

POLAR SEA DEPLOYMENT DEEP FREEZE 87

The day was November 8, 1986. POLAR SEA departed on its long awaited DEEP FREEZE deployment. The ship and her crew had worked hard the past summer, during REFTRA, and in the weeks before departing loading stores and supplies for the long deployment.

Our arrival in Port Hueneme, CA on 11 November brought the loading of all cargo, hazardous cargo, frozen foods, a NOAA data buoy to be offloaded in Valparaiso, Chile and associated gear. The cargo brought aboard weighed approximately 224,715 lbs. (112.4 tons). Although most of the crew watched as stevedores loaded it aboard we all knew we were the ones who would unload it in the months to come. All said and done, both upper and lower cargo holds were filled, deck loads were carried between Baxter Bolts on the port and starboard O1 decks at frames 143 and 154 and previously installed tiedown pads on the O2 deck between the fore and aft deck houses allowed all other deck cargo, primarily lumber, to be loaded in that location. On 12 November AVDET 115 arrived with 12 new crewmen, a few of which had sailed POLAR SEA in the past. Once all was loaded we set sail for a 1 day transit to Long Beach, CA to take on fuel on 14 November.

Puerta Vallarta, Mexico was our first foreign liberty port. It's located half way down the Mexican coast. We anchored approx. 2000 yards off shore logging 32 hrs. of small boat runs, and spent 4 relaxing days in the tropical climate. Some of the good times included parasailing, the Bora Bora cruise and beach ops. POLAR SEA pulled the hook and got underway on 24 Nov. enroute Valparaiso.

On 1 Dec. POLAR SEA was diverted toward Callao, Peru on 30 November to evacuate a member of the ship's company suffering from appendicitis. On 2 December both helicopters were launched 60 miles offshore to fly AE2 Schmitt, Doc Peterson, and SN Dorral (who spoke Spanish), to Lima, Peru. The American Embassy had misunderstood the medevac request and had only obtained permission for the flight to enter Peru. The aircraft remained overnight at the Peruvian Navy ramp due to a 24 hour processing delay for departure clearance. Both helicopters returned to POLAR SEA on 3 December. The CO granted liberty for those in the crew who wished to explore Callao and Lima. We anchored off Peru for only 48 hrs.

On 5 Dec. we set course for the five day leg to Valparaiso, Chile. Our port call in Valparaiso lasted 3 days in which we all enjoyed good food, weather and beautiful sights. One of the highlights of the port was the tour of town and horse back riding in the out back, and of course the saddle sores.

Two days out of Valparaiso we encountered the roughest seas of our deployment, lucky enough for those who had a tough time in them we entered the Patagonia Passage the next day. Passage through the Patagonian channel and Straits of Magellan allowed the crew a respite from the foul South Pacific weather as well as a chance to view the striking scenery along this part of the world's waterways.

After completing cargo operations off Punta Arenas POLAR SEA moored at Cabo Negro to commence fueling operations. The phone exchange was in Punta Arenas was to be a very popular place where we all made our last call from South America to our loved ones. One of the impressive sights was the parade in which the Chilean armed forces were present. We took onboard 396,231 gallons of DMF, that would last us until we would get to Antarctica.

POLAR SEA was now on her way to Palmer Station to off load our cargo. We crossed the Drake Passage expecting some of the worst seas in the world. As it happened throughout DEEP FREEZE we had luck on our side. The passage gave us no problems. The first icebreaking of the deployment occurred just north of the Palmer Archipelago during this leg. POLAR SEA's transit through the Gerlache and Bismark Straits went smoothly though fog reduced visibility to less than 2 miles over most of this part of the transit. 22-25 December '86; Palmer Station, Antarctica. Offloaded cargo (186,069 lbs. — 93.0 tons). On-loaded retrograde (22,618 lbs. — 11.3 tons). 1,035.5 Man-hours. Cargo was off-loaded by ship's LCV's. The lumber was man-handled to the flight deck, banded and lowered to the LCV's with the use of the ship's cranes making a very efficient and effective operation.

On our thirteen day passage from Palmer Station to Cape Washington and McMurdo Station we encountered sea ice on nine of the days. We entered the pack ice in the northern Ross Sea on 31 December to reduce the ship's motion so that the Aviation Department could change out the transmission in copter 10. The change out was completed just prior to the helicopter's use for the pull out of the Cape Washington science party. We believe that this is the first time a helicopter transmission has ever been changed out while underway.

5 January 1987; Cape Washington, Antarctica. On-loaded cargo (5,000 lbs. — 2.5 tons) 66.0 man-hours. Cargo was loaded by crane from the ice and helicopter VERTREP. Here most of the crew experienced the sight of killer whales in the wild. All cameras were on the flight deck.

On arrival at the McMurdo sound fast ice on 8 January there was over 32 miles of ice between the open water and hut point. The ice was first year sea ice from the fast ice edge to about 4.5 miles from hut point and second year ice for the remainder of the distance. At the fast ice edge the ice was 48 inches thick and increased to about 120 inches at its thickest in the second year ice. The McMurdo channel break out consisted of four operations; the initial cuts, forming the turning basin and Winter Quarters Bay boundaries, assisting the fast ice deterioration and improving and tending the channel and turning basin. Throughout the McMurdo break out we had expected to find a SSW wind however the wind seldom blew from this direction and more often than not we experienced strong winds from the north. The ice was covered with 6 to 12 inches of snow in most places. As the season and channel cutting progressed the fast ice began to break up naturally in some places and with our assistance in other places. Forming the remaining channel and the working boundaries of the turning basin and Winter quarters bay required backing and ramming using all 3 turbines churning up McMurdo Sound at 75,000 horsepower. This operation took place in the second year ice which proved to be very tough and "icebreaker resistant" (although by our accomplishment of the task we have shown that it was not "POLAR SEA PROOF.") The channel was continually widened and the constricting points in it were smoothed out by both scarfing and by cutting parallel channels close enough that the broken ice would relieve into the brash of the original channel. Our mission completion was only possible due to the efficient Engineering Department aboard. USCGC GLACIER assisted in loosening up the turning basin a task for which she was better suited than POLAR SEA because her turning radius was smaller allowing her to work more freely on its center.