

# APPENDIX XII

## DUKE / UNIVERSITY OF NORTH CAROLINA OCEANOGRAPHIC CONSORTIUM

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Memo to: Unols Fleet Improvement Committee February 2, 1996

From: Quentin Lewis, Marine Superintendent

Subject: R/V CAPE HATTERAS midlife refit

At the present time, conditions look favorable for a stretch of the HATTERAS in 1998, assuming both NSF approval and funding. Tidewater Navel Architects of Norfolk, Virginia, was hired in late 1995 to perform an initial feasibility study of the HATTERAS concerning a midbody extension. Two items were addressed;

- 1) What is the largest midbody that can be added keeping the vessel under 500 Gross tons (the cutoff point for Uninspected Vessels)?
- 2) Could My midbody be added and still allow the vessel to retain its warrant uninspected status?

The answer to #1 is that, based on preliminary tonnage calculations, a 23 foot midbody could be added.

The answer to #2 has not been officially received yet, but all indications from ABS and USCG are that a midbody could be added without a vessel status change.

We are planning to officially propose Phase I (Feasibility study) to NSF this spring. If this is approved and completed in 1996, then Phase II (Contract Design) and Phase III (Detail Design) would be proposed in January, 1997, During 1997, Phase II and III would be completed, and Shipyard Bid Packages sent out by November, 1997. Phase IV (Construction) would be proposed late in 1997. If funded, the actual midlife would be completed during the first half of 1998.

Items to be included in the midlife refit (with stretch) are:

- Addition of 16 - 20 scientific berths
- Renovation of ship's HVAC system (switch from central units to compartment units)
- Addition of bow thruster
- Renovation and reorganization of Main Lab and Wet Lab spaces
- Renovation and addition of space in Cold, Frozen, and Dry Galley Stores
- Addition of Scientific storage space
- Ship's propulsion and electrical systems have been previously determined to be adequate for up to a 24 foot midbody.