APPENDIX XIII

Date: 2 February 1996

To: UNOLS
From: Rick Jahnke, Skidaway

SUBJECT: BLUE FIN REPLACEMENT

The Skidaway institute of Oceanography has initiated the process to procure a new research vessel. This vessel will be used for a variety of research and educational activities primarily within the South Atlantic Bight region. It is anticipated that no single type of activity will dominate the vessel use and that the design and outfitting of the vessel will need to be flexible to accommodate a variety of instrumentation and personnel needs.

After reviewing a variety of ship types, it has been decided that a monohull offers the flexibility in payload and operations that best meets our needs. While SWATH vessels clearly offer certain advantages for underway survey work, on station stability and payload appeared unsatisfactory for our purposes (especially in the size of vessel we considered),

We are presently reviewing a conceptual design that has been submitted to SKIO by Intermarine, a local shipyard. This design describes a 87' monohull constructed of fiberglass reinforced plastic. Propulsion is still under discussion but their present recommendation is twin water jets driven by Detroit Diesel engines. Without propellers and rudders, the draft would be slightly less than 6', facilitating work in the shallow estuaries and sounds of the SAB. The boat could be operated by a crew of 2 on short trips and up to 4 on longer trips. Accommodations are currently 18, 4 reserved for crew, 14 for science. Deck outfitting would include a stern A frame, starboard I frame, three winches (trawl, hydro, conducting) with 1000 m of wire each, and a crane with approx. 25' reach mounted on the main deck. Roll would be slowed by a 10 cubic meter stabilizer tank. Cruising speed is 12 knots. The present estimated cost is $2.2M and we are presently negotiating with the state to get as much of this up front as possible.