USCGC BEAR (WMEC 901)

SPECIFICATION FOR AVIATION AVAILIBILITY

FY2027

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(Rev-0, 26 May 2026)

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REVISIONS RECORD

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

DATE	REV#	WORK ITEM#	CHANGES MADE

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

CONSOLIDATED LIST OF REFERENCES

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

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

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 113-001, Rev E, Tank Top PL & FR Fwd 101
Coast Guard Drawing 901 WMEC 113-002, Rev A, Tank Top PL & FR Aft 182
Coast Guard Drawing 901 WMEC 113-003, Rev G, Tank Top PL & FR, FR 101-182
Coast Guard Drawing 901 WMEC 116-001, Rev D, CVK Fwd 101 & G Long 2
Coast Guard Drawing 901 WMEC 116-002, Rev B, CVK Aft 182
Coast Guard Drawing 901 WMEC 116-003, Rev E, CVK Girder L-2 & L-4 FR 101-182
Coast Guard Drawing 901 WMEC 121-001, Rev D, Long Tank Bhds, Aft 182
Coast Guard Drawing 901 WMEC 122-001, Rev J, Transv Bhds 12 & 26
Coast Guard Drawing 901 WMEC 122-002, Rev H, Transv Bhds 47, 78 & 82
Coast Guard Drawing 901 WMEC 122-003, Rev G, Transv Bhds 103-117
Coast Guard Drawing 901 WMEC 122-004, Rev F, Transv. Bhds. 165, 169, 151.6
Coast Guard Drawing 901 WMEC 122-005, Rev F, Transv Bhds 186 & 190
Coast Guard Drawing 901 WMEC 122-006, Rev F, Transv Bhds 196, 207, 228 & 242
Coast Guard Drawing 901 WMEC 136-001, Rev N, 01 Level PL & FR. Fwd 101
Coast Guard Drawing 901 WMEC 171-001, Rev J, Main Mast
Coast Guard Drawing 901 WMEC 184-008, Rev G, Misc Navigation Foundations
Coast Guard Drawing 901 WMEC 185-025, Rev -, Anchor Windlass Foundation & Structural Mods
Coast Guard Drawing 901 WMEC 186-003, Rev-, Talon Grid Foundation & Structural Mod 01 Level
Coast Guard Drawing 901 WMEC 314-005, Rev B, 28.5 VDC Hlcptr Start Rect Replacement Diagram
Coast Guard Drawing 901 WMEC 314-006, Rev D, 400 Hz Hlcptr Svce Freqconv Installation Diagram
Coast Guard Drawing 901 WMEC 431-003, Rev J, Main IC Switchboard Arrangements, Elem Wrg Diag & Dets
Coast Guard Drawing 901 WMEC 494-001, Rev T, Meteorological System Block & Isometric W.D.
Coast Guard Drawing 901 WMEC 542-001, Rev J, JP-5 Sys Diag
Coast Guard Drawing 901 WMEC 542-002, Rev H, JP-5 Sys - A & D
Coast Guard Drawing 901 WMEC 581-002, Rev C, Hawse & Chain Pipes
Coast Guard Drawing 901 WMEC 582-001, Rev F, Mooring & Towing Figs - A & D
Coast Guard Drawing 901 WMEC 588-001, Rev F, Helicopter Tie Down Fittings Arr & Dets

Coast Guard Drawing 901 WMEC 634-002, Rev-, 270 Ft WMEC C & A, Pnt, Dk Cov & Insul Mod Helo Securing Grid Instl

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

Coast Guard Drawing FL-588-003, Rev -, Talon Grid, Supporting Skirt & Cover Fabrication & Instl

COAST GUARD PUBLICATIONS

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

Coast Guard Technical Publication (TP) 2711, SWBS 437, Jan 1992, Wind Transmitter - Type L

Coast Guard Technical Publication (TP) 3368, Jun 2020, Talon Helicopter Landing Grid - Type 18-22-01 Multiple Class Cutters

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

Coast Guard Technical Publication (TP) 5461, SWBS 421, Nov 2012, Anemometer – Model 120 & 122

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

Coast Guard Technical Publication (TP) 9146, SWBS 542, Jul 2022, Rotary Meter-Model Type 40 and Register - Operating, Maintenance and Parts Manual

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

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

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

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

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

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

OTHER REFERENCES

American Society for Testing and Materials (ASTM) A193 , June 2025, Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications

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

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

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS), SP-58, 2009, Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application and Installation

MIL-PRF-16173, 2017, Corrosion Preventive Compound, Solvent Cutback, Cold-Application

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

MIL-STD-1399 Section 300, Part 1, 25 September 2018, Low Voltage Electric Power, Alternating Current

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

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

NAVSEA Drawing 804-1213717, Rev J, Vehicle Lashing Sockets

Society of Automotive Engineers (SAE) Aerospace Material Specification (AMS) C6183, 2013, Cork and Rubber Composition Sheet; For Aromatic Fuel And Oil Resistant Gaskets

Society of Automotive Engineers (SAE) Aerospace Material Specification (AMS) C-6183B, 2019, Cork and Rubber Composition Sheet; for Aromatic Fuel and Oil Resistant Gaskets

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)
4	Y	**Anemometer	NSN: 6600-00-709-9947	2 ea.	5,316.00
5	N	Screw, Cap, 5/8-11 UNC 2A x 3in.	NSN: 5305-01-393-1827	24 ea.	26.00
5	N	Screw, Cap, M12-1.75 x 42 mm	NSN: 5305-01-584-6095	12 ea.	34.00
5	N	**Talon Grid Stanchion Bolt Assembly, Including Locking Nut	NSN: 5340-01-481-3786	60 ea.	32.00
5	N	Nut, Self-locking, M14x2.0-6H	NSN: 5310-01-598-3243	1 pg.	1007.00
8	N	Meter, Impeller Type, Liquid	NSN: 6680-01-726-0030	1 ea.	4,300.00
8	N	ASM Flange Assembly 1 Â½ inch Cast Iron, Oval Buna	NSN: 4730-01-F22-6578 PN: 009805-014	1 kt.	168.00
9	N	Tie-down fitting, raised mushroom cloverleaf type	NSN: 2040-01-213-2628 P/N: F265-1M	2 ea.	280.00

***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 3.2.6.1.4 (Inspection report particulars)):

Work Item	Title
5	Helo Talon Grids, Inspect and Test
7	Decks, Helicopter Operating Areas, Preserve

PRINCIPAL CHARACTERISTICS

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

General Requirements

1. SCOPE

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

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

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

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

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

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

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

OTHER REFERENCES

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

3. REQUIREMENTS

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

NOTE

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

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

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

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

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

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

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

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

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

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

3.3.3.1.2 Soluble salt conductivity measurements. 5 conductivity measurements must be taken every 1000 square feet. For submerged (immersed) applications conductivity measurements must not exceed 30 microsiemens/cm. For non-submerged (non-immersed) applications conductivity measurements must not exceed 70 microsiemens/cm. If a conductivity check fails, clean the surface in accordance with SFLC Std Spec 6310, paragraph 3.1.8.5 (Soluble salt removal).

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

- SSPC-PA 2 defines an area measurement as 5 separate spot measurements randomly spaced throughout a 100 square foot area.
- SSPC-PA 2 defines a spot measurement as 3 gage readings and each new gage reading the probe must

be moved to a new location within a 1.5-inch diameter circle defining the spot.

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

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

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

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

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

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

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

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

3.5.4 Environmental manager. The Contractor must appoint in writing an Environmental Manager for the project, who is responsible for coordinating Contractor compliance with Federal, State, local, and station environmental requirements. The Environmental Manager must ensure compliance with Hazardous Waste Program requirements, including hazardous waste handling, storage, manifesting, and disposal; implement the Contractors' Environmental Management Plan; ensure that all environmental permits are obtained, maintained, and closed out; ensure compliance with Storm Water Program Management requirements; ensure compliance with Hazardous

Materials including storage, handling, and reporting requirements; as well as coordinate any remediation of regulated substances such as lead, asbestos, and polychlorinated biphenyl (PCB). This may be a collateral position; however the individual must be trained to accomplish the following duties; ensure waste segregation and storage compatibility requirements are met; inspect and manage Satellite Accumulation areas; ensure only authorized personnel add wastes to containers; ensure all Contractor personnel are trained in 40 CFR requirements and individual position requirements; coordinate removal of waste containers; and maintain the Environmental Records binder and required documentation, including environmental permits compliance and close-out.

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

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

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

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

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

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

3.7 SFLC Standard Specification approved changes. Approved updates to the 2022 SFLC Standard Specifications will appear here.

3.7.1 None.

3.8 Freeze protection. After the Arrival Conference, the Contractor must conduct a walkthrough with the COR and Ships Force (EO and/or MPA), to perform a joint inspection to identify compartments and systems that will require freeze protection. Within 7 days of completing this joint inspection, the Contractor must submit a CFR documenting their plan for freeze protection when temperatures are expected to drop below freezing. Freeze protection must include securing systems/components and auxiliary equipment and its piping exposed to freezing temperatures or if not protected must be completely drained. If necessary, drain connections may be broken to prevent damage due to freezing.

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 BEAR (WMEC-270A) AVIATION AVAILABILITY FY2027

QA-1 - QUALITY ASSURANCE INSPECTION FORM

(PRESERVATION CHECKLIST)

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

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

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

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

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE

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

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

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

QA-3a - QUALITY ASSURANCE INSPECTION FORM
(SURFACE PROFILE LOG FOR PROFILE MEASUREMENTS IAW ASTM D4417-METHOD-C)

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

SURFACE PREPARATION METHOD		PROFILE ACHIEVED (MILS)		
		MIN	MAX	MEAN
SSPC-SP-10/AMPP No. 2	☐			
SSPC-SP WJ-2/AMPP WJ-2	☐			
SSPC-SP-3	☐			
SSPC-SP-11	☐			
SSPC-SP-11 (inaccessible area)	☐			
Brush-blasting (non-metallic substrate)	☐			
ABRASIVE MANUFACTURER:		**ABRASIVE SIEVE SIZE:**		

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

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

QA-3b - QUALITY ASSURANCE INSPECTION FORM
(SURFACE PROFILE LOG FOR PROFILE MEASUREMENTS IAW ASTM D4417-METHOD-B)

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

SURFACE PREPARATION METHOD		PROFILE ACHIEVED (MILS)		
		MIN	MAX	MEAN
SSPC-SP-10/AMPP No. 2	☐			
SSPC-SP WJ-2/AMPP WJ-2	☐			
SSPC-SP-3	☐			
SSPC-SP-11	☐			
SSPC-SP-11 (inaccessible area)	☐			
Brush-blasting (non-metallic substrate)	☐			
ABRASIVE MANUFACTURER:		**ABRASIVE SIEVE SIZE:**		

RECORD MEASUREMENTS TAKEN IN THE SPACES PROVIDED BELOW, TO SERVE AS PERMANENT QA RECORD. MAINTAIN SEPARATE LOG FOR EACH LOCATION. WHEN AN AREA IS DIVIDED INTO SEPARATE SECTIONS, MAINTAIN A SEPARATE LOG FOR EACH SECTION.					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Mean Mils Reading (IAW ASTM D4417-Method B for above 10 readings (by column):					
Mean Reading (mils)					

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

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

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

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

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

QA-5 - QUALITY ASSURANCE DATA FORM
(COATING THICKNESS)

(Use one sheet for each sequence)

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE

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

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

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

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

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

4.2 Tank and Void Assessment form.

SFLC-ESD-25	TANK AND VOID ASSESSMENT FORM
PRINT RESET	

GENERAL DATA	Note: Use SFLC-ESD-29 for Compartments other than Tanks & Voids.		
Inspector's Name:	Organization:	Contact Info:	
Cutter Name:	Cutter Class:	Hull:	
Tank:	Service:	Tank Area:	Gallons:
Solid Balast:	Access Compt:	Date:	Assessment Reason:

ACCESS DATA	
Manhole and cover condition:	Tank Penetration Condition:

VENT OVERFLOW DATA		
Present: ◯Yes ◯ No	Check Valve Installed: ◯Yes ◯No	Check Valve Operates Properly: ◯Yes ◯No

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

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

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

CATHODIC PROTECTION DATA		
Cathodic Protection in Tank: ◯Yes ◯No	Total Zincs:	Number of Zincs > 50% Depleted:

	1-6		Cleanliness & Housekeeping
Clean to light layer or residue		1-2 (G)	Comments:
Loose accumulation scale		3-4 (Y)	
Impending residue and sediments		5-6 (R)	

	%	1-6		Coating Systems
All Painted Surfaces			1-2 (G)	Comments:
			3-4 (Y)	
			5-6 (R)	

	%	1-6		Structural
Corrosion			1-2 (G)	Comments:
			3-4 (Y)	
			5-6 (R)	
Pitting & Grooving			1-2 (G)	Comments:
			3-4 (Y)	
			5-6 (R)	

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SFLC-ESD-25	TANK AND VOID ASSESSMENT SHEET
PRINT	

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

PHOTOGRAPHS

Pictures Taken (enter quantity):

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

Additional Comments:

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WORK ITEM 1: Tanks, Aviation Fuel Service, Clean And Inspect

1. SCOPE

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

TYPE OF TANK	LOCATION	CAPACITY - 95% (GALLONS)	LOW SUCTION (GALLONS)
JP-5 Service	3-190-1-J	890	80
JP-5 Service	3-190-2-J	890	80

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 113-001, Rev E, Tank Top PL & FR Fwd 101
Coast Guard Drawing 901 WMEC 113-002, Rev A, Tank Top PL & FR Aft 182
Coast Guard Drawing 901 WMEC 113-003, Rev G, Tank Top PL & FR, FR 101-182
Coast Guard Drawing 901 WMEC 116-001, Rev D, CVK Fwd 101 & G Long 2
Coast Guard Drawing 901 WMEC 116-002, Rev B, CVK Aft 182
Coast Guard Drawing 901 WMEC 116-003, Rev E, CVK Girder L-2 & L-4 FR 101-182
Coast Guard Drawing 901 WMEC 121-001, Rev D, Long Tank Bhds, Aft 182
Coast Guard Drawing 901 WMEC 122-001, Rev J, Transv Bhds 12 & 26
Coast Guard Drawing 901 WMEC 122-002, Rev H, Transv Bhds 47, 78 & 82
Coast Guard Drawing 901 WMEC 122-003, Rev G, Transv Bhds 103-117
Coast Guard Drawing 901 WMEC 122-004, Rev F, Transv. Bhds. 165, 169, 151.6
Coast Guard Drawing 901 WMEC 122-005, Rev F, Transv Bhds 186 & 190
Coast Guard Drawing 901 WMEC 122-006, Rev F, Transv Bhds 196, 207, 228 & 242

COAST GUARD PUBLICATIONS

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

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

OTHER REFERENCES

American Society for Testing and Materials (ASTM) A193 , June 2025, Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications

Society of Automotive Engineers (SAE) Aerospace Material Specification (AMS) C-6183B, 2019, Cork and Rubber Composition Sheet; for Aromatic Fuel and Oil Resistant Gaskets

3. REQUIREMENTS

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

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

3.1.4 Interferences. The Contractor must handle all interferences in accordance with SFLC Std Spec 0000, paragraph 3.3.5 (Interferences). Known interferences include but are not limited to the following: up to a total of 1,780 gallons of fuel.

NOTE

Vessel may come in with less tank fluid contents than specified above. The Contractor is responsible for providing all materials, equipment and services necessary to comply with local environmental regulations.

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 Cleaning requirements. The Contractor must remove tank cover(s) and clean tank interior surfaces free of all foreign materials, such as residual water, sediment, sludge, rust, and bacterial growth, taking care not to damage the coating system (if applicable).

3.3.1 Remove cleaning media and residues continuously during the washing process. Wash the tank with high-pressure cold fresh water before it has a chance to dry after emptying. Do not use steam; it can damage the tank's coating.

3.3.2 Drain and dry the tank using a portable air-driven pump. When dry, and after final visual inspection, close the tank. Submit a CFR.

WARNING

Do not use the Fuel Service or Transfer systems to drain water from the tank. Excessive fuel contamination will result.

3.4 Tank content and waste disposal. The Contractor must dispose of tank contents and all cleaning fluids in compliance with all applicable Federal, state, and local laws, ordinances and regulations. Document a complete chain of custody record of the removed tank contents and generated wastes, from the vessel to the point of final destination or delivery. Submit document to the COR upon completion of work.

3.5 Visual inspection. The Contractor must visually inspect all tank interior surfaces, including, but not limited to bulkheads, floor and overhead plating, structural members, manhole cover surfaces, fasteners and gasket seating surfaces. Complete the "Tank and Void Assessment Form" (found in the Work Item titled "General Requirements") and submit via CFR. Electronic PDF version of this form will be furnished by the COR upon request. Include the following, as applicable:

- Tank structural condition.
- Inaccessible areas.
- Condition of tank coating, including measurements taken, percentage, location, and type of coating failure.
- Tank level indicator (TLI) and/or float switch condition.
- Sounding/vent tube and striker plate condition.
- Suction and discharge piping condition.
- Fastener material and condition.

3.6 Tank closing. The Contractor must ensure that the tank(s) remain open for approximately 24 hours after completion of any KO-authorized repair and preservation procedures. Notify the COR at least 24 hours prior to closing the tank(s) and ensure tank closure is accomplished in the presence of the Coast Guard Inspector. After satisfactory inspection by the Coast Guard Inspector and completion of all authorized repairs, close tank manhole cover(s) with new gasket material conforming to AMS-C-6183. Chase threads on bolts to ensure even installation of the access covers. Renew any damaged or non-CRES bolts with CRES (ASTM A193 Gr B8 or equal) bolts. Apply a thin layer of anti-seize compound to bolt threads. Existing undamaged fasteners meeting this specification may be reused. For purpose of bid, assume 100% of existing fasteners will require renewal.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

4. NOTES

4.1 Tank content removal. The Ship's force will pump down the tanks to the maximum extent possible with the installed pumping system.

4.2 Tank inspection. The Coast Guard Inspector will visually inspect the tank interior immediately prior to closing.

4.3 Refilling. After final visual inspection and tank closure, Ship's force will refill tank with JP-5 fuel. Recirculate the fuel until it is clear and bright and passes the MK I and MK III detector kit tests. Flush all lines, pipes, and fittings before placing the JP-5 system back in service.

WORK ITEM 2: 28 Volt DC Helo Power Supply, Load Test

1. SCOPE

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

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

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

COAST GUARD PUBLICATIONS

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

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

OTHER REFERENCES

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

3. REQUIREMENTS

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

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

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

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

4. NOTES

4.1 Data sheet.

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

HULL NUMBER_____

TABLE 1: PERFORMANCE TEST DATA[1]

AMPS		OUTPUT VOLTS[2]
NOMINAL	ACTUAL	
0		
25		
50		
75		
100		
125		
150		
175		
200		
225		
250		
275		
300		
3003		

1. The calibrated load bank must be connected to the Power Supply using the helo start cable supplied with the cutter used for starting the aircraft. The cable must be adjusted prior to conducting the test so that its length is sufficient to service the aircraft in its normal landing position on the flight deck. If required to make connections to the load bank, it is permissible to conduct the test before installing the helicopter end plug.

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

3. Perform full load test at 300A for 60 minutes. Record values at the conclusion of the full load test. Increase no-load voltage to 28.5V prior to start of this burn-in test to ensure output voltage will not drop below 24.0 during the burn-in period.

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

Name Plate Data of the Power Supply

Make_____ Model_____

Serial No._____

Calibrated Load Bank Information

Make_____ Model_____

Serial No._____ Calibration Due Date_____

Calibrated Hand Held Voltage Meter

Make_____ Model_____

Serial No._____ Calibration Due Date_____

Certification of Test Results

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

Name of Testing Facility or Company_____

Test Conductor_____ Date_____

Test Supervisor/QC_____ Date_____

WORK ITEM 3: 400 Hz Power Supply (FCX Systems Inc), Load Test

1. SCOPE

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

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

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

COAST GUARD PUBLICATIONS

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

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

OTHER REFERENCES

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

MIL-STD-1399 Section 300, Part 1, 25 September 2018, Low Voltage Electric Power, Alternating Current

3. REQUIREMENTS

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

3.1.1 CIR.

None.

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

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

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

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

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

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

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

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

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

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

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

4. NOTES

4.1 Data sheet.

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

HULL NUMBER_____

TABLE 1: PERFORMANCE TEST DATA[1,2]

AMPS[3] (NOMINAL)	VOLTS[4,5]			AMPS[6]			FREQUENCY[6,7]
	AN	BN	CN	A	B	C	
2							
7							
12							
17							
22							
27							
29							
29[8]							
Continuity between pins "E" and "F"					Satisfactory ☐		
Plug pin "N" grounded to the ship's hull and not interrupted by the disconnect switch.					Satisfactory ☐		

1. The 400Hz Helicopter Service System must be tested by connection to a suitably sized load bank and operated at loads from 2 amps up to the load specified for the Coast Guard H-65 Helicopter (10 KVA).

2. The power supply must be connected to the load bank using the cable supplied to the cutter for aircraft servicing. If necessary to make the connection to the load bank, the test may be conducted prior to attachment of the helicopter end plug. The cable must be adjusted to the length necessary to service the aircraft in its normal landing position on the flight deck.

3. The required amperage for this test is calculated as:

$I = P/[(E)(3)^{1/2}]$

At P = 10 kVA (for H-65 Helicopter), and E = 200V (line to line), the maximum current required is 28.9 amps.

4. Verify the voltage output is between the limits of 113.0 to 118.0 Volts RMS, line-to-neutral, for steady state loads from no load to full rated load , at 0.7 lagging power factor. To allow for flexibility in loading techniques, the acceptable power factor range is from 0.7 lagging to 0.8 leading power factor.

5. The maximum allowable voltage unbalance is 3.0 volts RMS throughout the load range. Voltage unbalance = maximum difference between RMS phase voltage amplitudes at the utilization equipment terminals (Vmax – Vmin).

6. Verify the phase rotation and frequency is in accordance with Type III power requirements of MIL-STD-1399 Section 300, Part 1.

7. Frequency range must be between 398 to 402 Hz (400 Hz +/- 0.5%).

8. Perform burn-in test at 29A for 60 minutes. Record values at the conclusion of the full load test.

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

4.1.1 Name Plate Data of the Power Supply

Make_____ Model_____

Serial No._____

4.1.2 Calibrated Load Bank Information

Make_____ Model_____

Serial No._____ Calibration Due Date_____

4.1.3 Calibrated Hand Held Voltage Meter

Make_____ Model_____

Serial No._____ Calibration Due Date_____

4.1.4 Calibrated Hand Held Ammeter

Make_____ Model_____

Serial No._____ Calibration Due Date_____

4.1.5 Certification of Test Results

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

Name of Testing Facility or Company_____

Test Conductor_____ Date_____

Test Supervisor/QC_____ Date_____

WORK ITEM 4: Windspeed Transmitter, Anemometer, Remove and Reinstall

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to remove both port and stbd anemometer wind speed transmitters, inspect, and turn over to the COR for a period of up to 14 days and then reinstall both port and stbd wind speed transmitters.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
Y	**Anemometer	NSN: 6600-00-709-9947	2 ea.	5,316.00

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

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 171-001, Rev J, Main Mast

Coast Guard Drawing 901 WMEC 184-008, Rev G, Misc Navigation Foundations

Coast Guard Drawing 901 WMEC 431-003, Rev J, Main IC Switchboard Arrangements, Elem Wrg Diag & Dets

Coast Guard Drawing 901 WMEC 494-001, Rev T, Meteorological System Block & Isometric W.D.

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 2711, SWBS 437, Jan 1992, Wind Transmitter - Type L

Coast Guard Technical Publication (TP) 5461, SWBS 421, Nov 2012, Anemometer – Model 120 & 122

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

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

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- Height above the main deck.
- Electrical wiring.

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.

NOTE

Historically, mounting bolt has been found to be seized to the anemometer housing and/or mast mounting post requiring reconditioning of the mast mounting post and/or anemometer housing.

3.3 Inspection (by Contractor). The Contractor must visually inspect anemometer mounting post, anemometer housing and associated hardware for excessive deterioration and any other defects using Coast Guard Drawing 901 WMEC 184-008 and TP 5461 as guidance. Submit a CFR.

NOTE

COR will need to coordinate with NAVAIR to complete inspection during the 14 day inspection period. COR should obtain any required NAVAIR certification of the anemometer(s) prior to releasing to the Contractor for reinstallation.

3.4 Wind speed transmitter removal. The Contractor must remove the port and stbd windspeed transmitters using Coast Guard Drawings 901 WMEC 171-001, 901 WMEC 184-008, 901 WMEC 431-003, and 901 WMEC 494-001 and TP's 2711 and 5461 as guidance. Upon removal, the Contractor must turn over the removed wind speed transmitters to the COR for inspection for a period of up to 14 days.

3.5 Wind speed transmitter install. Upon completion of Coast Guard inspection, the Contractor must reinstall the port and stbd windspeed transmitters. Make all electrical and mechanical connections using

Coast Guard Drawings 901 WMEC 171-001, 901 WMEC 184-008, 901 WMEC 431-003, and 901 WMEC 494-001 and TP's 2711 and 5461 as guidance.

3.6 Government's right for change out. The Contractor must be aware that the Government reserves the right to furnish a new anemometer wind speed transmitter for installation in place of the existing anemometer wind speed transmitter. If the Government exercises this right, the Contractor must return the removed anemometer wind speed transmitter to the Coast Guard Property Administrator as an MTI item.

3.7 Electrical checks. Perform continuity checks and insulation resistance measurements for the reinstalled anemometers in accordance with SFLC Std Spec 3041. Submit a CFR.

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

- Port and Stbd Anemometers

4. NOTES

This section is not applicable to this work item.

WORK ITEM 5: Helo Talon Grids, Inspect and Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and test the helo talon grid system, located on the flight deck.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Screw, Cap, 5/8-11 UNC 2A x 3in.	NSN: 5305-01-393-1827	24 ea.	26.00
N	Screw, Cap, M12-1.75 x 42 mm	NSN: 5305-01-584-6095	12 ea.	34.00
N	**Talon Grid Stanchion Bolt Assembly, Including Locking Nut	NSN: 5340-01-481-3786	60 ea.	32.00
N	Nut, Self-locking, M14x2.0-6H	NSN: 5310-01-598-3243	1 pg.	1007.00

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

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 186-003, Rev-, Talon Grid Foundation & Structural Mod 01 Level

Coast Guard Drawing 901 WMEC 634-002, Rev-, 270 Ft WMEC C & A, Pnt, Dk Cov & Insul Mod Helo Securing Grid Instl

Coast Guard Drawing FL-588-003, Rev -, Talon Grid, Supporting Skirt & Cover Fabrication & Instl

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3368, Jun 2020, Talon Helicopter Landing Grid - Type 18-22-01 Multiple Class Cutters

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

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

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

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

OTHER REFERENCES

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

MIL-PRF-16173, 2017, Corrosion Preventive Compound, Solvent Cutback, Cold-Application

3. REQUIREMENTS

3.1 General.

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

- 3.6 Inspections.

3.1.2 Tech Rep.

Not applicable.

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

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

3.2 Pre-removal grid clearance measurement. The Contractor must extend a straight edge across the grid from edge to edge; measure and record the grid clearance to the straight edge at the center of the grid to establish a baseline for subsequent post-installation clearance measurements. Submit a CFR.

3.3 Grid removal plan. The Contractor must develop a plan to remove the grid assembly from the grid recess, using Coast Guard Drawings 901 WMEC 186-003 and 901 WMEC 634-002 and TP 3368 as guidance. Submit the plan to COR for acceptance within 72 hours before commencing grid work. When removing grid assembly from the grid recess, ensure that no force more than 15,000 pounds is applied to the grid assembly and recess support ring.

3.4 Grid removal. The Contractor must accomplish the following:

3.4.1 Remove and dispose of the existing filler material between the talon grid and flight deck.

3.4.2 Remove and dispose of the 24 existing 5/8” fixation bolts securing grid assembly to the grid recess supporting ring, in the grid recess.

3.4.3 Remove the existing grid assembly, including stanchions and M12 grid assembly bolts, in accordance with the accepted grid removal plan.

3.5 Grid support and recess preservation. The Contractor must prepare and preserve 100% of the grid recess and support structure surfaces, excluding the bearing flange to the honeycomb top-plate, using the coating system specified for "Bilges, Cofferdams, and Forepeaks, Option III", in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Select Grey (16099) as the finish/final top coat color.

NOTE

Grey (16099) is not the same Light Grey that is listed in SFLC Std Spec 6310, Appendix C for Bilge Epoxy Coating System.

3.6 Inspections. The Contractor must accomplish the following inspections, using TP 3368 and Coast Guard Drawing FL-588-003 as guidance. Submit a CIR.

3.6.1 Visual. Perform a visual inspection of the following components in accordance with Std Spec 5000 Appendix A:

- Grid top plate
- Grid lower support structure
- Recess supporting ring
- Grid recess and foundation
- Stanchions and nuts
- Threaded bolt holes
- Talon grid bolt threads

3.6.2 NDE. In the presence of a Coast Guard Inspector, perform NDE of all well welds, stanchions, and lower support structure for cracks, in accordance with SFLC Std Spec 0740, Appendix C.

3.7 Grid maintenance. The Contractor must perform the preventative maintenance requirements in accordance with TP 3368, Chapter 5, Paragraph 2, and all its related sub-paragraphs.

3.8 Grid reassembly and reinstallation. Upon completion of all authorized repairs, if any, the Contractor must reassemble and reinstall the grid assembly, in accordance with TP 3368. Ensure that the grid is level with the flight deck. Due to 01 level camber, portions of the talon grid will not be flush with the top of the 01-level plating. Level the top of the grid flush with the 01 level on ship's centerline and fair in remaining surfaces in accordance with 901 WMEC 186-003.

3.8.1 Renew the filler material in accordance with the manufacturer's recommended instructions.

3.8.2 Apply a suitable corrosion inhibitive compound conforming to MIL-PRF-16173, Class II, Grade 3, to both faces of the honeycomb plate in lieu of the "ARDROX 3140" material, which is specified in paragraph 2.2.3.h of TP 3368.

3.8.3 Renew all M12 grid assembly bolts and 5/8" fixation bolts with Government-furnished bolts. Apply a sealing, locking and retaining compound conforming to ASTM D5363 to each bolt; and secure each bolt with the following torque:

- M12 grid assembly bolt: 22 ft-lb.
- 5/8" fixation bolt: 44 ft-lb.

3.8.4 Renew all nylon-insert stanchion locknuts (pc #20) with Government-furnished locknuts in accordance with Coast Guard Drawing FL-588-003.

3.8.4.1 If change request is authorized and released, renew stanchion bolts designated by the Coast Guard Inspector using Government-furnished stanchion/nut assemblies.

3.8.4.2 Tighten stanchion end nuts to a torque of 44 ft-lbs in accordance with paragraph 2.2.3.g of TP 3368. Apply a sealing, locking and retaining compound conforming to ASTM D5363 to all nuts and locking-nuts.

CAUTION

Do not use assembly lube/anti seize on the same fastener threads as retaining/sealing compound. They will not perform their function if used together.

3.9 Pull test. After installation, the Contractor must pull test the grid to ensure structural integrity of the total installation. This must be accomplished by the following test procedure:

3.9.1 Extend a straight edge across the grid from edge to edge; measure and record the grid clearance to the straight edge at the grid center.

3.9.2 Make a direct upward pull from the approximate center isthmus of the grid of 13,700lbs for 2 minutes. After releasing the test load, the grid and resin foundation must be visually examined for evidence of structural failure. Visible deformation or cracking must be cause failure. The grid must be inspected for surface cracks by the dye penetrant method at a radius of 12 inches from the attachment point of the pull test. Six hold down bolts must be randomly removed and inspected by dye penetrant inspection for failure and replaced or renewed as necessary. The resin foundation must be visibly inspected. Submit a CFR.

3.10 Post-installation and test grid clearance measurement. After grid reinstallation and pull test, the Contractor must repeat the clearance measurement specified in paragraph 3.2 (Pre-removal grid clearance measurement). The grid clearance should not have changed from the measurement taken in paragraph 3.9.1. Record and compare new measurement to the previous readings in paragraphs 3.2 and 3.9.1, and submit a CFR. Some minor variation from the pre-removal measurement is to be expected. There should be no change from the measurement taken prior to pull test.

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

4. NOTES

4.1 Grid assembly particulars. The grid assembly consists of a top honeycomb plate and a lower supporting structure (support skirt) secured by 12 (M12) bolts and stanchions.

4.2 Stanchion coating. “Molykote” (specified for stanchion coating) is a brand name generically used for marine grade assembly lubricant. Multiple marine grade lubricants are acceptable for coating the

stanchions; including Molykote P-37, Molykote G-N metal assembly compound, or Loctite 34395 Marine Grade anti-seize.

WORK ITEM 6: Tanks, Aviation Fuel Service, Preserve, Partial (Optional)

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to prepare and coat the following tank(s) in locations designated by the Coast Guard Inspector, up to the percentage of surface area indicated:

TABLE 1 – TANKS

TYPE OF TANK	LOCATION	CAPACITY - 95% (GALLONS)	LOW SUCTION (GALLONS)	% OF TANK COATING TO REPAR
JP-5 Service	3-190-1-J	890	80	33
JP-5 Service	3-190-2-J	890	80	33

*** Tank CAPACITY - 95% at 95%**

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 542-001, Rev J, JP-5 Sys Diag

Coast Guard Drawing 901 WMEC 542-002, Rev H, JP-5 Sys - A & D

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

Society of Automotive Engineers (SAE) Aerospace Material Specification (AMS) C6183, 2013, Cork and Rubber Composition Sheet; For Aromatic Fuel And Oil Resistant Gaskets

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- TLIs
- Piping
- Tight corners
- Tank contents.

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

3.3 Operational test – initial. Prior to commencement of work, the Contractor must witness Coast Guard Personnel perform an initial operational test of all designated tank TLIs to demonstrate existing operational condition. Submit a CFR.

3.4 Ultrasonic thickness (UT) measurement. The Contractor must take a total of 50 UT measurements in accordance with SFLC Std Spec 0740, Appendix C in locations designated by the Coast Guard Inspector and using Coast Guard Drawings listed in section 2 of this work item as guidance. Submit a CFR.

3.4.1 In addition to the UT measurements, take a total of 10 pit-depth measurements, using a suitable pit depth gauge within each tank designated by the Coast Guard Inspector.

3.5 Surface preservation. The Contractor must remove and retain the tank manhole cover(s). Prepare and coat the designated tank interior surfaces, using the system specified for "Tanks and Voids (Fuel/JP-5 Tanks, Service, Storage, Overflow, Drain, Option I or Option II)" in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems). Power tool clean all affected surfaces to “bare metal”, in lieu of using abrasive blasting, and feather edges of existing intact coating to the prepared areas, in order to provide a smooth transition with the new paint. Select finish/top coat color to match existing adjacent surfaces.

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

surfaces".

4. NOTES

4.1 Tank content removal. The Ship's force will pump down the tanks to the maximum extent possible with the installed pumping system.

4.2 Tank inspection. The Coast Guard Inspector will visually inspect the tank interior immediately prior to closing.

4.3 Refilling. After final visual inspection and tank closure, Ship's force will refill tank with JP-5 fuel. Recirculate the fuel until it is clear and bright and passes the MK I and MK III detector kit tests. Flush all lines, pipes, and fittings before placing the JP-5 system back in service.

WORK ITEM 7: Decks, Helicopter Operating Areas, Preserve

1. SCOPE

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

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

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

COAST GUARD PUBLICATIONS

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

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

OTHER REFERENCES

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

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

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

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

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

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

3. REQUIREMENTS

3.1 General.

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

- 3.6.2 Substrate inspection.

3.1.2 Tech Rep.

Not applicable.

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

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

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

NOTE

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

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

3.3 Containment and ambient condition control. The Contractor must erect and maintain an environmental containment enclosure structure capable of withstanding wind, rain, and moisture intrusion. Heat/Air conditioning and ventilation to maintain environmental conditions in accordance with NAVSEA Standard Item 009-32 for Critical Coated Non-Skid must be maintained during entire preservation evolution, 24 hours a day, 7 days a week until final acceptance. The containment must be able to cover the entire deck, as designated in paragraph 1.1 (Intent), with exterior support posts only.

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

TABLE 1 - FLIGHT DECK COATING SYSTEM

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

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

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

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

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

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

- Deck fittings, including, but not limited to: pad eyes, label plates, net supports/foundation, helicopter tie-down fittings, and lifting handles for aircraft fuel filling station.
- Areas within two inches of deck fittings and protrusions.
- Areas within six inches of adjacent bulkheads, deck coaming, and deck edges.
- Waterways.

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

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

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

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

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

NOTE

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

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

NOTE

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

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

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

4. NOTES

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

4.2 Certification hot line action desk. The Naval Air Warfare Center Aircraft Division Lakehurst has the responsibility for inspection and certification of all air capable aviation ships which support and operate with helicopters. A Shipboard Aviation Facility hot line action desk has been established at the Naval Air Warfare Center Aircraft Division Lakehurst, to provide a central point of contact for obtaining all

information pertinent inspection and certification issues, including VLA and safety markings. The hot line action desk is in operation 24 hours a day and can be reached by contacting:

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

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

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

WORK ITEM 8: Flow Meter (Aviation Fuel), Replace

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to remove the existing TOKHEIM Model 1450-15-SP-2 JP-5 Flow Meter and Register and install new Red Seal Measurements Flow Meter, Model NEPTUNE, Type 40 with 800 (series) Register, in the JP-5 fueling station, compartment 1-207-3-J stbd side fantail as identified in Table 1.

TABLE 1 - INSTRUMENTATION

DESCRIPTION	SYSTEM	USE	RATING
1 ½ inch Flow meter	JP-5	Helicopter refueling	50 GPM

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Meter, Impeller Type, Liquid	NSN: 6680-01-726-0030	1 ea.	4,300.00
N	ASM Flange Assembly 1 ½ inch Cast Iron, Oval Buna	NSN: 4730-01-F22-6578 PN: 009805-014	1 kt.	168.00

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 542-001, Rev J, JP-5 Sys Diag

Coast Guard Drawing 901 WMEC 542-002, Rev H, JP-5 Sys - A & D

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 9146, SWBS 542, Jul 2022, Rotary Meter-Model Type 40 and Register - Operating, Maintenance and Parts Manual

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

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

OTHER REFERENCES

Manufacturers Standardization Society of the Valve and Fittings Industry (MSS), SP-58, 2009, Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application and Installation

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- Aviation fuel piping and contents.
- Fluid pressure.
- Flange shielding.

3.2 Renewal. The Contractor must replace the obsolete flow meter with a new Government-furnished flow meter-register assembly and flange kit (see Section 1.2 (Government-furnished property)) using Coast Guard Drawings 901 WMEC 542-001 and 901 WMEC 542-002 and TP 9146 as guidance.

3.2.1 Piping modifications. The Contractor must modify piping as necessary to accept new flowmeter assembly.

3.2.2 Pipe hanger installation. The Contractor must furnish, fit, and install new pipe hangers in accordance with MSS SP-58.

3.2.3 Disposal. The Contractor must dispose of the existing meter in accordance with all Federal, State and local regulations.

3.2.4 Calibration certification. The Contractor must provide a certificate of calibration to the COR for the new flow meter from the mfg.

3.3 Hydrostatic test. After all authorized repairs, the Contractor must hydrostatically test all new and disturbed piping and components of the JP-5 fuel system in accordance with SFLC Std Spec 0740, Appendix C, Hydrostatic Test. Ensure zero leakage from or permanent deformation of pressure-containing parts by repairing all leaks, deformations, and discrepancies. Submit a CFR

3.4 Leak test. After completing all authorized repairs, the Contractor must test the JP-5 flow meter operation using the system fluid at normal operating pressure. Ensure zero visible leakage from or deformation of mechanical parts by repairing all leaks and discrepancies. Submit a CFR.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment

3.5 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.

3.6 Recirculation. After Contractor installation of new flow meter, Ship's force will recirculate the fuel until it is clear and bright and passes the MK I and MK III detector kit tests. Flush all disturbed lines, pipes, and fittings before placing the JP-5 system back in service.

4. NOTES

4.1 Standard Configuration Change Form. The Coast Guard Inspector or COR must complete the Standardized Configuration Change Form SFLC-ESD-47-Rev1 (available at link below or CG Portal -> SFLC -> SFLC Directives SFLC -> Forms Library -> SFLC-ESD 47_Rev1_Standardized_Configuration_Change) upon completion of this installation, and e-mail completed and signed form to D05-DG-SFLC-ESD-SSB-CMS-CDMM-MECPL@uscg.mil.

https://cg.portal.uscg.mil/units/sflc/SFLCDirectivesLibrary/SFLC-ESD-47_Rev1_Standardized_Configuration_Change.pdf

WORK ITEM 9: Helicopter Tie-Down Fittings, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew designated helicopter tie-down fittings located on the Flight Deck.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	Tie-down fitting, raised mushroom cloverleaf type	NSN: 2040-01-213-2628 P/N: F265-1M	2 ea.	280.00

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 588-001, Rev F, Helicopter Tie Down Fittings Arr & Dets

COAST GUARD PUBLICATIONS

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

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

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

OTHER REFERENCES

NAVSEA Drawing 804-1213717, Rev J, Vehicle Lashing Sockets

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

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

- Overhead paneling
- Insulation
- Ductwork
- Electrical wiring
- Piping (Type/system)
- Light fixture(s)

NOTE

A ship check is highly recommended so the Contractor can identify all of the interferences involved.

3.2 Renewal. The Contractor must accomplish the following tasks for the designated tie-down fittings identified in Table 1:

TABLE 1: HELO TIE-DOWN FITTINGS TO RENEW

APPROXIMATE LOCATION	QTY	AFFECTED COMPARTMENT	INTERFERENCES
Flight deck, Frame 190, Aft of Talon grid, Port Side	1	Galley	Stainless steel overhead panel. Foiled covered insulation. Light fixtures & infrared lamp. Vent ducting. Wiring. CONN box. Various piping.
Flight deck, Frame 200, Near ladder to the fantail, Starboard side	1	Incinerator Room	Support for transformer assembly. CONN Box wiring. Ductwork. Light fixtures and supports. Piping.

3.2.1 Inspection. Visually inspect the raised mushroom cloverleaf type helicopter tie-down fittings, shown on NAVSEA Drawing 804-1213717, as designated by the Coast Guard Inspector. Submit a CFR.

3.2.2 Removal. Crop and dispose of the raised mushroom cloverleaf type tie-down fittings as designated by the Coast Guard Inspector. Ensure that cropping does not warp or cause any distortion to adjacent plating.

3.2.2 Installation. Install tie-down fittings into the same locations as the removed tie-down fittings in accordance with NAVSEA Drawing 804-1213717 and Coast Guard Drawing 901 WMEC 588-001. Ensure that welding does not warp or cause any distortion to adjacent plating.

3.3 Welding procedures and welder qualifications. The Contractor must ensure that the welding procedures and welder qualifications conform to the requirements of SFLC Std Spec 0740. Be aware that material to be welded is mild steel to HY-{100} steel.

3.4 Testing. The Contractor must accomplish the following tasks for each repaired or renewed fitting and submit a CFR.

3.4.1 Load test. After accomplishing all authorized repairs and renewals, and prior to applying any coating, the Contractor must load test each repaired or renewed tie-down fitting, using Test Note 4E of NAVSEA Drawing 804-1213717, and Coast Guard Drawing 901 WMEC 588-001, as guidance.

3.4.2 NDE. After satisfactory completion of the load test, the Contractor must perform magnetic particle or liquid penetrant NDE of each repaired or renewed fitting using Test Notes 4F and 4G of NAVSEA Drawing 804-1213717 as guidance, and in accordance with Coast Guard Drawing 901 WMEC 588-001, and SFLC Std Spec 0740, Appendix C. If selected NDE method requires coating removal, perform subsequent touch-up preservation in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs).

3.5 Preservation. The Contractor must preserve all exterior and interior surfaces of the new tie-down fittings, to match adjacent surfaces as follows:

3.5.1 Prepare and coat all exterior surfaces of the fittings, including disturbed adjacent deck areas, using the system specified for “Machinery, Deck, Option II”, in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems).

3.5.2 Prepare and coat all interior surfaces of the fittings, including disturbed adjacent overhead areas, using the system specified for “Bulkheads (Bulkheads and Overheads, Un-insulated Metal (Appearance not a factor, i.e., voids), and Insulated Steel), Option II”, in SFLC Std Spec 6310, Appendix B (Cutter and Boat Interior Painting Systems).

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

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 10: Anchor Windlass Flange Installation and Static Load Test

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to reinforce the existing bracket between the chain pipe deck bolster and transverse beam on both port and starboard sides and perform a static load test and supplemental testing/inspections on newly installed port and starboard anchor windlass assemblies

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 901 WMEC 136-001, Rev N, 01 Level PL & FR. Fwd 101

Coast Guard Drawing 901 WMEC 185-025, Rev -, Anchor Windlass Foundation & Structural Mods

Coast Guard Drawing 901 WMEC 581-002, Rev C, Hawse & Chain Pipes

Coast Guard Drawing 901 WMEC 582-001, Rev F, Mooring & Towing Figs - A & D

COAST GUARD PUBLICATIONS

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

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

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

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

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

None.

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

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

- Sheathing
- Bulkhead insulation
- Piping

NOTE

The Contractor must have required weld qualifications to weld to cast steel and submit qualified weld procedures and welder qualifications for approval in accordance with SFLC Std Spec 0740.

3.2 Flange plate installation. The Contractor must reinforce the bracket between the transverse beam and the chain pipe deck bolster on both port and starboard sides by welding a 5/8 inch by 3-inch flat steel bar in accordance with Coast Guard Drawing 901 WMEC 136-001 Elevation 63-C and SFLC Std Spec 0740. The chain pipe deck bolster is cast steel as shown on Coast Guard Drawing 901 WMEC 581-002.

3.3 Testing. The Contractor must perform the following tests.

3.3.1 NDE. The Contractor must perform NDE of the cutters bull nose chock and its associated welds (including but not limited to deck mounting and foundation welds) in accordance with SFLC Std Spec 0740, Appendix C and using Coast Guard Drawing 901 WMEC 582-001 as guidance. If selected NDE method requires coating removal, perform subsequent touch-up preservation in accordance with SFLC Std Spec 6310, (Touch-ups and minor coating repairs). Submit a CFR.

NOTE

Common NDE methods not requiring coating removal include, but are not limited to the following:

a. Radiographic Testing (RT).

b. Ultrasonic Testing (UT).

c. Eddy Current Testing (ET).

CAUTION

Do not attempt to operate the anchor windlass while the static test load is suspended from the capstan head.

3.3.2 Static Load Test. After installation of flange plate is complete and satisfactory NDE results have been confirmed, the Contractor must static test each anchor windlass at a load of 64,200 lbs for a duration no less than 10 minutes. Place a loop of line over the capstan head at midheight and rig through the cutters bull nose chock to a dynamometer and weighted water bag to ensure longitudinal pull.

3.3.3 No Load Test. Upon completion of the static load test and removal of the test load, the Contractor must operate each anchor windlass at no load in each direction to demonstrate that no damage has occurred to any anchor windlass components. Check for unusual noise or vibration during operation.

3.3.4 Wildcat Operational Test. Upon satisfactory completion of the no-load test, perform wildcat operational test in accordance with SFLC Std Spec 5000 paragraph B2.5.2.

3.4 Visual inspection. Once testing is complete, the Contractor must visually inspect the repaired longitudinal of the anchor windlass foundation and flange plate installation, including both the beam and attachment welds, to ensure no cracks or deformation using Coast Guard Drawing 901 WMEC 185-025 as reference. Submit a CFR.

4. NOTES

This section is not applicable to this work item.