APPENDIX VIII

DUKE/L.M. GOULD UPDATE

- ORIGINAL TEN YEAR CONTRACT NEARING COMPLETION (ACTUALLY BEYOND)
- CONGRESS REQUIRES A U.S. FLAG/U.S. YARD SHIP
- "DUKE-LIKE SHIP AT DUKE-LIKE PRICE" SOUGHT. NOT A NEW CAPABILITY BUT CONTINUANCE OF EXISTING REQUIREMENTS
- 5 YEAR INITIAL TERM, WITH OPTIONS TO 10 YEARS
- 2 YEAR CONTRACTUAL PROCESS COMPLETED APRIL 18, 1994
- THREE COMPETITORS
- CLEAR WINNER (PRICE & TECHNICAL) ECO
- VESSEL DELIVERED O/A 1 JUNE. 1997 IN LOUISIANA

SHIP PARTICULARS

	L.M. GOULD	DUKE
CLASS:	ABS-A1	BALTIC SEALER
AGE:	NEW BUILD	1983
DIMENSIONS		
LENGTH	230 FT	219 FT
BREADTH	46 FT	43 FT
DRAFT	18 FT	19 FT
GR. TONS	1599 TONS	1594 TONS
HORSE POWER	4200 BHP	4500 BHP
PROPELLER	2-VAR PITCH	1-VAR PITCH
KORT NOZZLE	KORT NOZZLE	
ACCOMMODATIONS	44	41
LAB SPACES		
WET LAB	425 FT2	400 FT2 (MAX)
HYDRO LAB	426 FT2	300 FT2 (MAX)
DRY LAB	356 FT2	300 FT2 (MAX)
ELECT. LAB	420 FT2	400 FT2 (MAX)
AQUARIUM	6 TANKS	6 TANKS
CARGO	9 MILVANS	7 MILVANS

ARSV SUBCONTRACT WITH EDISON CHOUEST OFFSHORE MODIFICATION NO. 1:

- A. The purpose of this no cost modification to the ASA Subcontract No...... is to incorporate technical and schedule changes to the proposed design and delivery of the Antarctic Research and Supply Vessel provided for in the referenced Subcontract.
- B. The vessel subcontracted for, designated ARSV by ASA and assigned Hull No. 154 by North

American Ship Building, will be named the R/V L.M. GOULD. -

- C. The schedule for delivery of the vessel is changed by this modification to:
 - 1. Vessel delivery at Pt. Fourchon, Louisiana
 - 2. On or about 1 June 1997, after the successful completion of dock and sea trials.
 - 3. The attached schedule (attachment 1), produced by NASB, is incorporated into the subcontract.

D. Technical changes:

All structural and equipment changes and additions must be in conformance with the environmental, classification and other regulatory rules which apply to the vessel and as noted in the technical requirement of the RFP and the subcontract for the vessel.

- 1. Add an Oceanographic Staging Hanger to the starboard side, aft of the Dry Lab. One GFE oceanographic winch is to be installed at the inboard end of this space to service an installed telescoping boom with five ton capacity and an outboard reach of 15 feet. The room shall be constructed so as to provide access to the telescoping boom and the starboard A-Frame. The door to the outboard side shall be hydraulically actuated, and with at least 8 feet of clearance, side to side. Overhead clearance from the sill must be no less than 15 feet. The staging hanger shall be designed and constructed in a manner similar to that of the staging hanger on the R/V N.B. Palmer.
- 2. The starboard side A-frame, provided for in the original vessel design, shall be relocated further aft to make room for the Staging Hanger. The A-frame shall now be centered near the rail at approximately frame #73.
- 3. Add an Aft Control Station with winch, boom and maneuvering controls, to the aft end, outboard corner of the Staging Hanger. This room should have good visability to the working decks and machinery, and have communications with the laboratories, Staging Hanger and the bridge.
- 4. Add a access door between the Wet Lab and the Aquarium Room.
- 5. Move access door to the main deck Scientific Stores Room further aft.
- 6. Reverse day room and bed room arrangements in the NSF rep. and MPC cabins; acoustically insulate the bulkheads of these cabins which are adjacent to the lounge/conference room and the exercise room respectively.
- 7. Remove the Pyrotechnique Locker and expand the Paint and Hazardous Materials Lockers with the resulting space.
- 8. Install a Hot Tub near the Sauna on 01 deck. Space is available as a result of NASB's redesign and relocation of HVAC units.
- 9. Consider modularity of furniture in Lounge in order to make the space more flexible and useable as a conference room and study area.
- 10. Install a Moon Pool of at least 1 meter diameter through the hull, starboard side, inboard, approximately at frame #73. Moon Pool must have a cover flush with the main deck.
- 11. Add a chain hoist boom over the access hatch to the lower hold sciencecargo area. ASA will provide the chain--hoist for this boom.
- 12. Add a Scientific Instrumentation Mast, aft of the ship's main mast, with a platform of equal height to the ship's mast, similar in construction to the mast on the R/V N.B. Palmer, or a more appropriate design, such as the new NASB tripod masts now being installed on some ECO vessels. The mast should have an access ladder and a platform for the installation of various antennas. Final design of this antenna must be approved by the ASA technical manager for this project.
- 13. Acoustically insulate the Mess Hall to significantly reduce hull transmitted noise during ice transits. Acoustically insulate the decks; acoustically and thermally insulate the peripheral bulkheads; use acoustic, perforated ceiling tiles in the overhead.
- 14. Provide 220 v., 60 Hz. current for science freezers to be located by ASA in the science cargo hold and storage area on the main deck.
- 15. Unistrut should be installed in the laboratory decks. This is noted in the RFP technical requirement,

- but requires clarification.
- 16. Extend the ship's main crane so that it will reach beyond the stern to the point where a wire from the stern A-frame fully extended, would enter the water, and so that the crane will reach over the port quarter, at least 15 feet clear of the side of the ship. The lifting requirement for this crane remains as stated in the Technical Requirement.
- 17. Attachments 2,3 and 4 indicate the changes to the general arrangements of the vessel as reflected by this modification.

(Note: Attachments 2-4 are line drawings of the decks. Copies of these attachments and the building schedule are available from the UNOLS Office.)