APPENDIX IX

UNIVERSITY OF Miami
THE ROSENSTIEL SCHOOL

September 18, 1996

Dr. Kenneth Johnson
Chair - UNOLS
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Dear Ken:

You wrote to me some time ago regarding the ideas and plans that we are developing for the replacement of the Calanus. In the letter, you described the typical process that has been used for research vessel design, including the role of the UNOLS Fleet Improvement Committee (FIC), the development and preparation of a set of Science Mission Requirements (SMRs), and the involvement of the user community. I would like to provide an update of the various aspects of our design process.

RSMAS has been considering a replacement for the Calanus for some time but it has been a lengthy and complex process. In 1993 and 1994, the Rosenstiel School's Ship Operations Committee held numerous meetings with Calanus internal and external users to define characteristics such as size, shape, type, length, and draft. From these discussions, the primary determination, driven by the requirement for a shallow draft vessel to work in Florida Bay, the Florida Keys, and the Bahama Banks, was that the vessel needed to be a catamaran.

We were aware that during this period discussions were taking place about coastal zone research and that there was a growing recognition of the importance of the near-shore areas and the stresses being placed on them. Concurrent with this was discussion on funding for the research and the platforms which would be required to accomplish it. In the June 1994 UNOLS Fleet Improvement Plan Update, FIC produced a set of general characteristics and scientific capabilities, and also stated that mission requirements (SMRs), and design will vary from region to region. Subsequently, FIC was to produce SMRs and proposed designs tailored to each region. We are not aware that these SMRs have been completed to date.

In the Florida Bay region particularly, several large research and monitoring programs are progressing and more are being proposed. We believe that there is an urgent requirement for a shallow draft vessel to service these regional needs. Consequently, we developed a set of draft SMRs and assembled a list of general characteristics. Concurrently, fund raising activities were started to support the construction of the vessel.

Design issues were many and varied. A preliminary design contract was let to Lock Crowther and Associates. While this firm produced preliminary plans, this approach was terminated because of high initial construction cost estimates and the death of Mr. Crowther. The option of a stock catamaran hull was explored and discussions were held with various yards to obtain preliminary cost estimates. After visits to and cruises aboard a number of catamarans, the consensus was that a stock design meeting the draft and load carrying requirements could be configured to a shallow draft coastal zone research vessel and built for a reasonable cost. The decision was made by the Rosenstiel School's Ship Operations Committee to proceed with this approach.

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To obtain broader community input, in mid-1995 a presentation of the concept, backed by the list of general characteristics and the draft SMRs, was made to the South Florida Coastal Zone Workshop. The concept was also reviewed by groups in the region such as Florida Institute of Oceanography, NOAA's Atlantic Oceanographic and Meteorological Laboratory, Harbor Branch Oceanographic Institution, and individuals at Texas A & M and University of Texas, member institutions of SECOR. The responses, ideas, and input were incorporated using the 1994 FIC guidelines, where applicable. I believe that you will find reasonable agreement with their suggested general scientific capabilities for small expedition vessels. To date, we have held discussion about construction with three groups, two of which have prepared initial profile and deck layout sketches.

I appreciate your letter of support for our efforts and trust that this information about our design process concurs with the UNOLS perspective of the appropriate design process.

Regards,

Otis Brown
Dean