USCGC DILIGENCE (WMEC 616)

SPECIFICATION FOR DOCKSIDE AVIATION AVAILABILITY

FY2019

Developed By: Celestin Jules

(REV-2, 14 June 2019)

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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 Bill of Material 618 WMEC 137, Rev M, Fdns. for Misc Equip.

Coast Guard Bill of Materials 618 WMEC 339, Rev C, Anemometer

Coast Guard Bill of Materials 618 WMEC 384, Rev -, Talon Grid

Coast Guard Bill of Materials 618 WMEC 79, Rev C, Arrangement Weather Deck, Reefer, & A/C Drains

Coast Guard Bill of Materials 618 WMEC 97, Rev L, Arrangement Aviation Fuel System

Coast Guard Drawing 618 WMEC 111-003, Rev -, Forward Bulwark Details

Coast Guard Drawing 618 WMEC 111-004, Rev -, Transom Bulwark Details

Coast Guard Drawing 618 WMEC 136-001, Rev L, 01 & 02 Level & Bridge Deck Plating & Support

Coast Guard Drawing 618 WMEC 186-001, Rev S, Foundation for Misc Equipment

Coast Guard Drawing 618 WMEC 186-002, Rev A, Talon Grid Foundation & Structural Mods - 01 Level

Coast Guard Drawing 618 WMEC 314-001, Rev H, Helo 400 Hz & 28.5 VDC Replacement Diagram

Coast Guard Drawing 618 WMEC 430-050, Rev -, I. C. Distribution Panel

Coast Guard Drawing 618 WMEC 437-002, Rev D, Wind Speed & Direction Ind Sys Elem Wrg Diag IC Ckt “HD & HE”

Coast Guard Drawing 618 WMEC 526-001, Rev E, Arr of Weather Deck, Drain & Refrig Drains

Coast Guard Drawing 618 WMEC 526-002, Rev C, Arr of Weather Deck and AC Drains

Coast Guard Drawing 618 WMEC 528-001, Rev L, Arrangement of Plumbing System and Deck Drains

Coast Guard Drawing 618 WMEC 528-002, Rev B, Diagram of Plumbing System and Deck Drains

Coast Guard Drawing 618 WMEC 542-001, Rev G, Diagram Aviation Fuel System

Coast Guard Drawing 618 WMEC 542-002, Rev J, Arrgt - Aviation Fuel System

Coast Guard Drawing 618 WMEC 542-003, Rev -, Diagram Aviation Fuel System

Coast Guard Drawing 618 WMEC 570-001, Rev -, Portable Davits

Coast Guard Drawing 618 WMEC 613-001, Rev B, Main Mast Rigging Arr & Det

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) 3234A, SWBS 426, Section D, Dec 2012, Distribution Switchboard

Coast Guard Technical Publication (TP) 3239A, SWBS 542, Nov 2016, JP-5 Flow Meter

Coast Guard Technical Publication (TP) 3368, Jul 2017, Talon Helicopter Landing Grid - Type 18-22-01

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

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

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

Coast Guard Technical Publication (TP) 9142, Nov 2016, Meter – Model M-5-2 Direct Drive

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2014, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2014, Shipboard Electrical Cable Test

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2014, Auxiliary Machine Systems

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2014, 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

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)
3	Y	Anemometer	NSN: 6600-00-709-9947	2 ea.	5315.58
4	N	**JP-5 Flow meter, Meter	NSN: 6680-01-658-6663	1 ea.	3,100.00
4	N	** Counter Rotating, Register	NSN: 6680-01-439-2365	1 ea.	388.00
5	N	**M16 Bolts	NSN: 5305-01-393-1827	24 ea.	25.67
5	N	**M12 Bolts	NSN: 5305-01-584-6095	12 ea.	34.92
5	N	**Talon Grid Stanchion Bolt Assembly, Including Locking Nut	NSN: 5340-01-481-3786	60 ea.	33.77

***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 Service Center**

CONSOLIDATED LIST OF CRITICAL INSPECTION ITEMS

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

Work Item	Title
5	Helo Talon Grids, Inspect And Test

PRINCIPAL CHARACTERISTICS

210' WMEC (A-CLASS)	
PHYSICAL	
Length overall	210' 6"
Length between perpendiculars	200' 0"
Beam molded	34' 0"
Depth molded, main deck amidships	19' 6"
Full load displacement	1,170 long tons
Draft, full load to baseline amidships *Baseline is 9" below keel amidships	12' 0"
Design drag between perpendiculars	1' 6"
Highest projection above baseline *VHF-FM ADF antenna	90' 0"
Shore tie voltage requirements	400A / 440V
Frame spacing	1' 0"
MACHINERY	
Main propulsion	2 ALCO Model 16-251-CE Diesel Engines, 5,000 BHP total
Ship's service generators	2 Caterpillar Model 3406B Diesel-driven SR4, 250 KW each @ 0.8 power factor, 440VAC, 3 phase, 60 cycle
Emergency generator	Caterpillar Model 3306B Diesel-driven SR4, 180 KW @ 0.8 power factor, 440VAC, 3 phase 60 cycle
Number of propellers	2
Propeller diameter	7' 6"
Number of blades, Each	4
Pitch	Controllable
Shaft RPM	300
Shaft diameter	8.25" at exit of hull
Anchor & chain	Two 2,800 lb. Navy Stockless Anchors, 7 shots of chain each
TANK CAPACITIES	
Diesel fuel total (95%)	47,140 gal.
Fresh water total (100%)	11,135 gal.
JP-5 fuel total (95%)	4,717 gal.
Lube oil total (95%)	2,331 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), 2014, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2014, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2014, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General. The Contractor shall conform to all requirements specified in SFLC Std Spec 0000 and in this item, as applicable, during the performance of this availability.

NOTE

The requirements of paragraph 3.1 (General) applies to all work under the scope of this contract, whether explicitly stated in work items or not, and to all other work subsequently authorized by changes, modifications, or extensions to the contract.

3.2 Contractor-provided fire watch personnel. The Contractor shall provide fire watch personnel and equipment.

3.2 Fire watch requirements. The Contractor shall 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 shall 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. Ensure that all colors and color coat/paint schemes are in accordance with COMDTINST M10360.3, Chapter 6 (Cutter and Boat Colors Exterior and Interior).

NOTE

Unless a waiver has been granted (in writing) by the KO, deviations from authorized coatings (listed in Appendix C of SFLC Std Spec 6310) and colors and color schemes (provided in Chapter 6 of COMDTINST M10360.3) are strictly prohibited.

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

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

3.5.1 USCG facilities. The Contractor shall 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 shall 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 shall 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 shall 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 fully mission capable.

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

3.5.3 Regulatory notifications. The Contractor shall be responsible for all regulatory notification requirements in accordance with Federal, State and local regulations. In cases where the Coast Guard must also provide public notification, such as storm water permitting, the Contractor must coordinate with the Contracting Officer or COR, and if work is being performed at a USCG Facility, the local Facility Engineer or Engineering Officer. The Contractor shall 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 shall 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 shall appoint in writing an Environmental Manager for the project, and shall be responsible for coordinating Contractor compliance with Federal, State, local, and station environmental requirements. The Environmental Manager shall 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 shall 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 shall be aware of the following:

3.5.6.1 No Contractor or Subcontractor shall 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 shall 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 shall 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. None.

3.7 SFLC standard specification approved changes. The Contractor shall be aware that the following are approved changes to published SFLC 2014 Edition Standard Specifications and supersede published content:

3.7.1 Change to SFLC Std Spec 0000, paragraph 1.3. ‘Acronyms and term definitions’, page 5, “PCL (Paint Containing Lead)” definition replaced by, “Any paint or coating containing lead in excess of 0.009 percent by weight (1.0 mg/cm2 or 90 ppm). Lead Based Paint (LBP) is an interchangeable term with PCL.”

3.7.1.1 Change Std Spec 0000 paragraph 3.2.4.2.3(QP 1 inspector or tech rep duties) bullet, “Determine when applied coats have sufficiently cured for overcoating or for system service resumption (see paragraph 3.1.19 of SFLC Std Spec 6310 (Critical drying time requirements)).” to “Determine when applied coats have sufficiently cured for overcoating or for system service resumption (see paragraph 3.1.17 of SFLC Std Spec 6310 (Critical drying time requirements)).”

3.7.2 Change to Std Spec 5000, paragraph D2.2.1.1 bullet, "For running rigging, furnish class 6x37, uncoated, independent wire rope core (IWRC), right regular lay (RRL) wire rope or Dyform-18, rotation resistant wire rope," to "For running rigging, furnish class 6x36, uncoated, independent wire rope core (IWRC), right regular lay (RRL) wire rope or Dyform-18, rotation resistant wire rope."

3.7.2.1 Change to Std Spec 5000, page D-2, Table D-1 title from "DYFORM-18, 6X19 AND 6X37 IWRC RRL," to " DYFORM-18, 6X19 AND 6X36 IWRC RRL"

4. NOTES

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

QA-1 - QUALITY ASSURANCE INSPECTION FORM
(PRESERVATION CHECKLIST)

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

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

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

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

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE

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

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

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

USCGC DILIGENCE (WMEC-210A) DOCKSIDE AVAILABILITY FY2019

QA-3a - QUALITY ASSURANCE INSPECTION FORM

(SURFACE PROFILE LOG FOR PROFILE MEASUREMENTS IAW ASTM D4417-METHOD-C)

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

SURFACE PREPARATION METHOD		PROFILE ACHIEVED (MILS)		
		MIN	**MAX**	**MEAN**
SSPC-SP-10/NACE No. 2	☐			
SSPC-SP WJ-1/NACE WJ-1	☐			
SSPC-SP WJ-2/NACE WJ-2	☐			
SSPC-SP WJ-3/NACE WJ-3	☐			
SSPC-SP WJ-4/NACE WJ-4	☐			
SSPC-SP-3	☐			
SSPC-SP-11	☐			
SSPC-SP-11 (inaccessible area)	☐			
Brush-blasting (non-metallic substrate)	☐			
ABRASIVE MANUFACTURER:		**ABRASIVE SIEVE SIZE:**		

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

Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here
Reading (mils):	Reading (mils):	Reading (mils):
Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here
Reading (mils):	Reading (mils):	Reading (mils):
Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here
Reading (mils):	Reading (mils):	Reading (mils):
Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here
Reading (mils):	Reading (mils):	Reading (mils):
Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here	Place Surface Profile Replica Tape Here
Reading (mils):	Reading (mils):	Reading (mils):
MEAN MIL READING (IAW ASTM D4417-METHOD C) FOR ABOVE 15 READINGS:		

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

QA-3b - QUALITY ASSURANCE INSPECTION FORM

(SURFACE PROFILE LOG FOR PROFILE MEASUREMENTS IAW ASTM D4417-METHOD-B)

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

SURFACE PREPARATION METHOD		PROFILE ACHIEVED (MILS)		
		MIN	MAX	MEAN
SSPC-SP-10/NACE No. 2	☐			
SSPC-SP WJ-1/NACE WJ-1	☐			
SSPC-SP WJ-2/NACE WJ-2	☐			
SSPC-SP WJ-3/NACE WJ-3	☐			
SSPC-SP WJ-4/NACE WJ-4	☐			
SSPC-SP-3	☐			
SSPC-SP-11	☐			
SSPC-SP-11 (inaccessible area)	☐			
Brush-blasting (non-metallic substrate)	☐			
ABRASIVE MANUFACTURER:		**ABRASIVE SIEVE SIZE:**		

RECORD MEASUREMENTS TAKEN IN THE SPACES PROVIDED BELOW, TO SERVE AS PERMANENT QA RECORD. MAINTAIN SEPARATE LOG FOR EACH LOCATION. WHEN AN AREA IS DIVIDED INTO SEPARATE SECTIONS, MAINTAIN A SEPARATE LOG FOR EACH SECTION.					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Reading (mils):					
Mean Reading (mils)					
Mean Reading (mils) IAW ASTM DD4417).					

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

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

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

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

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

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

(Use one sheet for each sequence)

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE

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

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

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

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

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

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

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

WORK ITEM 1: 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 618 WMEC 314-001, Rev H, Helo 400 Hz & 28.5 VDC Replacement Diagram

COAST GUARD PUBLICATIONS

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

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures. The Contractor shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces in the vicinity of the work area

against contamination during the performance of work. Upon completion of work, the Contractor shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor shall 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 shall load test the 28 VDC Helo Start Rectifier in accordance with the attached C.G. Yard Test Memorandum (see Section 4 below) and using Coast Guard Drawing 618 WMEC 314-001 and TP 7099, as guidance. Submit CFR.

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

3.3.2 Once repairs are complete, the Contractor shall 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 shall thoroughly test, in the presence of the Coast Guard Inspector and demonstrate all items or shipboard devices that have been disturbed, used, repaired, altered, or installed to be in satisfactory operating condition. Submit a CFR.

3.5 Report. The Contractor shall submit a CFR for the completed test memorandum attached below.

4. NOTES

4.1 Test memorandum.

TEST MEMORANDUM
U.S. COAST GUARD YARD

TITLE: 28 VOLT DC HELO START POWER SUPPLY TEST

HULL NO._____

REF: (a) Air Capable Ship Aviation Facilities Bulletin No. 1G.

(b) Rectifier power supply 28Vdc-300A #137-01B NAVSEA Manual # S9314-05-MMC- 010.

METHOD OF CONDUCTING TEST

1. In accordance with Section 21.2 of reference (a) and reference (b), the 28 Volt Helicopter Starting System Power Supply shall be tested by connection to a suitably sized resistive load bank and operated at various loads ranging from 0 to 300 amps.

2. The calibrated load bank shall be connected to the power supply using the helo start cable supplied with the cutter used for starting the aircraft. The cable shall 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.

3. The test shall be conducted with the ship on ship's power (not shore tie) and a hand held calibrated voltage meter. Connect the power supply to the load bank and energize the power supply. Adjust the output, IAW reference (b) so that the no load voltage is 28.Vdc.

4. Increase the load in nominal increments of 25 amps and record the output voltage at each load. Maximum load for this test is 300 amps. Record data on the table below.

ENCLOSURE (1)

FIGURE 1. ENCLOSURE 1 PAGE 1 of 2

AMPS Nom/Actual	VOLTS 24 Vdc min.- 29 Vdc max.)	AMPS Nom/Actual	VOLTS (24Vdc min.- 29Vdc max.)
0/ ___	_____	175/ ___	_____
25/ ___	_____	200/ ___	_____
50/ ___	_____	225/ ___	_____
75/ ___	_____	250/ ___	_____
100/ ___	_____	275/ ___	_____
125/ ___	_____	300/ ___	_____
150/ ___	_____		

TITLE: 28 VOLT DC HELO START POWER SUPPLY TEST

5. NAME PLATE DATA OF THE POWER SUPPLY TEST:

MAKE _____ MODEL_____

SERIAL NO._____

6. CALIBRATED LOAD BANK INFORMATION

MAKE _____ MODEL_____

SERIAL NO._____ DATE LAST CALIBRATED_____

7. CALIBRATED HAND HELD VOLTAGE METER:

MAKE _____ MODEL_____

SERIAL NO._____ DATE LAST CALIBRATED_____

Accept/ Reject Criteria: Test is successful if voltage does not fall outside of the range of 29 Vdc to 24 Vdc for steady state load currents from 0 to 300 amperes.

_____ _____ _____

TEST CONDUCTOR DATE *TEST SUPERVISOR/QC

_____

*PROJECT STAFF ACCEPTANCE/REVIEW

ENCLOSURE (1)

FIGURE 2. ENCLOSURE 1 PAGE 2 of 2

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

1. SCOPE

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

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 618 WMEC 314-001, Rev H, Helo 400 Hz & 28.5 VDC Replacement 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), 2014, General Requirements

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep. The Contractor shall provide the services of a qualified Tech Rep, who is familiar with the FCX Systems Inc. PFC 400 Hz Power Supply equipment/system, to accomplish the following tasks – on site:

- Advise on manufacturer's proprietary information pertinent to the system.
- Assist with proper repair methods, and ensure compliance with manufacturer's procedures

and standards during disassembly, inspection, repair, modification, calibration, and reassembly of the equipment/system.

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

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

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

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.2 Operational test, initial. Prior to commencement of work, the Contractor shall 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

3.3 400 HZ (FCX) Power Supply, load test. The Contractor shall provide all labor and materials including a load bank to perform load test of the 400 HZ FCX Solid State Frequency Converter in accordance with attached Enclosure (1) C.G. Yard Test Memo and using TP 4931 as guidance. Submit a CFR.

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

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.5 Report. The Contractor shall submit a CFR for the completed test memorandum attached below.

4. NOTES

4.1 Test memo.

COAST GUARD YARD TEST MEMO

HULL NO._____

GROUP NO._____

TEST MEMO NO. 82 REV A

QA REVIEW:_____

TITLE: 400 HZ HELICOPTER POWER SUPPLY TEST

REF: (a) Air Capable Ship Aviation Facilities Bulletin No. 1G

(b) Section 300, DOD-STD-1399

© PFC Series Operator's Manual, FCX System Inc.

METHOD OF CODUCTING TEST

1. In accordance with Section 21.3 of reference (a), the 400HZ helicopter service system shall 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 HH-65 Helicopter (10 KVA).

2. The power supply shall 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 shall be adjusted to the length necessary to service the aircraft in its normal landing position on the flight deck.

3. After connection of the power supply to the load bank, energize the power supply and adjust the load to approximately 2 amps. Record the output voltage, frequency and current on table 1. Verify correct phrase rotation.

NOTE!

The maximum power requirements for the HH-65 helicopter are 10KVA (per reference (a)).

Enclosure (1)

FIGURE 1: ENCLOSURE 1, PAGE 1 of 3

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

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

At P= 10 KVA, and E= 200V (line to line), the maximum current required is 28.9 amps.

TABLE 1.

AMPS	FREQUENCY 398 Hz Min - 402 Hz Max	VOLTS 113 VAC Min - 118 VAC Max
2		
7		
12		
17		
22		
27		
29		

5. NAME PLATE DATA OF THE POWER SUPPLY TEST:

MAKE _____ MODEL _____

SERIAL NO._____

6. (A) CALIBRATED LOAD BANK INFORMATION

MAKE _____ MODEL _____

SERIAL NO._____ DATE LAST CALIBRATED _____

(B) CALIBRATED HAND HELD VOLTAGE METER:

MAKE _____ MODEL _____

SERIAL NO._____ DATE LAST CALIBRATED _____

Enclosure (1)

FIGURE 2. ENCLOSURE 1, PAGE 2 of 3

7. Accept/ Reject Criteria: Test is successful if voltage does not fall outside of the range of 118 Volts to 113 Volts, line-to-neutral, for the entire load range at a unity power factor. Frequency must not fall outside of the range of 398 Hz to 402 Hz.

_____	_____	_____
TEST CONDUCTOR	DATE	TEST SUPERVISOR/QC

Enclosure (1)

FIGURE 3. ENCLOSURE 1, PAGE 3 of 3

43700_LNM_1117_210_270
REC_43700_210' A WMEC (1117)

WORK ITEM 3: Windspeed Transmitter (Anemometer), Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew both 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.	5315.58

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Bill of Materials 618 WMEC 339, Rev C, Anemometer

Coast Guard Drawing 618 WMEC 430-050, Rev -, I. C. Distribution Panel

Coast Guard Drawing 618 WMEC 437-002, Rev D, Wind Speed & Direction Ind Sys Elem Wrg Diag IC Ckt "HD & HE"

Coast Guard Drawing 618 WMEC 613-001, Rev B, Main Mast Rigging Arr & Det

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3234A, SWBS 426, Section D, Dec 2012, Distribution Switchboard

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

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

Surface Forces Logistics Center Standard Specification 3041 (SFLC Std Spec 3041), 2014, 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 shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces in the vicinity of the work area against contamination during the performance of work. Upon completion of work, the Contractor shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

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

- 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 shall 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 Windspeed transmitter, renew. The Contractor shall renew both wind speed transmitters using the Government-furnished anemometers listed in paragraph 1.2, and turn over the removed anemometers to the Coast Guard Property Administrator as MTI. Make all electrical and mechanical connections using Coast Guard Drawings 618 WMEC 430-050, 618 WMEC 437-002, 618 WMEC 613-001; and TPs 3234A and 5461, as guidance.

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

3.4.1 Perform continuity checks and insulation resistance measurements for the newly installed anemometer in accordance with SFLC Std Spec 3041.

3.4.2 Demonstrate that the wind speed transmitter system operates satisfactorily.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 4: Flow Meter (Aviation Fuel), Calibrate

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to inspect and calibrate the instrumentation 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	**JP-5 Flow meter, Meter	NSN: 6680-01-658-6663	1 ea.	3,100.00
N	** Counter Rotating, Register	NSN: 6680-01-439-2365	1 ea.	388.00

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

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Bill of Materials 618 WMEC 97, Rev L, Arr - Aviation Fuel Sys

Coast Guard Drawing 618 WMEC 542-001, Rev G, Diagram Aviation Fuel System

Coast Guard Drawing 618 WMEC 542-002, Rev J, Arrgt - Aviation Fuel System

Coast Guard Drawing 618 WMEC 542-003, Rev -, Diagram Aviation Fuel System

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 9142, Nov 2016, Meter – Model M-5-2 Direct Drive

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

OTHER REFERENCES

None

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

3.1.3 Protective measures - general. The Contractor shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces in the vicinity of the work area against contamination during the performance of work. Upon completion of work, the Contractor shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness. The Contractor shall be careful to blank off and protect the JP-5 fuel system at all times, to prevent contamination.

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

- Aviation fuel piping and contents
- Fluid pressure.

3.2 Instrument inspection and calibration. The Contractor shall remove, clean, inspect, calibrate and reinstall the instrumentation identified in Table 1 in accordance with the referenced Coast Guard TP in Section 2 (References). The Contractor shall refer to the Coast Guard drawings listed in Section 2 (References) for guidance while accomplishing this work item.

3.2.1 Cleaning and inspection. The Contractor shall disassemble the flow meter sufficiently to expose the gears, rotors and metering chamber. Inspect and clean gear teeth, rotors and internal housing surfaces. Submit a CFR. A soft wire brush may be used to clean surfaces, taking care not to alter the contour of the part surfaces. Remove nicks or burrs with a stone. Ensure all parts are clean and free of foreign matter prior to reassembly. Renew all disturbed seals, packing and gaskets.

3.2.2 Calibration. The Contractor shall test for meter accuracy prior to disassembly and cleaning; and again after reassembly. Submit a CFR for each accuracy test. The Contractor shall calibrate the meter using a certified calibration facility. The Contractor shall provide a certificate of calibration to the COR.

3.2.3 Renewal. If a Change Request has been authorized and released, the Contractor shall replace the existing flow meter with a new Government-furnished flow meter (see Section 1.2 (Government-furnished property)). Contractor shall provide and install OEM aluminum flanges (1 ½ or 2 inch) to fit specific cutter piping design and configuration. The Contractor shall dispose of the existing meter in accordance with all Federal, State and local regulations. The Contractor shall provide a certificate of calibration to the COR for the new flow meter.

3.3 Leak test. After completing all authorized repairs, the Contractor shall 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.

4. NOTES

4.1 Recirculation. After Contractor reinstallation of 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.

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	**M16 Bolts	NSN: 5305-01-393-1827	24 ea.	25.67
N	**M12 Bolts	NSN: 5305-01-584-6095	12 ea.	34.92
N	**Talon Grid Stanchion Bolt Assembly, Including Locking Nut	NSN: 5340-01-481-3786	60 ea.	33.77

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

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Bill of Materials 618 WMEC 384, Rev -, Talon Grid

Coast Guard Drawing 618 WMEC 186-002, Rev A, Talon Grid Foundation & Structural Mods - 01 Level

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

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) 3368, Jul 2017, Talon Helicopter Landing Grid - Type 18-22-01

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2014, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2014, 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 shall 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 shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, the Contractor shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

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

3.2 Pre-removal grid clearance measurement. The Contractor shall 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. Submit a CFR.

3.3 Grid removal plan. The Contractor shall develop a plan to remove the grid assembly from the grid recess, using Coast Guard Drawing 618 WMEC 186-002 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 shall 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 M16 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 fixation bolts, in accordance with the accepted grid removal plan.

3.5 Grid support and recess preservation. The Contractor shall preserve 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.

3.6 Inspections. The Contractor shall accomplish the following inspections, using Coast Guard drawing FL-588-003, as guidance. Submit A CIR.

3.6.1 Visual. Perform a visual inspection of the following components:

- Grid top plate
- Grid lower support structure
- Recess supporting ring
- Grid recess and foundation
- Stanchions and nuts.

3.7 Grid maintenance. The Contractor shall perform the preventative maintenance requirements in accordance with TP 3368, Chapter 5, Paragraph 2 (Preventive Maintenance in Workshop), and all its related sub-paragraphs.

3.8 Grid reassembly and reinstallation. Upon completion of all authorized repairs, if any, the Contractor shall reassemble and reinstall the grid assembly, in accordance with TP 3368. Ensure that the grid is level with the flight deck.

3.8.1 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.

3.8.2 Renew all M12 fixation bolts and M16 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 fixation bolt: 22 ft-lb.
- M16 bolt: 44 ft-lb.

3.8.3 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.

NOTE

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.

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

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

3.9.1 Ensure a straight edge is laid across the grid from edge to edge and the clearance at the grid center shall be measured and recorded.

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 shall be visually examined for evidence of structural failure. Visible deformation or cracking shall be cause failure. The grid shall 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 shall be randomly removed and inspected by dye penetrant inspection for failure and replaced or renewed as necessary. The resin foundation shall be visibly inspected. Report any test failure to Commandant (G-AHT) and Commandant (G-ENE-2A) immediately.

3.10 Post-installation and test grid clearance measurement. After grid reinstallation and pull test, the Contractor shall 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 shall prepare and coat all new and disturbed surfaces to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, paragraph 3.1.13 (Touch-ups and minor coating repairs.)

4. NOTES

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.

4.3 Jacking bolts. Six jacking bolts will be needed to accomplish above tasking; 5/8” Thread 11 Length 8” Hex Bolt.

WORK ITEM 6: Flight and Boat Deck Drains, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to crop out and renew 10 deck drains located on the Flight deck and Port and Starboard boat decks.

1.2 Government-furnished property.

None

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Bill of Materials 618 WMEC 79, Rev C, Arrangement Weather Deck, Reefer, & A/C Drains

Coast Guard Drawing 618 WMEC 136-001, Rev L, 01 & 02 Level & Bridge Deck Plating & Support

Coast Guard Drawing 618 WMEC 526-001, Rev E, Arr of Weather Deck, Drain & Refrig Drains

Coast Guard Drawing 618 WMEC 526-002, Rev C, Arr of Weather Deck and AC Drains

Coast Guard Drawing 618 WMEC 528-001, Rev L, Arrangement of Plumbing System and Deck Drains

Coast Guard Drawing 618 WMEC 528-002, Rev B, Diagram of Plumbing System and Deck Drains

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2014, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2014, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General. The Contractor shall refer to Coast Guard Drawings listed in Section 2 (References), as 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 shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, the Contractor shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

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

- Deck covering system
- Deck drain piping
- Flight deck lighting
- Flight deck netting
- Deck drain covering
- Deck drain hardware
- Life raft racks
- Welin Lambie boat davit
- Main deck overhead system

3.2 Renewal. The Contractor shall crop and renew 10 designated deck drains, including drain funnels, grates and up to 6 inches of adjacent piping for each deck drain located on the Flight deck and Port and Starboard boat decks as designated by the Coast Guard Inspector and using Coast Guard drawings referenced in Section 2 (References), as guidance. The Contractor shall visually inspect the deck(s) and associated piping surrounding each designated drain. Submit a CFR. Deck drains to be renewed are Item #36 on Coast Guard Bill of Materials 618 WMEC 79; and are located on the Flight Deck and the Boat deck.

WARNING

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

3.3 Pipe flushing. The Contractor shall flush all new and disturbed piping with clean fresh water until all debris is removed but no longer than five minutes. Ensure flushing fluid is directed to move scale and

foreign debris away from installed machinery to prevent possible damage upon operational testing. Submit a CFR documenting date and time of flushing process and level of pipe cleanliness.

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

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

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

3.6 Operational test- initial. Prior to commencement of work, the Contractor shall 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.

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

4. NOTES

This section is not applicable to this work item.

WORK ITEM 7: Portable Davit Socket, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to renew 3 Gussets, Bearing button and mount plate located on Port and Starboard portable davit and renew the pipe sleeve on the starboard portable/J davit located on the Flight Deck.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 618 WMEC 111-003, Rev -, Forward Bulwark Details

Coast Guard Drawing 618 WMEC 111-004, Rev -, Transom Bulwark Details

Coast Guard Drawing 618 WMEC 570-001, Rev -, Portable Davits

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2014, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 5000 (SFLC Std Spec 5000), 2014, Auxiliary Machine Systems

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2014, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General. The Contractor shall refer to Coast Guard Drawing listed in Section 2 (References), as 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 shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, the Contractor shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

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

- Fight deck nets
- Deck edge lights
- Electrical cabling
- Terminal Boxes

3.2 Renewal. The Contractor shall renew 3 Gussets, Bearing buttons and mount plates located on Port and Starboard portable davit and renew the pipe sleeves on the starboard portable davit located on the Flight Deck, as designated by the Coast Guard Inspector, and as shown on Coast Guard drawings Coast Guard Drawing 618 WMEC 570-001 Plan 14-F, section 13-G, section 12-G and Detail 8-D.

3.2.1 Alignment checks. The Contractor shall conduct alignment checks for the portable davit sleeves and bearing buttons, verify the sockets are perpendicular to the baseline, validate alignment checks and ensure freedom of movement for the portable davit. Submit a CFR.

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

WARNING

There are serious dangers associated with weight handling equipment. All loads must be stabilized prior to personnel attempting to remedy any casualties

3.6 Operational and weight test. The listed tests shall be conducted in sequence, in accordance with SFLC Std Spec 5000 and Table 1

TABLE 1: WEIGHT TEST REQUIREMENTS

TASK TYPE	QTY	COMPONENT OR ASSEMBLY	TEST LOAD
Op and Weight Test	2	1500# Portable Davit	Static Load Test Weight: 3000 lbs.

3.6.1 No-Load Test. With 1500# portable davit installed in deck socket, davit shall be rotated through full operating range to verify no binding of the davit in the deck socket.

3.6.2 Static Load Test. Using an external lifting device, suspend the static load test weight from the 1500# portable davit padeye, and hold for a minimum of 10 minutes. Verify no permanent deformation or damage to any components.3.6 Flight deck nets. If the flight deck nets are removed and reinstalled as interference to work, the Contractor shall accomplish the following:

3.6.3 Corner net test. After reinstallation, apply a 500-lb load in the center of the net. Distribute the load over the entire net and hold the load for 10 minutes.

3.6.4 Inspection. After the tests, inspect the nets and frames for any signs of damage, cracking, deterioration, bending, or loosening of connection or joints. Submit a CFR.

4. NOTES

This section is not applicable to this work item.

WORK ITEM 8: Flight Deck Hose Roller Foundation, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to crop out and renew .5 inches plate support structure on the Flight deck hose roller foundation for JP-5 and Helo Start cable.

1.2 Government-furnished property.

None

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Bill of Material 618 WMEC 137, Rev M, Fdns. for Misc Equip.

Coast Guard Drawing 618 WMEC 186-001, Rev S, Foundation for Misc Equipment

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), 2014, Welding and Allied Processes

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2014, Requirements for Preservation of Ship Structures

OTHER REFERENCES

None.

3. REQUIREMENTS

3.1 General. The Contractor shall refer to Coast Guard Drawings listed in Section 2 (References), as 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 shall furnish and install all protective coverings to seal off and protect all non-affected vessel's components, equipment, and spaces near the work area against contamination during the performance of work. Upon completion of work, the Contractor shall remove all installed protective measures, inspect for the presence of contamination, and return all contaminated equipment, components, and spaces to original condition of cleanliness.

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

- Rollers
- Mounting hardware
- Flight deck nets
- Flight deck decking

3.2 Renewal. The Contractor shall crop and renew steel plate support structure for JP-5 hose and Helo Start cable roller foundations located on the Flight Deck, as designated by the Coast Guard Inspector and using Coast Guard Drawings 618 WMEC 186-001 sheet 18, as guidance. Steel plate(s) to be renewed are item #66 on Coast Guard Bill of Materials 618 WMEC 137; and are located on the Flight Deck.

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

NOTE

Coast Guard personnel will operate all shipboard machinery and equipment.

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

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

4. NOTES

This section is not applicable to this work item..

WORK ITEM 9: Decks - Exterior, Preserve ("Mil-Spec/Flight Deck" System)

1. SCOPE

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

- Main Deck (Steel Surfaces): Frame 68 aft, port and starboard side.
- 01 Level (Steel Surfaces): All exterior deck surfaces, from Frame 114 forward, port and starboard.
- 02 Deck (Aluminum Surfaces): Bridge Deck .
- 02 Deck (Aluminum Surfaces): Pilot House Top.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 618 WMEC 601-004, Rev J, General Arrangement Main and 01 Deck

Coast Guard Drawing 618 WMEC 601-005, Rev F, General Arrangement Arrg 02 Deck, Brdge Dk & House Top

COAST GUARD PUBLICATIONS

Surface Forces Logistics Center Standard Specification 0000 (SFLC Std Spec 0000), 2014, General Requirements

Surface Forces Logistics Center Standard Specification 6310 (SFLC Std Spec 6310), 2014, Requirements for Preservation of Ship Structures

OTHER REFERENCES

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

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

Commercial Item Descriptions (CID) A-A-59316, Nov 2003; Abrasive Materials for Blasting

3. REQUIREMENTS

3.1 General.

3.1.1 CIR.

None.

3.1.2 Tech Rep.

Not applicable.

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

3.1.3.1 Apply protective measures as specified in SFLC Std Spec 0000, paragraph 3.3.3 (Vessel component, space, and equipment protection) to the following components, spaces and equipment:

- Adjacent vertical (beyond what is specified in paragraph 3.3.1 (System particulars)).
- Ventilation intakes.
- Deck fittings.
- Deck equipment.
-

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

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

3.3 Preservation requirements particulars. The Contractor shall accomplish the following tasks. Use Coast Guard Drawings 618 WMEC 601-004 and Coast Guard Drawing 618 WMEC 601-005 as guidance.

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

3.3.2 Surface preparation and coating application. Prepare and coat the deck surfaces designated in paragraph 1.1 (Intent), including bitt and chock foundations, machinery rack guards and machinery foundations, hatches and hatch guards, stanchion sockets, vent pipes, angle coaming area, and approximately six inches up all adjacent vertical surfaces (as applicable); use the system specified for “Weather Decks, Non-Skid, MIL-SPEC Coating for Steel or Aluminum”, in SFLC Std Spec 6310, Appendix A (Cutter and Boat Exterior Painting Systems).

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

3.3.2.2 Color selection. Select and use Gray (16099) as the finish/top coat color.

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

- Within two inches of deck fittings, hatches, welds, and protrusions.
- Within six inches of deck coaming, bulkheads, and deck edges.
- Within six inches of all deck edges and bulkheads.
- Within two inches of deck foundations (two inches measured from outermost portion of foundation, for example, foundation brackets on anchor windlass).
- Over deck fittings.
- Over waterways.

NOTES

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

2. Waterjetting only reveals an existing substrate anchor profile and does not create a new profile. Abrasive may be introduced to the waterjet stream, to achieve required surface profile and/or greater productivity. Abrasive blast grit (if used for preparing the aluminum surfaces) shall conform to CID-A-A59316, Type I or Type IV.

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

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

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

b. Coatings must be applied by brushing or rolling.

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

3.4 Low temperature cure system. If a Change Request has been authorized and released, the Contractor shall apply a low temperature cure system, conforming to MIL-PRF-24667, Type VIII, Composition G. Ensure that top color coating is a silicone alkyd enamel product, recommended by the nonskid coating system manufacturer, in lieu of the polyurethane-based coating listed on QPL-24667.

NOTES

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

2. Primer, non-skid, and color coatings must be procured as part of a system kit from the system's manufacturer or supplier.

3.5 Flexible membrane system. If a Change Request has been authorized and released, the Contractor shall apply the MIL-PRF-24667, Type III, Composition G system, with the intermediate membrane.

NOTE

The Type III non-skid system with the intermediate membrane should only be used over deck surfaces that undergo a great deal of flexing, or over uneven deck surfaces where flatness is required.

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

4. NOTES

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