USCGC (WMEC 210/270 & WLB 225 Classes)

SPECIFICATION FOR WELIN LAMBIE DUAL POINT DAVIT MODEL TW PIV 5.0B SUPPORT

FY2026

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REVISIONS RECORD

This page is used to record specification revisions, which may have occurred after a Revision 0 (Rev-0) package. Information listed is intended to provide contractors and field unit personnel with 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 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 618 WMEC 583-003, Rev E, Diagram Boat Davit Hydraulic Circuit (applicable for 210 A class vessels)

Coast Guard Drawing 618 WMEC 583-063, Rev G, OTHB Davit Arrangement (applicable for 210 A class vessels)

Coast Guard Drawing 618 WMEC 583-064, Rev D, OTHB Davit Installation (applicable for 210 A class vessels)

Coast Guard Drawing 618 WMEC 583-065, Rev-, OTHB Davit - Access Platform Mod (applicable for 210 A class vessels)

Coast Guard Drawing 627 WMEC 583-003, Rev C, Boat Davit Hydraulic Circuit (applicable for 210 B class vessels)

Coast Guard Drawing 627 WMEC 583-006, Rev D, Hydraulic Piping for Boat Davits (applicable for 210 B class vessels)

Coast Guard Drawing 627 WMEC 583-040, Rev J, OTHB Davit Arrangement (applicable for 210 B class vessels)

Coast Guard Drawing 627 WMEC 583-041, Rev F, OTHB Davit Installation (applicable for 210 B class vessels)

Coast Guard Drawing 627 WMEC 583-042, Rev A, OTHB Davit - Access Platform (applicable for 210 B class vessels)

Coast Guard Drawing 901 WMEC 583-011, Rev C, Boat Davit Hydraulic Power Unit Installation and Assembly (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-013, Rev A, Boat Davit Outline and Assembly (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-015, Rev-, Davit Modifications Arrgt and Details (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-021, Rev D, OTHB Electrical Installation (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-023, Rev E, OTHB Davit Installation (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-024, Rev G, OTHB Davit Arrangement (applicable for 270 A class vessels)

Coast Guard Drawing 905 WMEC 583-004, Rev A, Boat Davit Hyd Sys A&D (applicable for 270 B class vessels)

Coast Guard Drawing 905 WMEC 583-024, Rev G, OTHB Davit Arrangement (applicable for 270 B class vessels)

Coast Guard Drawing 905 WMEC 583-025, Rev E, OTHB Davit Installation (applicable for 270 B class vessels)

Coast Guard Drawing FL 2605-038, Rev A, Welin Lambie 5.0B RHI Cradle End Pads

Coast Guard Drawing FL 8201-107, Rev A, Welin Lambie Davit OTH Boat Gripe Assemblies

Coast Guard Drawing 225-WLB 320-021, Rev A, MMA Electrical Mods to Suit Dual Point Davit Install

Coast Guard Drawing 225B-WLB 320-026, Rev A, MMA Electrical Mods to Suit Dual Point Davit Install

Coast Guard Drawing 225-WLB 556-014, Rev C, MMA Hydraulic Piping Mods to Suit Dual Point Davit Install

Coast Guard Drawing 225B-WLB 556-016, Rev B, MMA Hydraulic Piping Mods to Suit Dual Point Davit Install

Coast Guard Drawing 225-WLB 583-004, Rev A, MMA Installation of Dual Point Davit

Coast Guard Drawing 225B-WLB 583-002, Rev E, MMA Installation of Dual Point Davit

COAST GUARD PUBLICATIONS

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

Coast Guard Technical Publication (TP) CP-H5-0001-V0, Aug 2025, Twin Pivot Arm Davit - Type TW.PIV 5.0B - Ref. No. 5558-1 Thru 5558-15

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 2351 (SFLC Std Spec 2351), 2022, Overhaul DC Generators & Motors

Surface Forces Logistics Center Standard Specification 3020 (SFLC Std Spec 3020), 2022, Overhaul AC Electrical Motors

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

ASME BPV Code Section VIII, Division 1 & 2, Rules for the Construction of Pressure Vessels

ASTM International (ASTM) D3951, R2018, Standard Practice for Commercial Packaging

British Standard (BS) BS EN 837-1, 03/1998, Pressure Gauges Part 1: Bourdon Tube Pressure Gauges – Dimensions, Metrology, Requirements and Testing

FED-STD-595C, 16 Jan 2008, Colors Used in Government Procurement

The Society for Protective Coatings (SSPC)/NACE International (NACE) Joint Surface Preparation Standard SSPC-SP 7/NACE No.4, 2007, Brush-Off Blast Cleaning

CONSOLIDATED LIST OF GOVERNMENT-FURNISHED PROPERTY

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

WORK ITEM	MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
1	N	4 Year Davit In-place Overhaul Kit	P/N: 892-02053 NSN: 3950-01-F15-5354	1 ea.	198,557.27
1	Y	Cylinder Assembly	PN: 5727-1501 NSN: 3040-99-239-4845	2 ea.	21,669.13
1	Y	Hook, Release, Boat Davit	PN: APR-356-CBH NSN: 4030-01-467-1005	2 ea.	8,763.00
1	Y	Accumulator, Hydraulic	PN: 885-02012 NSN: 3040-99-355-4929	2 ea.	14,707.86
1	Y	Chock Mod Kit (Mk-IV)	PN: 892-02105 NSN: 2030-01-845-8402	1 ea.	32,641.16
1	Y	Chock Mod kit (WLB-225)	PN: 892-02076 NSN: 2030-01-F15-4212	1 ea.	31,500.00
2	Y	Welin-Lambie OTHB Davit	PN: Model number 5558 Series NSN: 2030-99-454-8999	1 ea.	729,429.47

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

This section is not applicable to this package.

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.

PRINCIPAL CHARACTERISTICS

210' WMEC (B-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-B 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%)	48,427 gal.
Fresh water total (100%)	11,693 gal.
JP-5 fuel total (95%)	4,683 gal.
Lube oil total (95%)	2,390 gal.

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.

225' WLB (A-CLASS)	
PHYSICAL	
Length overall	225' 0"
Length between perpendiculars	206' 0"
Maximum beam	46'
Designed draft	13' 0"
Full load displacement	1929.74 Long Tons SW
Light ship displacement	1544.38 Long Tons SW
Minimum operating displacement	1906.70 Long Tons SW
Mast height (above 12' waterline)	67' 5"
Anchor	Two 4000 lb standard Navy stockless anchors, 8 shots each, port and starboard, 1-3/8 die lock chain
HULL	
Bilge keels (port & starboard)	Frames 42-79
Frame spacing	
FR 0 to 12	21"
FR 12 to 30	22"
FR 30 to 102	24"
MACHINERY	
Main propulsion	Diesel Reduction
Diesel engines	Two Caterpillar 3608, TA, 3100 BHP each @ 900 RPM
Number of propellers	1

Number of blades	4
Diameter	10'
Pitch	Controllable
RPM	254
Ship's service diesel generators	Two Caterpillar 3508 TA, 450 KW
Emergency diesel generator	One Caterpillar 3406 DITA, 280 KW
Shore tie	Two 450 VAC, 400 Amp, 3-wire
Shaft bearing, forward	Cooper Bearing 01-BCP-1400-EX-TL
Shaft bearing, aft	Water Lubricated Cutless Bearing

PRINCIPAL CHARACTERISTICS

270' WMEC (B-CLASS)	
PHYSICAL	
Length overall	270' 0"
Length between perpendiculars	255' 0"
Beam molded	38' 0"
Depth molded, main deck amidships, 01 level amidships	23' 7" 31' 4"
Full load displacement	1,886 long tons
Draft, full load to baseline amidships	14' 2"
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, 3,650 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

PRINCIPAL CHARACTERISTICS

225' WLB (B-CLASS)	
PHYSICAL	
Length overall	225' 0"
Length between perpendiculars	206' 0"
Maximum beam	46'
Designed draft	13' 0"
Full load displacement	1905.6 Long Tons SW
Light ship displacement	1500.7 Long Tons SW
Minimum operating displacement	1869.2 Long Tons SW
Mast height (above 12' waterline)	67' 5"
Anchor	Two 4000 lb standard Navy stockless anchors, 8 shots each, port and starboard, 1-3/8 die lock chain
HULL	
Bilge keels (port & starboard)	Frames 42-79
Frame spacing	
FR 0 to 12	21"
FR 12 to 30	22"
FR 30 to 102	24"
MACHINERY	
Main propulsion	Diesel Reduction
Diesel engines	Two Caterpillar 3608, TA, 3100 BHP each @ 900 RPM
Number of propellers	1
Number of blades	4
Diameter	10'
Pitch	Controllable
RPM	254
Ship's service diesel generators	Two Caterpillar 3508 TA, 450 KW

Emergency diesel generator	One Caterpillar 3406 DITA, 280 KW
Shore tie	Two 450 VAC, 400 Amp, 3-wire
Shaft bearing, forward	Cooper Bearing 01-BCP-1400-EX-TL
Shaft bearing, aft	Water Lubricated Cutless Bearing

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 contractors 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

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) apply 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 Fire watch requirements. The Contractor shall refer to 3.3.1.3 (Fire watch requirements) of SFLC Std Spec 0000, in accomplishing the following tasks:

- 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. Contractors 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 shall be provided at time of award.

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 2020 Edition Standard Specifications and supersede published content:

None.

4. NOTES

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

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

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

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

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

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

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(Use one sheet for each sequence)

VESSEL NAME	HULL #	WORK ITEM #	WORK ITEM TITLE

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

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

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

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

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

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

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

WORK ITEM 1: Welin-Lambie Model TW.PIV 5.0B Dual Point Davit, Inspect, Test and Overhaul

1. SCOPE

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

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
N	4 Year Davit In-place Overhaul Kit	P/N: 892-02053 NSN: 3950-01-F15-5354	1 ea.	198,557.27
Y	Cylinder Assembly	PN: 5727-1501 NSN: 3040-99-239-4845	2 ea.	21,669.13
Y	Hook, Release, Boat Davit	PN: APR-356-CBH NSN: 4030-01-467-1005	2 ea.	8,763.00
Y	Accumulator, Hydraulic	PN: 885-02012 NSN: 3040-99-355-4929	2 ea.	14,707.86
N	Chock Mod Kit (Mk-IV)	PN: 892-02105 NSN: 2030-01-845-8402	1 ea.	32,641.16
N	Chock Mod kit (WLB-225)	PN: 892-02076 NSN: 2030-01-F15-4212	1 ea.	31,500.00

2. REFERENCES

COAST GUARD DRAWINGS

None.

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) CP-H5-0001-V0, Aug 2025, Twin Pivot Arm Davit - Type TW.PIV 5.0B - Ref. No. 5558-1 Thru 5558-15

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 2351 (SFLC Std Spec 2351), 2022, Overhaul DC Generators & Motors

Surface Forces Logistics Center Standard Specification 3020 (SFLC Std Spec 3020), 2022, Overhaul AC Electrical Motors

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

ASME BPV Code Section VIII, Division 1 & 2, Rules for the Construction of Pressure Vessels

ASTM International (ASTM) D3951, R2018, Standard Practice for Commercial Packaging

British Standard (BS) BS EN 837-1, 03/1998, Pressure Gauges Part 1: Bourdon Tube Pressure Gauges – Dimensions, Metrology, Requirements and Testing

FED-STD-595C, 16 Jan 2008, Colors Used in Government Procurement

The Society for Protective Coatings (SSPC)/NACE International (NACE) Joint Surface Preparation Standard SSPC-SP 7/NACE No.4, 2007, Brush-Off Blast Cleaning

3. REQUIREMENTS

3.1 General. The Contractor shall accomplish all work herein in accordance with SFLC Std Spec 5000 and TP 3943. The Contractor shall provide all services required to accomplish the work herein on the Welin-Lambie TW.PIV 5.0B Dual Point Davit system.

3.1.1 CIR.

None.

3.1.2 Tech Rep. The Coast Guard will provide a Tech-Rep to conduct the Inspection and Commissioning of the Welin-Lambie Davit IAW the OEM Contract.

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

3.1.3.1 Protective measures, hydraulic system(s). Maintain existing hydraulic system cleanliness and take all necessary precautions to prevent the introduction of contaminants into the hydraulic system. Immediately after disconnecting or removing components from the hydraulic system, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick. Contractor shall drain all fluids from the hydraulic reservoir, fwd tension winch, aft tension winch, and gear box and dispose IAW all State and Federal requirements. Contractor shall renew all fluids IAW with TP 3943.

NOTE

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

3.1.4 Interferences. The Contractor shall handle all interferences in accordance with SFLC Std Spec 0000.

3.1.5 Receipt report. Upon receipt of the Government furnished overhaul kit, and the additional parts furnished by the Government based on the Welin-Lambie Pre-Inspection Report, the Contractor shall inspect and inventory the Government furnished overhaul kit against overhaul kit contents shown in Section 4 and the additional Government furnished parts identified from Welin-Lambie Pre-Inspection Report and submit a CFR on the following:

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

3.2 Visual inspection. The Contractor shall clean and visually inspect the following for structural damage, coating damage, exposed wiring, and any other notable damage and submit a CFR:

- Exterior electrical cables, wiring, and conduit.
- Davit frame.
- Forward davit arm structure.
- Aft davit arm structure.
- Main winch drums.
- Tension winch drums.
- Davit foundation.

3.3 Disassemble and inspect. The Contractor shall overhaul the following components/assemblies and sub-components/assemblies in accordance with SFLC Std Spec 5000 paragraph 3.2.2 “Disassemble and inspect” using TP 3943 as guidance. Renew Government furnished parts for each component (see paragraph 4.2 for listing of parts to be renewed):

- Boat Block Assembly.
- Fwd. and Aft Davit Arm Assemblies.
- Winch Gearbox Assembly.
- Falls Tension Winch Assembly.
- Control Station Assembly.
- Hydraulic System including Hoses, Hydraulic Panel Assembly and Accumulators.

3.3.1 All component overhaul shall be accomplished in the presence of the designated Coast Guard Inspector. This requirement may be waived by the Coast Guard Inspector on a day-to-day basis.

3.4 Additional renewals. The COR will provide the Tech Rep’s Pre-Inspection report to the Contractor, if one is available. The Contractor shall submit a proposal, via CFR, to renew all components determined by the Tech Rep assessment to require replacement.

3.4.1 Government’s right to change out. The Government reserves the right to furnish new components required to be renewed, for installation in place of the existing. If the Government exercises this right, the Contractor shall return the removed components to the Coast Guard PA as an MTI item.

3.5 Updates and upgrades. The Contractor shall submit a proposal, via CFR, to update and/or upgrade the following, as required:

3.5.1 Component upgrades.

- Based on the Welin-Lambie tech rep pre-inspection report provided by the COR.
- Others as directed by Welin-Lambie that can be completed by the contractor.

3.6 Pressure gauge calibration. The Contractor shall ensure all pressure gauges are in accordance with BS EN 837-1 and be calibrated and certified. Submit a CFR with current calibration date.

3.7 NDE. The Contractor shall perform NDE of the following in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

- Foundation attachment welds.
- Forward davit arm.
- Aft davit arm.

3.8 Lubricate. The Contractor shall lubricate the Welin-Lambie davit system in accordance with TP 3943.

3.9 Test requirements - Post Overhaul.

3.9.1 Test plan. The Coast Guard will submit a test plan to the Contractor upon Contract Award, to include the tests prescribed herein.

3.9.2 Test notification. The Contractor shall give Coast Guard personnel 7 days' notice prior to testing.

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

3.9.3.1 No load operational test. Conduct an operational test of the davit using no load over the entire range of motion in accordance with SFLC Std Spec 5000, paragraph B2.7.2.1.

3.9.3.2 Winch Brake/Modified static load test. Conduct a static brake test using 16,500 lbs plus or minus 25 lbs test load (150% of the Safe Working Load (SWL) of 11,000 lbs) in accordance with SFLC Std Spec 5000, paragraph B2.7.2.3. Conduct test with a 50-50 weight distribution.

3.9.3.3 Dynamic load test. Conduct a dynamic load test using 13,750 lbs plus or minus 25 lbs test load (125% of the Safe Working Load (SWL) of 11,000 lbs) in accordance with SFLC Std Spec 5000, paragraph B2.7.2.4 in both the normal power mode and the hydraulically stored energy mode (emergency operation). Conduct test with a 50-50 weight distribution for each operation mode.

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

3.9.3.3.1.1 Main winch running speed test – gravity lower, measure and record the main winch speed.

NOTE
The minimum speed shall be 73.3 RPM rope drum speed.

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

NOTE

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

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

NOTE

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

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

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

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

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

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.) The Contractor shall apply Densyl (Denso) Tape on designated components as per Tech Rep.

4. NOTES

4.1 Davit information:

- National Stock Number (NSN): 2030-99-454-8999
- Item name: Dual Point Davit
- Part Number (PN): TW.PIV 5.0B
- Original Equipment Manufacturer (OEM): Welin Lambie LTD

4.2 Contents of Government furnished overhaul kit. The following is a list of parts/components contained in the overhaul kit, which the Coast Guard requires to be renewed. The kit contents may not be all-inclusive of parts that may need to be renewed. Additional parts recommended by the Contractor for renewal will be done via CFR.

PART NUMBER	DESCRIPTION	QTY
N/A	4 YEAR DAVIT IN-PLACE OVERHAUL KIT	
Boat Block Assembly Drawing 5650-5601		
5201-8711	Sheave Bush	2

5201-8611	Isolating Bush	4
675-05035	Tension Pin	2
7300-0120	Thrust washer	2
7300-0121	Sleeve Bearing	2
651-10015	External Circlip	2
5440-5511	Rubbing Strip	4
5440-5711	Rubbing Strip	4
5440-5611	Rubbing Strip	4
616-02056	Slotted CSK HD Screw	16
616-02048	Hex HD Screw	8
616-02051	Plain Washer	8
616-02050	Hex HD Setscrew	8
616-02053	Hex Nut	8
616-02046	Plain Washer	16
Davit Assembly Drawing 5631-4601		
5204-5211	Arm Pivot Bush	4
639-01070	Locknut	4
5202-8411	Cylinder Pin Bush	4
5191-4711	Roller	8
7500-1225	Self-Lubricating Bearing	32
679-40032	Split Cotter Pin	32
5191-4611	Roller	8
5418-1631	Striker Arm	2
679-38032	Split Cotter Pin	8
800-02033	Main Rope – FWD	1
800-02034	Main Rope – AFT	1
889-01048	Grease Nipple	28
889-01049	Grease Nipple	2
7967-0702	Oil Seal	32
5202-7211	Sleeve	32
7004-0055	Deep Groove Ball Bearing	32
652-00100	Internal Circlip	16
859-03343	Incremental Rotary Encoder	2
Winch Gearbox Assembly Drawing 5508-7002		
5405-6911	Gasket	1
5062-0611	Bearing Housing	1

7967-0453	Oil Seal	1
5201-6111	Sleeve	1
7004-0045	Deep Groove Ball Bearing	1
889-02105	Sealing Washer	2
889-02006	Flanged Plug	2
859-01333	Miniature Immersion Heater	1
679-40030	Split Cotter Pin	2
647-00820	Plain Washer	2
7500-1220	Self-Lubricating Bearing	2
5727-0801	Brake Cylinder	1
677-40045F	Split Cotter Pin	1
651-10065	External Circlip	2
7960-0603	O-Ring	1
7967-0401	Oil Seal	1
5520-6301	Main Brake Shoe Assembly	1
2520-1901	Centrifugal Brake Shoe Assembly	6
7960-0453	O-Ring	1
7967-0551	Oil Seal	1
652-10052	Internal Circlip	1
5425-6331	Cylinder Plate	1
5204-5011	Bush	1
679-38020	Split Cotter Pin	1
647-00810	Plain Washer	1
7500-0612	Self-Lubricating Bearing	2
5421-8011	Pivot Plate	1
629-00016	Hex Nut	1
609-16150	Hex HD Setscrew	1
894-01706	Bonded Washer	1
683-00327	Compression Spring	4
647-00816	Plain Washer	4
651-10030	External Circlip	4
647-00830	Plain Washer	4
5492-6011	Motor Terminal Box Gasket	1
651-10045	External Circlip	1
677-40025F	Split Cotter Pin	6
Falls Tension Winch Assembly Drawing 5503-3902		

5142-6911	Anchor Pin	2
5590-1411	Modified Nut	2
679-39050	Split Cotter Pin	2
5492-6011	Motor Terminal Box Gasket	2
5293-2311	Gasket	2
7960-1543	O-Ring	2
891-05524	Brake Lining	2
Control Station Assembly Drawing 5694-4701		
830-00110	PVC Strip Seal	1
5405-7111	Gasket	1
Hydraulic Assembly Drawing 5631-4602		
5726-6101	Pressure Hose Assembly	2
5726-5901	Pressure Hose Assembly	2
5726-6001	Pressure Hose Assembly	4
890-90204	Equal Tee	1
890-90203	Elbow Fitting	1
Hydraulic Reservoir Assembly Drawing 5735-1001		
5405-7911	Reservoir Gasket	1
894-00915	Suction Strainer	2
894-00836	Oil Heater	1
894-01709	Bonded Washer	3
894-00835	Air Bag	1
894-00913	Pressure Filter Assembly	2
894-00822	Desiccant Breather	1
894-00834	Breather Adaptor	1
894-00813	Breather	1
894-00321	Relief Valve	2
891-00601	Pressure Filter Element	2
5492-6011	Motor Terminal Box Gasket	2
894-10213	Male Stud Coupling	2
894-10215	Male Stud Coupling	4
894-11355	Reducer	2
5425-8911	Bell Housing Gasket	2
5433-7811	Pump Gasket	2
894-00226	Coupler Spider	2
894-00206	Hydraulic Pump	2

Hydraulic Panel Assembly Drawing 5733-1301		
894-00319	Solenoid Coil	1
5406-4511	Hydraulic Panel Gasket	1
891-00449	Water Filter Element	1
894-00908	Return Filter Element	1
Miscellaneous		
885-02061	Accumulator Gas Valve	2
885-02059	Accumulator Bladder Kit	2
885-02072	Accumulator Bleed Valve	2
891-00460	Accumulator Cushion Ring	2
885-02025	Accumulator Safety Block	1
885-02073	Accumulator Burst Disk	2
892-01013	Cylinder Seal Kit	2
891-00451	Over Center Valve	4
859-01070	Switch, Sensitive	7

WORK ITEM 2: Welin-Lambie Model TW.PIV 5.0B Dual Point Davit, Renew

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to upgrade and renew a Welin-Lambie TW.PIV 5.0B Dual Point Davit for WMEC 210 and 270 Class cutters.

1.2 Government-furnished property.

MTI	ITEM DESCRIPTION	NSN/PN	QTY	ESTIMATED COST ($/UNIT)
Y	Welin-Lambie OTHB Davit	PN: Model number 5558 Series NSN: 2030-99-454-8999	1 ea.	729,429.47

2. REFERENCES

COAST GUARD DRAWINGS

Coast Guard Drawing 618 WMEC 583-003, Rev E, Diagram Boat Davit Hydraulic Circuit (applicable for 210 A class vessels)

Coast Guard Drawing 618 WMEC 583-063, Rev G, OTHB Davit Arrangement (applicable for 210 A class vessels)

Coast Guard Drawing 618 WMEC 583-064, Rev D, OTHB Davit Installation (applicable for 210 A class vessels)

Coast Guard Drawing 618 WMEC 583-065, Rev-, OTHB Davit - Access Platform Mod (applicable for 210 A class vessels)

Coast Guard Drawing 627 WMEC 583-003, Rev C, Boat Davit Hydraulic Circuit (applicable for 210 B class vessels)

Coast Guard Drawing 627 WMEC 583-006, Rev D, Hydraulic Piping for Boat Davits (applicable for 210 B class vessels)

Coast Guard Drawing 627 WMEC 583-040, Rev J, OTHB Davit Arrangement (applicable for 210 B class vessels)

Coast Guard Drawing 627 WMEC 583-041, Rev F, OTHB Davit Installation (applicable for 210 B class vessels)

Coast Guard Drawing 627 WMEC 583-042, Rev A, OTHB Davit - Access Platform (applicable for 210 B class vessels)

Coast Guard Drawing 901 WMEC 583-011, Rev C, Boat Davit Hydraulic Power Unit Installation and Assembly (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-013, Rev A, Boat Davit Outline and Assembly (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-015, Rev-, Davit Modifications Arrgt and Details (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-021, Rev D, OTHB Electrical Installation (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-023, Rev E, OTHB Davit Installation (applicable for 270 A class vessels)

Coast Guard Drawing 901 WMEC 583-024, Rev G, OTHB Davit Arrangement (applicable for 270 A class vessels)

Coast Guard Drawing 905 WMEC 583-004, Rev A, Boat Davit Hyd Sys A&D (applicable for 270 B class vessels)

Coast Guard Drawing 905 WMEC 583-024, Rev G, OTHB Davit Arrangement (applicable for 270 B class vessels)

Coast Guard Drawing 905 WMEC 583-025, Rev E, OTHB Davit Installation (applicable for 270 B class vessels)

Coast Guard Drawing FL 2605-038, Rev A, Welin Lambie 5.0B RHI Cradle End Pads

Coast Guard Drawing FL 8201-107, Rev A, Welin Lambie Davit OTH Boat Gripe Assemblies

COAST GUARD PUBLICATIONS

Coast Guard Technical Publication (TP) CP-H5-0001-V0, Aug 2025, Twin Pivot Arm Davit - Type TW.PIV 5.0B - Ref. No. 5558-1 Thru 5558-15

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

ASME BPV Code Section VIII, Division 1 & 2, Rules for the Construction of Pressure Vessels

British Standard (BS) BS EN 837-1, 03/1998, Pressure Gauges Part 1: Bourdon Tube Pressure Gauges – Dimensions, Metrology, Requirements and Testing

3. REQUIREMENTS

3.1 General. The Contractor shall accomplish all work herein in accordance with SFLC Std Spec 5000 and TP 3943. The Contractor shall refer to the Coast Guard drawings referenced in Section 2 (References), as applicable, for guidance in accomplishing this work item.

3.1.1 CIR.

None.

3.1.2 Tech Rep. The Coast Guard will provide a Tech-Rep to conduct the Inspection and Commissioning of the Welin-Lambie Davit IAW the OEM Contract.

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

3.1.3.1 Protective measures, hydraulic system(s). Maintain existing hydraulic system cleanliness and take all necessary precautions to prevent the introduction of contaminants into the hydraulic system. Immediately after disconnecting or removing components from the hydraulic system, seal all openings to the rest of the system using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

NOTE

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

3.1.4 Interferences. The Contractor 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:

- Lighting and associated wiring.
- Piping systems.
- Lifelines.
- Small boat.
- Life rafts
- Dewatering pumps

3.2 Receipt report. Upon receipt of the davit, the Contractor shall inspect and inventory the davit assembly; and submit a CFR on the following:

- General condition of the shipping container and davit assembly.
- Davit model and serial numbers.
- Missing or damaged parts/components with photographs of each.

3.2.1 Visually inspect. The Contractor shall visually inspect the following and submit a CFR:

- New davit assembly.
- Hydraulic reservoir(s).
- Hose assemblies.
- Exterior electrical cables, wiring, and conduit.
- Conduct an inventory IAW the delivery list in TP3943.

3.2.2 Accumulators and HPU relief valves. The Contractor shall visually inspect the accumulator(s) for a certification data plate. Submit a CFR. If a Change Request is released and approved by the KO, the Contractor shall test and certify the accumulators/cylinders using ASME BPV Code Section III as guidance.

3.2.3 Pressure gauge calibration. The Contractor shall ensure all pressure gauges are in accordance with BS EN 837-1, calibrated and certified. Submit CFR.

3.3 Davit upgrade particulars. The Contractor shall accomplish the following tasks as required, using Coast Guard drawings listed in Section 2 (References) as guidance:

3.3.1 Davit Modification/relocation. Accomplish davit installations as shown on the referenced Coast Guard Drawings for each Class of cutters (i.e. 210 WMEC and 270 WMEC Cutters).

3.3.1.1 Fabricate and install by welding, new hull protector mounting plates (270 – 4, 210 – 8) at locations shown on the applicable referenced drawings.

3.3.1.3 Fabricate and install by welding, new forward and aft gripe assemblies as shown on Coast Guard FL 8201-107.

NOTE

Gripe assemblies might not require welding.

3.3.1.4 Fabricate and install by welding new davit forward eyebolt, including plates and foundations.

3.4 NDE. The Contractor shall perform NDE of all new installations in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

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

3.6 Davit renewal. The Contractor shall renew the davit assembly using Government-furnished property. Package the removed davit as a “mandatory” turn-in item. The Contractor shall accomplish the following for the new davit installation in accordance with SFLC Std Spec 5000:

3.6.1 The Contractor shall accomplish touch-up preservation of the deck and foundation surfaces that become exposed upon removal of the davit to match existing adjacent surfaces in accordance with SFLC Std Spec 6310, paragraph 3.1.13 (Touch-ups and minor coating repairs).

3.6.2 Renew all disturbed fasteners with Government furnished replacements.

3.6.3 Install the Government furnished wire rope assembly.

3.6.4 NDE all weld joints on davit interface. The Contractor shall perform NDE of the following in accordance with SFLC Std Spec 0740, Appendix C. Submit a CFR.

3.6.5 Prior to performing Op and Weight test, Lubricate the new davit assembly in accordance with SFLC Std Spec 5000 and TP 3943. Fill both accumulators with Contractor Furnished nitrogen, Fill fwd and aft tension winch gear boxes (2), main gear box, and fill hydraulic reservoir fluid in accordance with TP 3943.

3.6.6 After all other work is complete, “Op and Weight Test” the new davit in accordance with Appendix B of Std Spec 5000.

3.6.6.1 Test plan. The Coast Guard will submit a test plan to the Contractor upon Contract Award, to include the tests prescribed herein, prior to commencement of testing.

3.6.6.2 Test notification. The Contractor shall give Coast Guard personnel 07 days' notice prior to testing.

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

3.6.6.3.1 No load operational test. Conduct an operational test of the davit using no load over the entire range of motion in accordance with SFLC Std Spec 5000, paragraph B2.7.2.1.

3.6.6.3.2 Winch Brake/Modified static load test. Conduct a static brake test using 16,500 lbs plus or minus 25 lbs test load (150% of the Safe Working Load (SWL) of 11,000 lbs) in accordance with SFLC Std Spec 5000, paragraph B2.7.2.3. Conduct test with a 50-50 weight distribution.

3.6.6.3.3 Dynamic load test. Conduct a dynamic load test using 13,750 lbs plus or minus 25 lbs test load (125% of the Safe Working Load (SWL) of 11,000 lbs) in accordance with SFLC Std Spec 5000, paragraph B2.7.2.4 in both the normal power mode and the hydraulically stored energy mode (emergency operation). Conduct test with a 50-50 weight distribution for each operation mode.

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

3.6.6.3.5 Main winch running speed test – gravity lower, measure and record the main winch speed

NOTE
The minimum speed shall be 73.3 RPM rope drum speed.

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

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

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

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

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

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

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

3.7.1 Fabricate and install a label plate in accordance with Appendix B of Std Spec 5000.

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

3.9 Davit disposal. The Contractor shall package the removed davit in the shipping container vacated by the Government-furnished davit, in the same manner as received. Mark as "F" condition. The removed davit shall be packaged as a complete assembly, with any removed parts retained to be shipped with the removed davit. Remove all fluids from the gear box, hydraulic reservoir, and tension winch gear boxes (2) and properly dispose of all fluids IAW with State and Federal Regulations.

3.9.1 The Contractor shall ensure any exposed areas on the hydraulic cylinders are lubricated with an appropriate light preservative and wrapped with moisture barrier paper prior to packaging.

3.9.2 The Contractor shall seal all hydraulic system openings using caps for externally threaded connection points, bolt-on blanks, or taped-on discs/covers made of durable plastic or sheet-metal that is no less than 1/16-inch thick.

3.9.3 The Contractor shall ensure storage protection of the shipping container and davit preservation is adequate for up to 3 years of outdoor storage.

4. NOTES

4.1 Davit information:

- National Stock Number: 2030-99-454-8999
- Item name: Dual Point Davit
- Part Number (PN): TW.PIV 5.0B
- Original Equipment Manufacturer (OEM): Welin-Lambie LTD

4.2 Shipping marking:

- National Stock Number (NSN) 2030-99-454-8999
- Item Name: Boat Davit, Dual Point
- Part Number: TW.PIV 5.0B
- Shipping weight: (as determined)
- Government Contract Number: (as determined)
- Statement: Coast Guard Material Condition F, 1 each
- Serial Number: (as determined)

4.3 Davit foundation preservation. Contractors will prepare, prime, and paint all exposed surfaces under and around davit foundation. (Touch-ups and minor coating)

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WORK ITEM 3: Welin-Lambie Model TW.PIV 5.0B Dual Point Davit, Shipping and Storage

1. SCOPE

1.1 Intent. This work item describes the requirements for the Contractor to store then ship a Government furnished davit from Contractor facility to designated place of performance, and ship the removed davit to the Coast Guard Warehouse.

1.2 Government-furnished property.

None.

2. REFERENCES

COAST GUARD DRAWINGS

None

COAST GUARD PUBLICATIONS

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

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

3.1.3.1 The Contractor shall store Government furnished Davit at their facility in a secure area in accordance with SFLC Std Spec 0000 until ready for shipment to job site.

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

3.2 Government furnished "A" condition Davit shipping. The Contractor shall ship the Government furnished condition "A" davit (provided on other work items in this Specification) from their facility to the designated place of performance. Shipping quote shall be submitted to the COR.

3.3 Removed "F" condition Davit packing and shipping. The Contractor shall package the removed davit in the shipping container vacated by the Government furnished davit in the same manner as the new davit to prevent damage during shipping and marked as "F" condition as specified in other work items in this Specification. The Contractor shall submit a CFR with photographs documenting the davit packaging to the COR for approval prior to sealing the container. The Contractor shall ship the packaged davit to the Coast Guard Warehouse. Shipping quote shall be submitted to the COR.

US Coast Guard Surface Forces Logistics Center
Coast Guard Yard, Bldg. 88
2401 Hawkins Pont Rd
Baltimore, MD 21226
Attn: Benjamin Wilhelms, ph. (571) 613-1689

4. NOTES

4.1 Davit information:

- National Stock Number: 2030-99-454-8999
- Item name: Dual Point Davit
- Part Number (PN): TW.PIV 5.0B
- Original Equipment Manufacturer (OEM): Welin Lambie LTD

4.2 Shipping marking:

- National Stock Number (NSN) 2030-99-454-8999
- Item Name: Boat Davit, Dual Point
- Part Number: TW.PIV 5.0B
- Shipping weight: (as determined)
- Government Contract Number: (as determined)
- Statement: Coast Guard Material Condition F, 1 each
- Serial Number: (as determined)