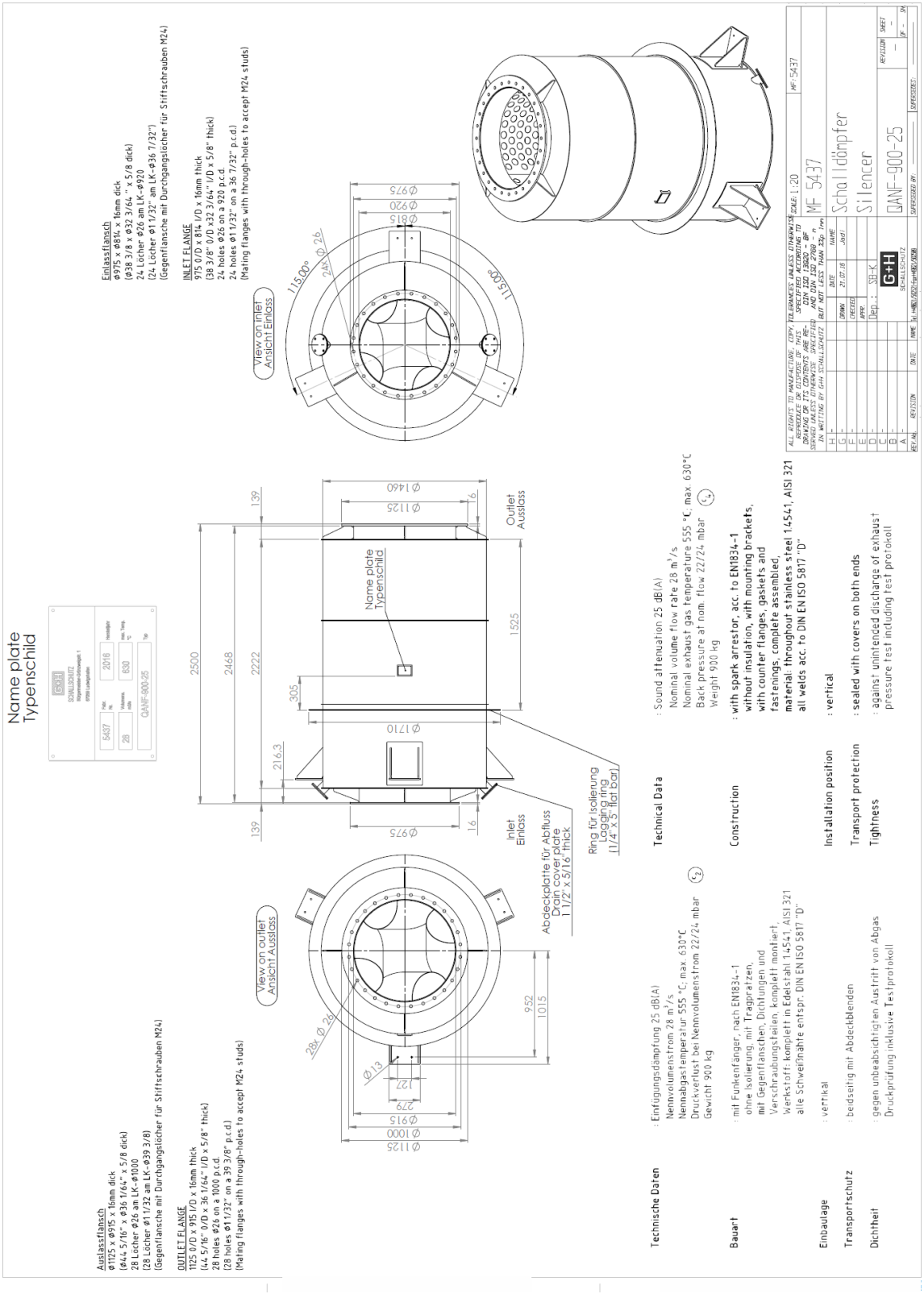


FIGURE 1: OUTLINE DIMENSION OF EXHAUST SILENCER

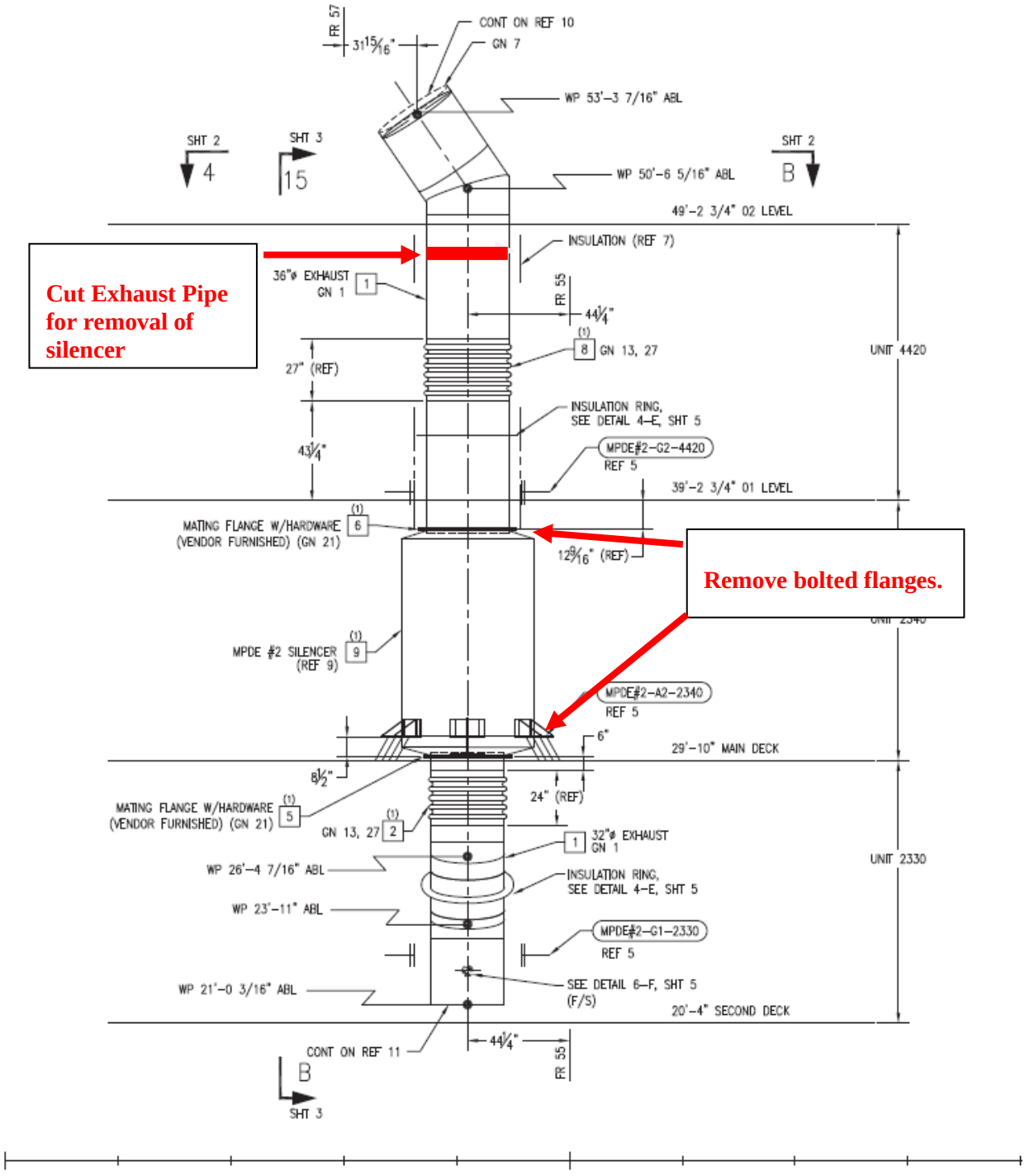


FIGURE 2: EXHAUST PIPING CUT OUT LOCATION FOR SILENCER REMOVAL

WORK ITEM 11: HVAC System (Cleaning Gear Locker & Protective Clothing Storeroom), Modify

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to modify the HVAC systems listed in Table 1.

TABLE 1 – HVAC SYSTEM MODIFICATION

COMPARTMENT	LOCATION	HVAC SYSTEM	DRAWING
Cleaning Gear Locker	3-71-2-A	Exhaust System (ES-107)	750-WMSL-512-529
T/S	3-72-2-L	Exhaust System (ES-107)	750-WMSL-512-529
Protective Clothing Storeroom	01-36-1-A	Recirculation System (RS-32) Total Protection Supply System (TPSS-70)	750-WMSL-512-528
Passage	01-38-1-L	Recirculation System (RS-32) Total Protection Supply System (TPSS-70)	750-WMSL-512-528

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-512-001, Rev -, HVAC System Diagram

Coast Guard Drawing 750-WMSL-485-001, Rev L, Sleeves – Pipe Structure Penetration (SP485000)

Coast Guard Drawing 750-WMSL-509-001, Rev A, HVAC Insulation Schedule and L/M (ASC509001)

Coast Guard Drawing 750-WMSL-512-004, Rev A, Vent and Air Conditioning Standard Instruction (ASC512007)

Coast Guard Drawing 750-WMSL-512-019, Rev C, Vent & Air Cond Arr Mn Dk Unit 1240 (ASC512124)

Coast Guard Drawing 750-WMSL-512-035, Rev B, Vent & Air Conditioning Arr 2nd Platf, Unit 3110 (ASC512311)

Coast Guard Drawing 750-WMSL-512-036, Rev C, Vent & Air Cond Arr 1st Platf Unit 3120 (ASC512312)

Coast Guard Drawing 750-WMSL-512-037, Rev F, Vent & Air Cond Arr 2nd Dk Unit 3130 (ASC512313)

Coast Guard Drawing 750-WMSL-512-045, Rev E, Vent & Air Conditioning 01 Level, Unit 4210 (ASC512421)

Coast Guard Drawing 750-WMSL-512-051, Rev B, Vent Arr Stack Unit 4430 (ASC512443)

Coast Guard Drawing 750-WMSL-512-528, Rev A, HVAC Modifications to Protective Clothing Storeroom

Coast Guard Drawing 750-WMSL-512-529, Rev B, HVAC Modifications to Cleaning Gear Locker

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

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 0850 (SFLC Std Spec 0850), 2020, General Requirements for Drawing Preparation

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

OTHER REFERENCES

Federal Specification (Fed Spec) HH-P-151, Mar 1991, Rubber-Sheet, Cloth Insert

ASTM International (ASTM) F708, 2018, Standard Practice for Design and Installation of Rigid Pipe Hangers

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.

None.

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

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

- Joiner bulkhead (i.e. Cleaning Gear Locker: 3-72-2-A)
- Bulkhead insulation
- Piping
- Electrical wiring
- Overhead Lights

3.1.5 Material disposal. The Contractor must dispose all items or materials removed from the cutter that are not reinstalled, retained and shipped by the Contractor to a Coast Guard authorized facility, or turned over to the Coast Guard Inspector. Disposal must be in accordance with all Federal, state, and local regulations.

3.1.6 Duct hangers. The Contractor must furnish, fit, and install new duct hangers not more than 4'-0" apart. Hangers must be attached as near as possible to division joints. Dampers and terminals and other components not supported by a foundation must be supported with at least one hanger and it must be located within 12" of the component.

3.1.7 Bulkhead and deck penetrations, furnish and installation. The Contractor must furnish and install all bulkhead and deck penetrations in accordance with procedures and notes shown on Coast Guard Drawing 750-WMSL-485-001.

3.1.8 Welding and nondestructive examination (NDE). The Contractor must perform all welding in accordance with SFLC Std Spec 0740, Appendix C. Perform a visual inspection (VT) of all new welds in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

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

- Protective Clothing Storeroom (01-36-1-A)
- Passage (01-38-1-L)
- Cleaning Gear Locker (3-71-2-A)

3.2.1 Test / Inspections. The Contractor must test the HVAC systems for flow velocities, temperature accuracy and uniformity, sound levels, water ingestion and duct tightness. Close/seal off dampers as necessary to inspect for any leaks. This information will be used as a baseline to compare with the post-repairs testing.

3.3 Cleaning gear locker (3-72-2-A). The Contractor must rip-out and modify the exhaust ventilation system (ES-107) in accordance with Coast Guard Drawing 750-WMSL-512-529.

3.3.1 Bulkhead remove and re-install. Remove joiner bulkhead as necessary and retain for reinstallation. Upon completion of duct mods reinstall bulkhead and modify as required to facilitate future inspections and maintenance. Use new fasteners when installing bulkhead.

3.4 Protective clothing storeroom (01-36-1-A). The Contractor must rip-out and modify the recirculation system (RS-32) and the total protection supply system (TPSS-70) in accordance with Coast Guard Drawing 750-WMSL-512-528.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.5 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 ventilation systems of following compartments listed below to be in satisfactory operating condition. Submit a CFR.

- Protective Clothing Storeroom (01-36-1-A)
- Passage (01-38-1-L)
- Cleaning Gear Locker (3-71-2-A)
- T/S (3-72-2-L)

3.5.1 Test / Inspections. The Contractor must test the HVAC systems for flow velocities, temperature accuracy and uniformity, sound levels, water ingestion and duct tightness. Close/seal off dampers as necessary to inspect for any leaks. Flow velocity readings must be recorded after the system is balanced and recorded for use by the crew in maintaining the system. System balance must be achieved by adjusting volume dampers, then mechanically securing them in position IAW drawing.

3.5.2 The recirculation system RS-32 must be balanced so that the delivered quantity of air to each compartment is not less than 100 percent nor more than 110 percent of design quantity. The total protection supply system TPSS-70 must be balanced so that the measured quantity of air delivered is not less than 100 percent nor more than 110 percent of design quantity. Individual terminal delivery quantities within the compartment must be within plus or minus 10 percent of the prorated quantities.

3.5.3 The exhaust system ES-107 must be balanced so that the delivered quantity of air to each compartment is not less than 100 percent nor more than 110 percent of design quantity. Individual terminal delivery quantities within the compartment must be within plus or minus 10 percent of the prorated quantities.

3.6 Thermal insulation renewal. The Contractor must renew existing insulation material as shown on Coast Guard Drawing 750-WMSL-635-002. Coat the newly installed insulation system in accordance with SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems).

3.7 Ducting insulation renewal. The Contractor must renew existing ducting insulation as shown on Coast Guard Drawing 750-WMSL-509-001. Coat the newly installed insulation system in accordance with SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems).

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

3.9 Redlined drawing deliverable(s). The Contractor must “red-line” Coast Guard Drawings 750-WMSL-512-528 and 750-WMSL-512-529 to reflect the work or deviations specified in this work item in accordance SFLC Std Spec 0850.

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

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 12: AFFF Bilge Sprinkling Piping, Modify

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to modify the aqueous film forming foam (AFFF) system aboard the USCGC STRATTON. This work item will add three (3) new AFFF nozzles to the Forward Main Machine Room, five (5) nozzles to the Aft Main Machine Room, and low point drain valves throughout the AFFF system.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 418A-WMSL-555-001, Rev A, Foam System Diagram

Coast Guard Drawing 418A-WMSL-555-003, Rev -, AFFF Bilge Sprinkling Modifications

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

Coast Guard Drawing 750-WMSL-555-016, Rev D, Foam System Unit 2230 (ASC555223-AF)

Coast Guard Drawing 750-WMSL-555-020, Rev D, Foam System Unit 2330 (ASC555233-AF)

Coast Guard Drawing 750-WMSL-555-026, Rev C, Foam System Unit 3130 (ASC555313-AF)

Coast Guard Drawing 750-WMSL-555-030, Rev B, Foam System Unit 3230 (ASC555323-AF)

Coast Guard Drawing 750-WMSL-555-038, Rev D, Foam System Unit 4420 (ASC555442-AF)

Coast Guard Drawing 750-WMSL-555-040, Rev C, Foam System Unit 2110 (ASC555211-AF)

Coast Guard Drawing 750-WMSL-555-042, Rev B, Foam System Unit 2210 (ASC555221-AF)

Coast Guard Drawing 750-WMSL-555-044, Rev D, Foam System Unit 2310 (ASC555231-AF)

Coast Guard Drawing 750-WMSL-555-505, Rev -, AFFF Low Point Drains Installation

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 0850 (SFLC Std Spec 0850), 2020, General Requirements for Drawing Preparation

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

OTHER REFERENCES

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

MIL-STD-1627, 30 Sept 1994, Bending Of Pipe or Tube for Ship Piping Systems

ASTM International (ASTM) A53, July 2020, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless

ASTM International (ASTM) F708, 2018, Standard Practice for Design and Installation of Rigid Pipe Hangers

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS) SP-58, 2020, Pipe Hangers and Supports - Materials, Design, Manufacture, Selection, Application, and Installation

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
- Deck Plating
- Engine Room Bilges

NOTE

Ship check by the Contractor is recommended to determine exact components' location, interferences and piping required for this work item. For ship check, the Contractor must contact the Contracting Officer

3.1.5 Hot Work. The Contractor must accomplish all hot work in accordance with SFLC Standard Spec 0740.

WARNING

WATER IN THE AFFF SYSTEM PIPES MAY CONTAIN RESIDUAL AFFF.

WARNING

STAGNANT AFFF AND SEAWATER MIXTURE CAN PRODUCE HYDROGEN SULFIDE (PFAS AND PFOS) WHICH IS POTENTIALLY HAZARDOUS. HYDROGEN SULFIDE, AFFF, AND SEAWATER DISCHARGE IS EXPECTED WHEN CUTTING EXISTING PIPE. PROTECTIVE MASKS SHOULD BE WORN AT ALL TIMES DURING WORK.

3.1.6 Fluid handling. The Contractor must drain and dispose of residual fluid and cleaning fluid in compliance with all applicable Federal, state, and local laws, ordinances, regulations and SFLC Standard Specification 0000. Provide minimal 4,000 gallon Anti-pollution container. Notify the COR (in writing) at least 5 days prior to removal of wastes and fluids. Document a complete chain of custody record of the removed contents and generated wastes, from the vessel to the point of final destination or delivery. Submit document to the COR upon completion of work.

3.1.7 Plan submittal. The Contractor must submit a work plan for the operational and hydrostatic testing (initial and post repair) to the COR at the Arrival Conference.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor must coordinate with Coast Guard personnel to 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 with test observations and measurements.

3.2.1. Utilize only seawater for this test.

3.2.2. The Contractor must ensure seawater flows downstream of all proposed low point drain installation areas.

3.2.3. The Contractor must dispose of all residual pipe and bilge contents in accordance with Paragraph 3.1.6.

3.3 Hydrostatic test, initial. The Contractor must conduct hydrostatic testing in the presence of a Coast Guard Inspector of the entire system and bilge in accordance with General Note 5 of Coast Guard Drawing 418A-WMSL-555-003 and paragraph C2.2.5 of SFLC Standard Specification 0740. Utilize the test pressure shown in General Note 5. Submit a CFR documenting the test results.

3.4 Add AFFF Nozzles.

3.4.1 Ripout. The Contractor must ripout existing portions of AFFF piping as directed by Coast Guard Drawing 418A-WMSL-555-003 sheets 1-4

3.4.1.1 The Contractor must mark all piping for Coast Guard Inspector approval before cutting any pipe. Submit a CFR documenting this approval.

3.4.1.2 The Contractor must dispose of all water that drains out in accordance with Paragraph 3.1.6.

NOTE

Some of the removed piping will be reused according to Coast Guard Drawing 418A-WMSL-555-003

3.4.2 Install. The Contractor must install new AFFF piping as directed by Coast Guard Drawing 418A-WMSL-555-003 sheets 5 through 7. All welding must be accomplished in accordance with Standard Specification 0740.

3.4.2.1 The Contractor must submit a CFR to request Coast Guard approval for any deviations in routing from Coast Guard Drawing 418A-WMSL-555-003.

3.4.2.2 The Contractor must submit a CFR with proposed locations for pipe supports for Coast Guard approval before welding them in place. The Contractor must utilize ASTM F708 and General Note 4 of Coast Guard Drawing 418A-WMSL-555-003 for placement and construction of pipe supports.

3.4.2.3. The Contractor must conduct hydrostatic testing in the presence of a Coast Guard Inspector of new and disturbed pipe in accordance with General Note 5 of Coast Guard Drawing 418A-WMSL-555-003 and paragraph C2.2.5 of SFLC Standard Specification 0740. Utilize the test pressure shown in General Note 5. Submit a CFR documenting the test results.

3.4.2.4. Paint new and disturbed piping in accordance with General Note 6 of Coast Guard Drawing 418A-WMSL-555-003 and SFLC Std Spec 6310 Appendix B.

3.5 Add Low Point Drains.

3.5.1 Shipcheck the vessel in the presence of a Coast Guard Inspector to determine if the system has any low points in addition to the ones noted in Coast Guard Drawing 750-WMSL-555-505. Submit a CFR documenting the results of the survey.

3.5.2. Crop out portions of pipe that will be replaced with drains. The left side of each sheet shows the portion of pipe to be removed.

3.5.1.1 The Contractor must mark all piping for Coast Guard Inspector approval before cutting any pipe. Submit CFR.

If it is determined during installations that new drain valves are in locations likely to be either impractical for installation or inaccessible for crew maintenance, the contractor may submit a CFR to the COR with a request to relocate the valve anywhere along lowest segment of the same section of pipe.

3.5.1.2 The Contractor must dispose of all water that drains out of the affected piping system in accordance with Standard Specification 0000, Appendix B.

3.5.3. Replace the cropped pipe with drains. The right side of each sheet shows the replacement drains.

3.5.3.1. The Contractor must conduct hydrostatic testing, in the presence of a Coast Guard Inspector, the entire system and bilge in accordance with General Note 5 of Coast Guard Drawing 418A-WMSL-555-003 and paragraph C2.2.5 of SFLC Standard Specification 0740. Utilize the test pressure shown in General Note 5. Submit a CFR documenting the test results.

3.5.3.2. Paint new and disturbed piping in accordance with General Note 6 of Coast Guard Drawing 418A-WMSL-555-003 and SFLC Std Spec 6310 Appendix B.

3.5.3.3. In the presence of a Coast Guard Inspector, ensure that the low point drain valves are locked in the "closed" position.

3.6 Operational test, post repairs. Upon completion of work, the Contractor must coordinate with Coast Guard personnel to perform an operational test of all items or shipboard devices to be disturbed, used, repaired, or altered, to demonstrate existing operational condition. Submit a CFR with test observations and measurements.

3.6.1. Utilize only sea water for this operational test.

3.6.2 The Contractor must ensure seawater flows downstream of all installed low point drain installation areas.

3.6.3 The Contractor must dispose of all residual pipe and bilge contents in accordance with Paragraph 3.1.6.

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

3.8 Update Drawings. The Contractor must update applicable drawings showing all pipe routing changes in accordance with SFLC Standard Specification 0850. The USCG will provide master AutoCAD files for the contractor to manipulate. Submit the completed drawings to the Contract Officer Representative.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 13: Port Stern Capstan, Level 2 Overhaul

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to perform a Level 2 overhaul of the capstans listed in Table 1.

TABLE 1 – CAPSTANS

CAPSTAN	LOCATION	MOTOR CONTROLLER LOCATION
Port Stern (Towing) Capstan	Main Deck - Frame 87	2-88-0-L (Passage, Port Side)

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 750-WMSL_320_10, Rev G, Power Sys Deck Plan – Second Dk, Aft of Fr 52 (ASC3200016)

Coast Guard Drawing 750-WMSL_320_12, Rev G, Power Sys Deck Plan – Main Deck Fwd of Fr 52 (ASC320007)

Coast Guard Drawing 750-WMSL_320_16, Rev F, Power Sys Deck Plan – 01 Level (ASC320009)

Coast Guard Drawing 750-WMSL-582-001, Rev D, Anchoring, Mooring, and Towing Arrangement (ASC582001)

Coast Guard Drawing 750-WMSL_582_2, Rev H, Mooring and Towing Arrangement (ASC582002)

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 7065, SWBS 582, Jun 2007, Forward & Aft Capstan – Model 20834

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

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2020, Shipboard Electrical Cable Test

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

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

Surface Forces Logistics Center Standard Specification 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):

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- Wiring
- Bunk Beds
- Deck Plating
- Piping
- Electrical cables
- Machinery
- Ventilation ducting

3.1.5 Fluid disposal. The Contractor must dispose of removed fluids in accordance with all applicable Federal, state, and local regulations.

3.1.6 Electrical work. The Contractor must accomplish all electrical work in accordance with SFLC Std Spec 3042, and test cables in accordance with SFLC Std Spec 3041.

3.2 Capstan inspections. For each capstan listed in Table 1, the Contractor must perform the tasks listed in

Table 2. Refer to documents referenced on section 2 for technical guidance.

CAUTION

Capstan holes, deck holes, mounting ring, and fasteners must be labeled/matchmarked prior to removal to prevent damage to the capstan and/or fasteners during reinstallation. Lableing/matchmarking is essential to ensure fasteners are reinstalled in their original, fitted locations.

TABLE 2 – TASK LIST

				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	1	Capstan	3.2.1 (Operate and Inspect)	Submit a CFR with a description of any discrepancies
2	Disassemble and Inspect	1	Capstan Assembly	3.2.3 (Disassemble and Inspect)	• Install protective barriers to cover hole on deck. • Matchmark all fasteners to their respective capstan base, mounting ring, and deck holes during disassembly, to ensure reinstallation in their original locations. • Inspect for signs of rubbing/scraping between components. • Renew all self-locking nuts.
3	Service and Inspect	1	Motor	3.2.2 (Service and Inspect)	Check insulation resistance of the motor before removal and after reinstallation, open the controller and inspect for loose wires, missing/broken insulation, and failing components. Submit a CFR.
4	Disassemble and Inspect	1	Control Console Assembly and Control Valves	3.2.3 (Disassemble and Inspect)	
5	Disassemble and Inspect	1	Brake Assembly	3.2.3 (Disassemble and Inspect)	
6	Disassemble and Inspect	1	Gear Box	3.2.3 (Disassemble and Inspect)	Renew oil and grease as needed
7	Partially Preserve	1	Capstan Foundation and Deck	3.2.4 (Preservation)	
8	Partially Preserve	1	Capstan Assembly	3.2.4 (Preservation)	Preserve Capstan external surfaces.

				ADDITIONAL REQUIREMENTS	
#	**TASK TYPE (SFLC STD SPEC 5000 PARA. REF.)**	**QTY**	**COMPONENT OR ASSEMBLY**	**APPENDIX AND PARA. FROM SFLC STD SPEC 5000**	**OTHER**
9	Groom and Lubricate	1	Capstan Assembly	3.2.6 Groom and Lubricate	Lubricate all components per Table 4-1 of Tech Pub 7065
10	Operational and Weight Testing	1	Capstan Assembly	3.2.8 Operational and Weight Testing	See Paragraph 3.3 below.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.3 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.

3.3.1 No-load test. The Contractor must perform a no load test. Run each capstan without load at fast speed for 30 minutes in each direction. Verify that no abnormal heat, wear, or noise develops in any parts.

3.3.2 Brake test. With the capstan rigged for developing normal line pull, each capstan brake must be subjected to 150% of the rated load for 10 minutes. The load must be applied using several turns of line around the head to produce the desired torque. The rated load is specified as 15,000 lbs.

3.3.3 Operating load test. The Contractor must run each capstan continuously at rated load for 30 minutes, allowing for reverse rotation of the capstan. This test must be conducted by alternatively raising and lowering a weight equal to the rated load. The rated load is specified as 15,000 lbs. The test must be repeated with the rope wrapped in the reverse direction of the capstan.

3.4 Special requirements for various components. If a Change Request has been authorized for additional work on any of the components listed in Table 3 below, the Contractor must refer to the corresponding Appendix or paragraph of SFLC Std Spec 5000, as applicable:

TABLE 3 – SPECIAL REQUIREMENTS

COMPONENT	APPENDIX & PARAGRAPH IN SFLC STD SPEC 5000
Fluids	C2.1
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 14: RQAWTS 12 D (1-93-1 and 1-93-2), Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew quick-acting watertight scuttles listed in Table 1 with Government-furnished property in Table 2.

TABLE 1 RAISED QUICK-ACTING WATERTIGHT SCUTTLE 12 INCH DIAMETER

CLOSURE ID	LOCATION	DESCRIPTION
RQAWTS 1-93-1	Weather 1-93-1 to Boatswain Storeroom 2-88-1-A	12 in D Raised Quick-Acting Watertight Scuttle, w/ Coaming 12”x3/16”, Steel, Aft Hinge, 15 psi
RQAWTS 1-93-2	Weather 1-93-2 to DC Storeroom 2-88-2-A	12 in D Raised Quick-Acting Watertight Scuttle, w/ Coaming 7”x3/8”, Steel, Aft Hinge, 15 psi

Note : All information is for bidding purposes only.

1.2 Government-furnished property.

TABLE 2 GOVERNMENT FURNISHED PROPERTY

MTI	ITEM DESCRIPTION	NSN/PN	QTY	PRICE ($/UNIT)
N	12 in D Raised Quick-Acting Watertight Scuttle, w/ Coaming 12”x3/16”, Steel, 15 psi	Juniper P/N : JE31890-SRQXB02	2 ea.	3,400.00 (incl. S&H)

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

2. REFERENCES

COAST GUARD DRAWINGS

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

Coast Guard Drawing 750-WMSL-100-045, Rev H, 2nd Dk to Main Dk - Fr 82 to Aft (ASC100333)

Coast Guard Drawing 750-WMSL-167-007, Rev C, Hatch & Scuttle List Ship Wide, NSC 3 and Follow (AS3167003)

Coast Guard Drawing 750-WMSL-635-001, Rev -, Thermal & Acoustic Insulation (ASC635001)

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

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 Nondestructive Testing (ASNT), Recommended Practice No. SNT-TC-1A, 2020, Personnel Qualification and Certification in Nondestructive Testing

American Society for Nondestructive Testing (ASNT), Standard No. ANSI/ASNT CP-189-2020, 2020, ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel

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

MIL-PRF-900, Mar 1991, Rubber Gasket Material, 45 Durometer Hardness

MIL-PRF-1149, Jun 1998, Gasket Materials, Synthetic Rubber, 50 and 65 Durometer Hardness

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

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

NOTE

For Navy's Drawings, Documents, or any other References under "DISTRIBUTION STATEMENT D: Distribution authorized to DoD and DoD contractors only", please let the Contractor directly contact the Navy for obtaining them.

3. REQUIREMENTS

3.1 General.

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

- 3.2 Operational test - initial
- 3.3 Inspection

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

- NDE Tech Rep : NDE Inspector/Level 2

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

- Perform NDE Inspections.

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

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

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

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

- Machinery spaces (e.g. Crane Equipment Rooms)
- Machinery and equipment (e.g. Cranes, Controls, and Terminals)

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

- Machinery and equipment (e.g. Cranes, Controls, and Terminals)
- Ventilation systems (e.g. ventilation inlets/outlets, and trunks)
- Electronics (e.g. sensors, switches)
- Foundations, outfits, and fittings
- Switches, controls, and terminals
- Lights, alarms, speakers, sensors, switches, and supports
- Piping and supports
- Cables and supports

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

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

3.1.7 Work plan. The Contractor must provide a work plan for the Watertight Closures Renewal listed in the Table 1 to the COR at the Arrival Conference.

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

- Shipboard devices

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

3.3 Inspection. In presence of Coast Guard Inspector, the Contractor must inspect substrates (bulkheads/decks), closure assemblies, coamings, and fittings for any related discrepancies, damages,

defects, or corrosions before, during, and after performing required works in accordance with SFLC Std Spec 0740. Submit a CIR.

- Inspection of closure assembly prior to installation (to detect any closure manufacturer discrepancies, ordering discrepancies, shipping damages, or storage damages).
- Inspection and preparation of substrate prior to closure installation (to ensure acceptable substrate fairness).

3.4 Renewal. The Contractor must accomplish the following tasks, using drawing in Section 2 as guidance :

3.4.1 Removal. The Contractor must crop, remove, and dispose of the designated closures including associated coaming if required, in accordance SFLC Std Spec 0740.

- Remove nameplates and labels.
- Remove coaming supporting brackets/chocks. Separate coaming from bulkhead/deck at welding seams.
- Keep all cutting of watertight closures as close to the existing edge of welding seams, plate opening or below but close to the existing connection line if welded on raised coamings or pipes as possible.

3.4.2 Installation. The Contractor must install a new Government-furnished closure assemblies in place of the ones removed in accordance with SFLC Std Spec 0740. Perform all necessary modifications to ensure a proper fit. Accomplish tasks as follows :

- Weld using proper welding procedures.
- Renew coaming supporting chocks and brackets.
- Adjust lock and secure mechanism for proper fit.

NOTE

Closure securing latches, both integral to the closure and mounted to the ship's structures, may require modification or relocation to achieve proper functionality. These modifications include, but are not limited to, relocating securing latch fixtures, adjusting the position of the closure, or the fabrication and installation of a new securing device. Relocation and modification of securing latches will be at the direction of the Coast Guard Inspector.

3.5 Alignment and fairness tests. In presence of Coast Guard Inspector, the Contractor must measure alignment and fairness of the newly welded structures (e.g. bulkheads/decks, frames/coamings, girders, and stiffeners) in accordance with SFLC Std Spec 0740, Paragraph 3.5 Fairness, and MIL-STD-1689A, Section 12.3 Alignment and Fairness. Submit a CFR.

- Ensure that all misalignments and deviations meet requirements and do not exceed tolerance limits as specified in MIL-STD-1689A, Section 12.3 Alignment and Fairness
- Realign structures and fair plates until pass the test

3.6 NDE. In presence of Coast Guard Inspector, the Contractor must perform NDE of the newly welded substrates (bulkhead/deck plates) and coamings in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

3.7 Boundary test. In presence of Coast Guard Inspector, the Contractor must accomplish a chalk test and water hose test, in accordance with SFLC Std Spec 0740. Submit a CFR.

3.8 Preservation. The Contractor must prepare, prime, and paint surfaces as follows :

3.8.1 Closures and coamings. The Contractor must prepare and preserve both sides of the new closure assemblies, including all disturbed surfaces, to match existing adjacent area by using the same coating and matching deck covering systems in accordance with SFLC Std Spec 6310.

CAUTION!

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

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

3.9 Marking. The Contractor must mark the new fittings (either stencils or label plates, as applicable) with the same identification used on the old fittings, if existing.

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

- Shipboard devices

3.10.1 Addition. In addition, the Contractor must 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.
- Ensure lock and secure mechanism work properly.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.11 Nameplates and labels. The Contractor must provide, install, and restore new nameplates and labels on and around the newly installed closures. (including Engraved Metal DC Nameplates)

3.12 CFR. The Contractor must summarize and submit CFR to the COR if additional repairs are required.

4. NOTES

4.1 Damage control markings. Coast Guard personnel will apply appropriate damage control decals onto all newly installed closure(s).

FIGURE 1 RQAWTS12D 1-93-1 (NSC3)

FIGURE 2 RQAWTS12D 1-93-2 (NSC3)