

XV. Oceanography- Government

Section XV outlines plans for United States Antarctic Program sponsored oceanographic expeditions during the 1997-98 season.

R/V NATHANIEL B. PALMER

The R/V NATHANIEL B. PALMER first arrived in the Antarctic Peninsula area in April 1992. The vessel is owned by Edison Chouest Offshore and is of United States Registry. The vessel will be on long-term charter to support the United States Antarctic Program. The R/V NATHANIEL B. PALMER is ice-classed ABS A2, is 93.9 meters long, has a beam of 18.3 meters, a design draught of 6.9 meters, and displaces 6800 long tons. The vessel has 13,000 shaft horsepower driving two controllable pitch propellers. The vessel has a crew of 26 and accommodation for 39 scientists.

Research Capabilities.

The vessel is equipped with a satellite precision navigation system, side-looking and fish-finding sonar, INMARSAT communications and HF and VHF transceivers. The vessel is equipped with Dynamic Positioning. A deep sea trawl and coring winch and two hydrowinches are operated through stern and starboard A-frames. One hydrowinch, equipped with electromechanical cable, leads through a baltic-room arrangement, protected from the weather. The vessel is equipped with multi-channel seismic capability, a swath multibeam bathymetric system called SeaBeam, and is equipped with laboratories totaling approximately 520 square meters, all located contiguously on the main deck. The vessel also has a suite of portable lab vans.

Ship's Masters: Captain Joe Borkowski and Mike Watson.

Scientific Programs in the Antarctic Treaty Area

The R/V NATHANIEL B. PALMER will conduct cruises in the Southern Ocean surrounding Antarctica, including Physical and Chemical Oceanography, Marine Geology and Geophysics, and Marine Biology.

Intended Tracks and Schedule

The vessel is currently scheduled for work in the Weddell and the Ross Sea. Ports of call include Punta Arenas and Talchvano, Chile, Lyttleton, New Zealand, and McMurdo Station, Antarctica.

R/V LAURENCE M. GOULD

R/V LAURENCE M. GOULD is scheduled for completion and dedication in October 1997. The R/V LAURENCE M. GOULD is owned by Edison Chouest Offshore and is of United State Registry. The vessel will be on long-term charter to support the United States Antarctic Program. The R/V LAURENCE M. GOULD is ice-classed ABS A1, is 14.02 meters, has a design draught of 5.48 and displaces 3400 long tons. She will be a multidisciplinary research platform, designed for year-round operations in polar regions.

Research Capabilities

It is anticipated that the R/V LAURENCE M. GOULD will have the same research capabilities and be outfitted similar to the R/V POLAR DUKE. The vessel will be equipped with a satellite precision navigation system, side-looking and fish-finding sonar, INMARSAT communications and HF and VHF transceivers. A deep sea trawl winch and two hydrowinches are to be operated through a stern A-frame and starboard side-hydro davit. Various over-the-side sampling equipment will be handled through use of an articulated Hiab crane on the ship's fantail. The vessel will also have single channel seismic capability. In addition, it is equipped with laboratories totaling 99 square meters and an additional 27 square meters in portable laboratory vans. Zodiacs will be available for ship-to-shore transport and sample collection.

Ship's Masters: Captain Joe Borkowski and Captain Warren Sanamo

Scientific Programs in the Antarctic Treaty Area

The R/V LAURENCE M. GOULD will support research and logistic support cruises October 1997 through September 1998. Research to be conducted includes biological, chemical, and physical oceanography as well as marine geology and geophysics. The R/V LAURENCE M. GOULD will also serve to transport scientists, cargo, and personnel to/from Palmer Station.

Intended Tracks and Schedule

The R/V LAURENCE M. GOULD is scheduled to begin the 1997-98 season at sea from Punta Arenas, Chile, October 14, 1997. The vessel will transport support personnel to and from Palmer Station on this and all other cruises. The vessel will perform approximately 11 cruises in the Antarctic Peninsula area during 97-98 season.

R/V ROGER REVELLE

The R/V ROGER REVELLE, built in 1996 is a U.S. Navy owned, University of California, San Diego, Scripps Institution of Oceanography, operated general purpose undocumented oceanographic research ship. A member of the UNOLS fleet, the vessel operates under U.S. flag, is inspected under U.S. Coast Guard rules for oceanographic research vessels and is registered in the state of California. R/V ROGER REVELLE is rated ABS Class A1 and Ice Classed 'C' and 3180 Gross Registered Tons. The ship has an overall length of 83.3 meters, a registered length of 75.38 meters, beam of 16 meters and a maximum draft of 5.2 meters. Propulsion is diesel electric, 6000 shaft horsepower, driving two 360 degree azimuthing Z-Drive LIPS thrusters. A bow thruster is installed. The vessel has a crew of 22, with accommodations for 37 scientists.

Research Capabilities

The vessel is equipped with satellite precision navigation system, multibeam ocean bottom mapping capability, INMARSAT communications and full GMDSS capabilities.

Dynamic Positioning System is installed. Installed winches include a double drum, deep sea trawling/coring traction winch usually equipped with mechanical and electromechanical cables located below decks. Cables are led through the stern A-Frame or a port side trawl crane. There are two topside hydrographic winches capable of handling both mechanical and electromechanical cables which are deployed via a hydroboom on the starboard side. In addition, the ship carries several portable winches. Seismic capability is available. There are laboratories totaling approximately 372 square meters, all located contiguously on the main deck. There is also a suite of portable laboratory vans.

Ship Masters: Captain Thomas Desjardins and Captain Albert Arsenault.

Scientific Programs in the Antarctic Treaty Area

R/V ROGER REVELLE will conduct 4 scientific cruises in support of the JGOFS program between October 1997 and March 1998. Research in support of this program includes physical and chemical oceanography and marine biology.

Intended Tracks and Schedule

All four cruises will depart from and return to Lyttelton, NZ. Each one will proceed to 65 degrees South Latitude at some point. It is estimated that approximately 5 days will be spent south of 60 degrees South Latitude per cruise. All operations in the treaty zone will occur between 60 and 65 degrees South