



USCGC HEALY (WAGB 20)

Service Life Extension Program (SLEP)

Information Brief for Arctic Icebreaker Coordinating Committee (AICC) Winter Meeting

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Agenda

- Program Overview
- Notional Milestone Schedule
- Notional Worklist



Program Overview



Maintain Capabilities

- The Coast Guard's current polar icebreaking capability consists of two polar icebreakers: USCGC *Polar Star* and USCGC *Healy*.
- Polar icebreakers provide access and presence to national strategic objectives in the Arctic and Antarctic.
- USCGC *Healy* provides unique support of the nation's strategic science efforts through partnerships with the Office of Naval Research (ONR) and National Science Foundation (NSF).
- 02 April 2024 ADE 2-A&B.
 - Authorizing the program to proceed.

Program Overview



Progress Updates

- Non-Requiring Engineering efforts are underway targeting the development for FY 27 and 28 availabilities.
- Installation of new science seawater ice grinder on track for completion during FY25 dockside availability.
- Developing Engineering Change and procuring Coast Guard GFE for new multi-beam sonar installation, targeting install during FY26 drydock availability.
 - Sonars ordered
 - Windows are being manufactured

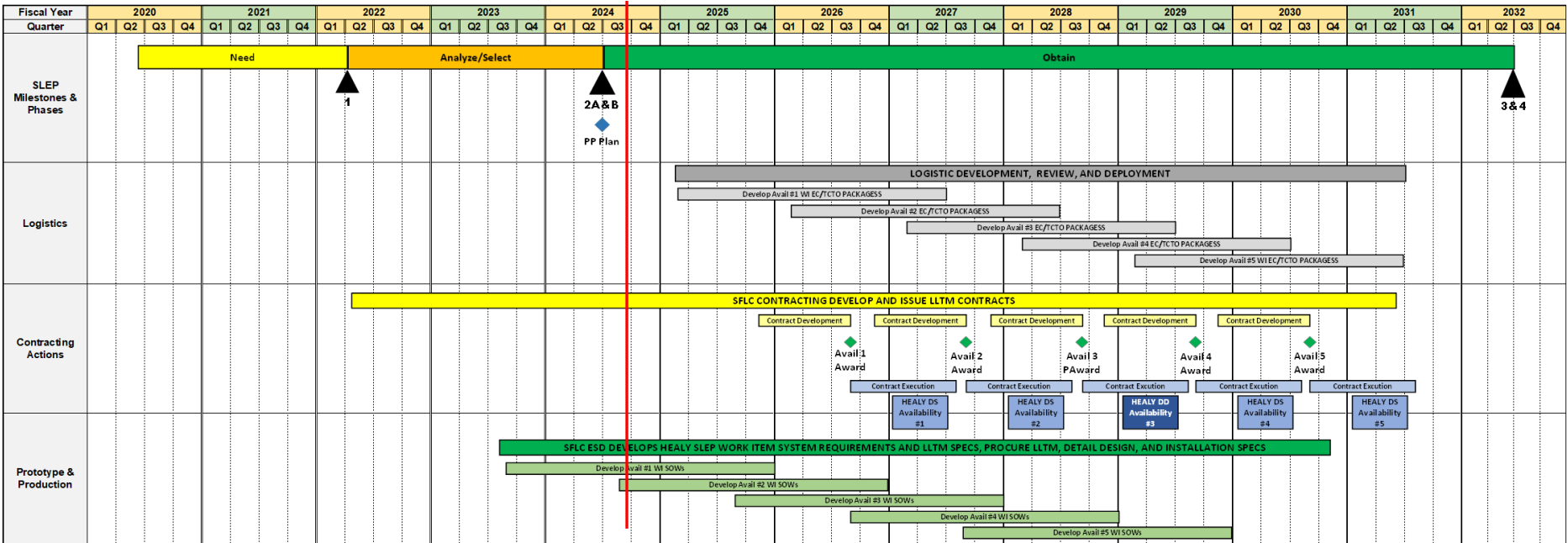
Notional Milestone Schedule

Key Assumptions & Applied Best Practices:

- SLEP will comprise of 5 availability “phases” scheduled around recurring Arctic missions.
- Will be using SFLC individual availability contracts.

HEALY SLEP

12/16/2024



Notional Work Schedule



Availability Year	WI #	Work Item Description
2025	34	Science Sea Water System Pump & Cyclone Separator
	54	Over-the-Side Weight Handling & Slack Cable
2026	19	Support NSF Sub Bottom Profiler (SBP 29) Installation
	65	Support NSF Multi-Beam Sonar System (EM304) Installation
2027		Currently planning for 20 WI's (see notional WI grouping)

Notional Work Schedule(cont.)



Availability Year	WI #	Work Item Description
2027	2	Weight and Moment Tracking / Incline & Stability
	3	Electrical Load Analysis - Update
	4	Create/Maintain Selected Record Drawings
	5	Heat Load Analysis
	6	Perform Sound Survey/Insulate Berthing Spaces
	7	MPCMS - Equipment Integration (IPP Contract Support)
	8	Recapitalize Auxiliary Boiler Components
	9	Recapitalize Science Data Network Infrastructure
	10	Recapitalize CGOne Network Infrastructure
	11	Aux Diesel Generator (M)
	12	Aux Diesel Generator (E) - Investigate Auto Start
	17	Recapitalize Science Network - Underway Connectivity
	18	Recapitalize CGOne Network - Underway Connectivity
	24	Recapitalize Steam Reducing Stations
	25	Main Motor Lube Oil Service System Sump Steam Heater Con
	26	Main Diesel Generator Pre-Heaters
	30	Recapitalize Ice Radar
	63	Recapitalize 1MC - General Announcing System
	81	Bow Thruster Soft Start System & Oil Pump Status Indicator
	83	Recapitalize Gyrocompass

Notional Work Schedule(cont.)



Availability Year	WI #	Work Item Description
2028	21	Ventilation Improvements /Fire Dampeners, Humidifiers, Trans Void
	22	Centralize Heating System Controls
	31	Recapitalize Closed Circuit Television System (CCTV)
	41	Recapitalize Steering Control System Components
	43	Recapitalize Sanitary System Components
2029	13	Recapitalize MSW & ASW Sea Water Piping
	14	Auxiliary Sea Water System (ASW) Pumps
	15	Main Sea Water System (MSW) Pumps
	16	Install Additional Sea Chest Isolation Valves
	27	Uptake/Intake Demisters, MDG Debris Screens & Intake Filters
	28	Recapitalize Climate Control Chambers A/C Compressors
	29	Recapitalize Anchoring Handling and Controllers
	32	Recapitalize Aloft Conning Station Controls
	33	Recapitalize WIFCOM
	49	Recapitalize 6MC Mast Speaker
	51	Galley Equipment - Recapitalize
	56	Starting Air Compressor Pressure Study
	57	Evaporator discharge

Notional Work Schedule(cont.)



Availability Year	WI #	Work Item Description
2030	23	Install Alternate Air Conditioning ASW Source
	44	Redesign Forward Freshwater Contaminated Tank
	52	Firemain Improvements
	59	Oceanographic and Trawl Core Winches Cable Management
	60	Correct Aft Uncontaminated Water Tank Piping
	66	Install Boat Davit Maintenance Deck
	68	Recapitalize Main Diesel Gen J/W & L/O Cooler 3 Way Valves
	2031	35
36		Upgrade Scientists & Junior Enlisted Crew Berthing
37		Recapitalize Warping Capstan Controllers
38		Recapitalize Fuel Oil Service System Valve Actuators
39		Fuel Oil Purifier Emergency Stops & Emergency Transfer XConn
45		Recapitalize Topside Cargo and Stores Handling Cranes LMS
53		AFFF - Recapitalize System
64		Decrease Hydraulic Power Units Noise & Vibrations
67		Recapitalize Potable Water Accumulators & Suction Piping
71		Recapitalize 60 Hz to 400 Hz Frequency Converters

Questions/Discussion

