R/V HUGH R. SHARP (UNOLS Annual Meeting – October 2005)

CURRENT SCHEDULE

- CAPE HENLOPEN retired from service October, 2005
- New Vessel delivered to east coast early <u>December, 2005</u>
- Cross-deck/final outfitting period December '05 February '06
- New Vessel to begin operations in late <u>March 2006</u> following NSF Inspection and final test & trials in Lewes.

Preliminary Acoustic Trials (September 2005 in Puget Sound)

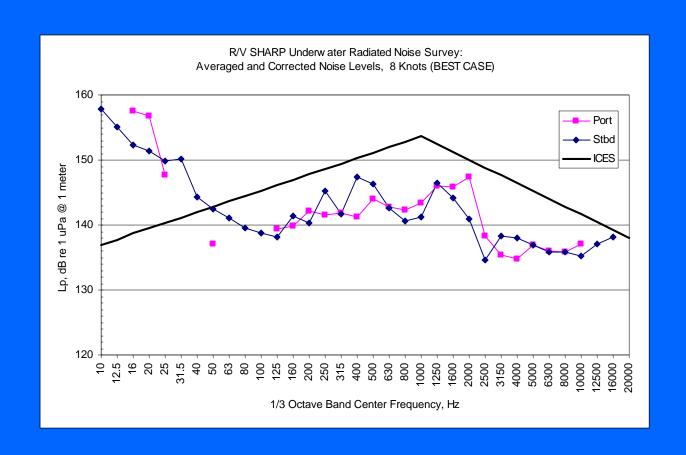
• NCE conducted extensive airborne, vibration, and underwater radiated noise measurements while vessel was underway.

Underwater radiated noise goal:

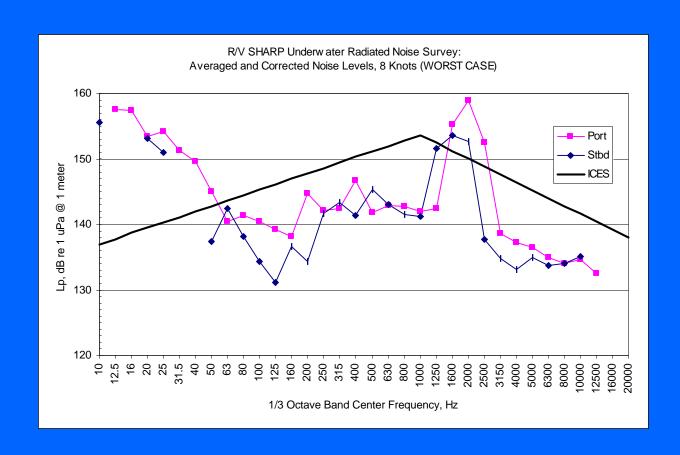
Below the ICES curve at 8.0 knots

- Preliminary results appear to be excellent.
 - Significant propeller cavitation does not appear until ~10.0 knots.
 - 60 dB reduction in gen-set noise transmission to hull from double-stage raft.
- Only machinery excess is "gear mesh" tone from Z-drives.
 - To be remedied by adding additional noise treatments to hull in motor room.
 - Working with Schottel to ensure not a mechanical problem.
- Formal acoustic trials planned for late October at Dabob Bay.
 (Submarine/torpedo test range near Seattle).

Comparison to ICES Curve (Best run at 8.0 knots)



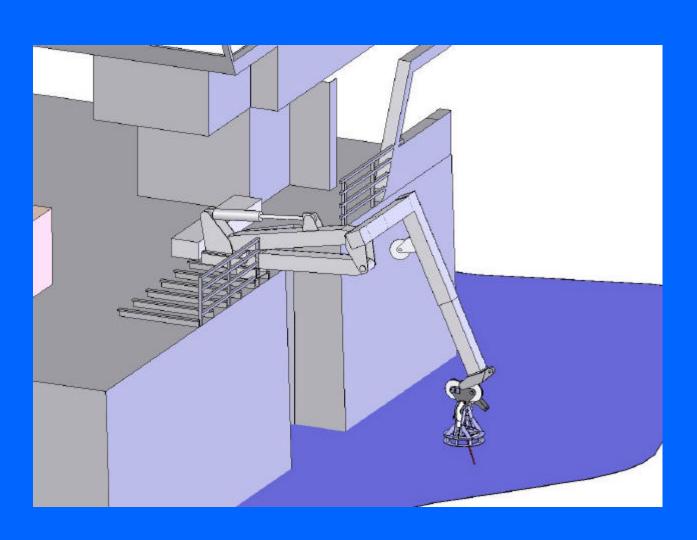
Comparison to ICES Curve (Worst run at 8.0 knots)



CTD Handling System (Caley Ocean Systems)

- "Next Generation" system based on results of UNOLS Load Handling System Study.
- All-electric AC winch.
- Motion Compensation by winch pay-in/pay-out and MRU.
- Docking Head with "Auto-Tension" capability to capture the science package.
- "Slip Mode" pay out under tension when towing.
- Delivered in January 2006.

CTD Handling System (Caley Ocean Systems)



Launch - July 16th



Preliminary Acoustic Trials



Preliminary Acoustic Trails



More to follow...