

US COAST GUARD POLAR ICEBREAKERS



Polar Engineering Status Brief
AICC Meeting March 2012
Mr. Ryan Young



- Who I am & where we fit
 - Maintenance
 - Corrective
 - Preventive
 - Alterative
- What we are interested in vis-à-vis science
 - Insight & input into scheduling, via channels
 - Cooperation on Configuration Changes
 - Strategic
 - Tactical – via Scott Hiller



HEALY (WAGB-20)

- Returned from successful and extended AWS '11 Mission in February.



HEALY (WAGB-20)



- Is currently conducting a DS availability scheduled to end in May '12.
- Major work scheduled for FY12 DS include MPCMS upgrade, start air compressor upgrade and IPP system upgrade.
- Post DS work will include regular maintenance and Winch Groom



HEALY (WAGB-20) Science TCTO Status



- Winch Control System – Prototype Authorization to be issued NLT April 12
- LED “Backboard” – Prototype Authorization to be issued NLT April 12
- ADCP Relocation – Prototype Authorization granted
- TSG/PCO₂ Relocation – Prototype pending USCG/US Naval Ship standards compliance
- Van Relocation – Study being conducted by Elliott Bay Design Group
- Photo, Computer, Future Lab Renovation – Will begin TCTO process late FY12 or earlier with STARC TCTO development

POLAR STAR (WAGB-10)



- Nearing completion of a 3-year, \$67M effort to restore STAR to operational capability and extend its service life by 7 to 10 years.

POLAR STAR (WAGB-10)

Reactivation intended to add 7-10yrs of additional service life thru:

- Major System Upgrades
- Restoration of laid up systems
- Completion of backlogged maintenance
- Rehabilitation of habitability spaces

Intent of Reactivation is NOT to improve operational capability, but will substantially improve reliability of historically troublesome systems.

All HM&E work to complete NLT Dec 2012, Sea & Ice Trials thru 2013

Ready for Operations November 2013

Currently in Reactivation Phase 4 Dockside (4DS) @ Vigor Shipyard

- Phase 1 Condition Assessment in 2009
- Phase 2 Dockside, May-Dec 10
- Phase 3 Dry Dock, Jan-July 11
- Phase 4 Dockside, Aug 11-May 12
- Phase 5 Dockside, May-Dec 12



POLAR STAR (WAGB-10)

- Major System Upgrade Status:

- Main Motor Cleaning: All Motors Cleaned
- Main Diesel Engine Upgrade: Receiving FME Parts. Continuing to reassemble engines and load bank in sequence of completion.
- Open Loop CPP System Conversion: Complete
- CHS Removal/Crane Renewal: Install complete with exception of electrical.
- Gyro Upgrade: Complete
- Small Boat Davit Upgrade: Will be completed after DS.
- Aft Stern Tube Bearing Renewal: Complete
- MCAMS Upgrade: Scheduled for completion during DS.
- MGT Digital Fuel Control Upgrade: Scheduled for completion during DS.



Questions?

