

US COAST GUARD POLAR ICEBREAKERS



Polar Engineering Status Brief
AICC Meeting December 2010
LCDR Michael Ciaglo

HEALY (WAGB-20)

- Returned from successful AWS '10 Mission in October.



HEALY (WAGB-20)

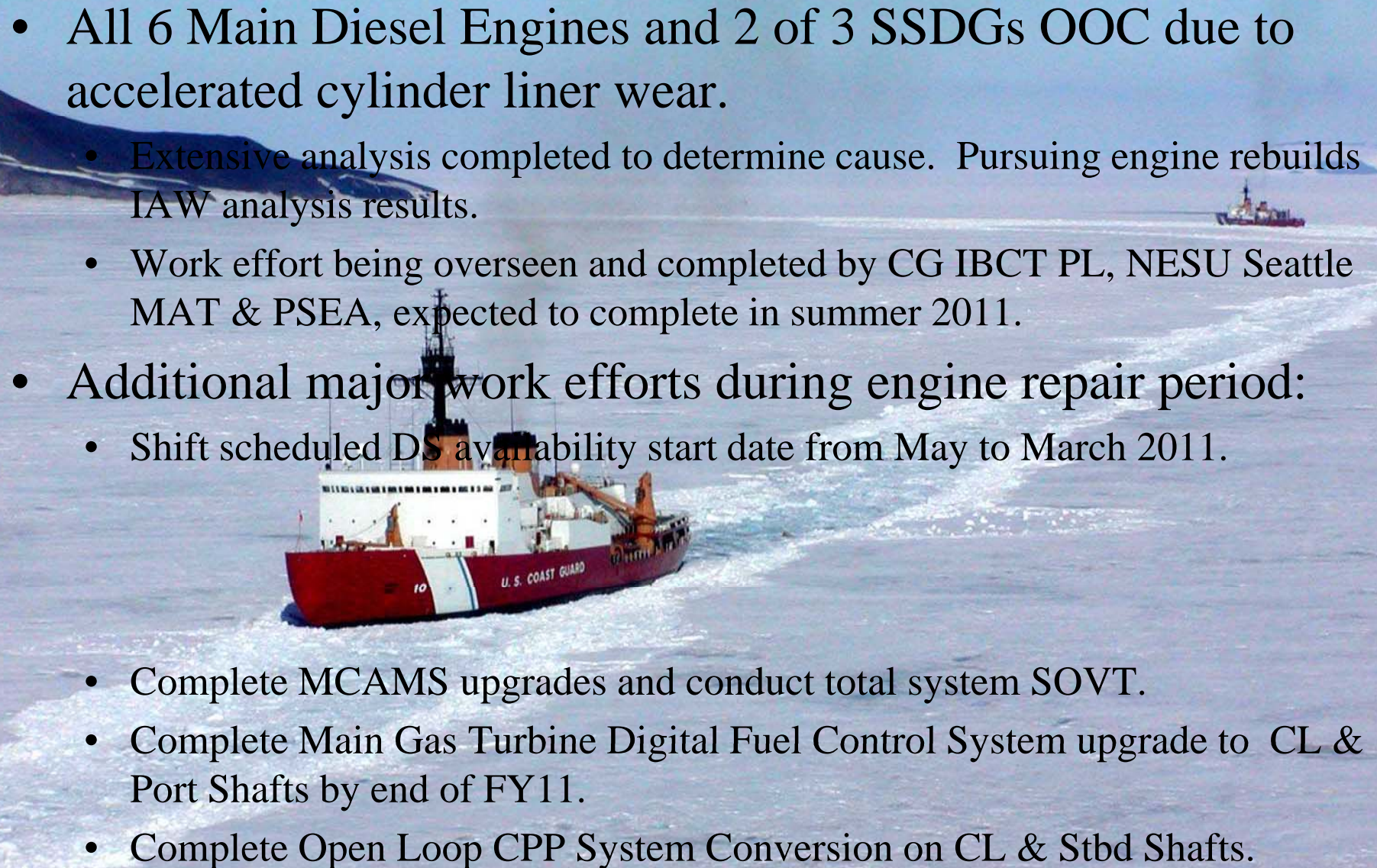
- Is currently conducting TSTA and has a DS availability scheduled to begin in January '11.
- Major work scheduled for FY11 DS include #2MDE center section overhaul, start air compressor upgrade and IPP system upgrade.

POLAR SEA (WAGB-11)



- Completed scheduled drydock availability at Todd Pacific Shipyards Sept '10.
 - Major recap work was relocation of small boat davit aft and final propulsion control system upgrade.

POLAR SEA (WAGB-11)

- All 6 Main Diesel Engines and 2 of 3 SSDGs OOC due to accelerated cylinder liner wear.
 - Extensive analysis completed to determine cause. Pursuing engine rebuilds IAW analysis results.
 - Work effort being overseen and completed by CG IBCT PL, NESU Seattle MAT & PSEA, expected to complete in summer 2011.
 - Additional major work efforts during engine repair period:
 - Shift scheduled DS availability start date from May to March 2011.
 - Complete MCAMS upgrades and conduct total system SOVT.
 - Complete Main Gas Turbine Digital Fuel Control System upgrade to CL & Port Shafts by end of FY11.
 - Complete Open Loop CPP System Conversion on CL & Stbd Shafts.
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POLAR STAR (WAGB-10)



- Mid-way through a 3-year, \$57M effort to restore STAR to operational capability and extend its service life by 7 to 10 years.

POLAR STAR (WAGB-10)

•Major System Upgrade Status:

- Main Motor Cleaning: #2 MM clean, dried, reassembling. #3 drying. #1 after CPP.
- Main Diesel Engine Upgrade: Blocks moving into ship, assembly w/ Honey Chrome cylinder liners in process.
- Open Loop CPP System Conversion: Rip outs complete, assembly during DD.
- CHS Removal/Crane Renewal: Rip outs complete, 3-ton crane first article test complete, assembly during DD.
- Gyro Upgrade: 75% complete, op test prior to end of 2010.
- Small Boat Davit Upgrade: Rip outs complete, awaiting outcome of OT&E of Miranda davit on SEA prior to finalizing davit type and location. Will be completed after DD.
- Aft Stern Tube Bearing Renewal: Scheduled for completion during DD.
- MCAMS Upgrade: Scheduled for completion during DD.
- MGT Digital Fuel Control Upgrade: Scheduled for completion during DD.



Questions?

