## APPENDIX XXII

## **ROPOS STATUS**

- 1. ROPOS lost when Thompson suprised by fast-moving storm while diving at Middle Valley to investigate venting initiated by ODP drilling.
- 2. NOAA-designed ROV manifold sampler successfully used on ROPOS during Middle Valley ops was lost with vehicle. However, deployment demonstrated that ROV's can be used for multiple, high-quality water sampling at vents.
- 3. ROPOS was insured but initial reaction from DFO was not favorable to replacement. E-mail appeal from community turned tide and final decision is to replace.
- 4. Insurance underwriters have accepted loss and we are presently negotiating final amount of claim.
- 5. New vehicle will most-likely be built by ISE. CSSF will participate directly in construction to bring improvements to vehicles based on operational experience. Estimated time for reconstruction and sea trials is 16 weeks. Work should start early January.
- 6. All winch mods for full depth diving have been completed. A single dive to 4960 m was conducted in Aleutian Trench in July. A total of 17 hours of bottom time at full depth were logged during this dive. During recovery of vehicle at end of this dive there was a massive failure of optical fibers in new 5000 m cable.
- 7. Vector Cable has acknowledged responsibility for failure of cable and they are working on a design for a new cable. We have requested delivery by April 1997. In the mean time we can continue to use our 3500 m Rochester cable.
- 8. The ROPOS system may be available in the Atlantic in late summer of 1997, following diving ops on the Polarstern (July 1 Aug. 15), if there are interested (and funded) users. The Polarstern cruise will involve diving in the Arctic Basin, under the ice, to depths of 4400 m.