

May 23, 2005

**IODP EXPEDITION 307:
MODERN CARBONATE MOUNDS: PORCUPINE DRILLING
WEEK 4 REPORT**

OPERATIONS

The transit from the last hole of Expedition 307 (U1317E) to Ponta Delgada on the island of Saõ Miguel of the Azorean chain was concluded when the first line was passed ashore at 0535 hr on 16 May. The 1026 nmi journey was accomplished at an average speed of 10.7 knots. After clearing customs and immigration formalities, the scientific compliment and Staff Scientist of Expedition 307 disembarked. The Expedition Operations Superintendent was also relieved during this intermediate port call. The vessel remained in port until the last line was released from the dock on schedule at 1907 hr that evening. The vessel then began the 3500 nmi journey to the pilot station of Mobile Alabama.

The first week of the transit to the United States has been accomplished in generally mild to moderate conditions. The captain made a minor course correction to avoid the projected track of Tropical Storm Adrian. The base course was resumed when it was determined that the storm was quickly losing energy and would not be a threat to the vessel. As of 1800 hr on 22 May, the vessel has sailed 1567 nmi at an average speed of 10.8 knots. The E.T.A. at the Mobile Pilot station is presently at 0100 hr on 31 May.

The only incident of note during this period was an unplanned load shedding event on 19 May that resulted in the loss of hotel power and reduced power to the main shafts for 40 minutes. The cause of this problem has not been determined.

During the transit, the drilling crew has been performing routine inspections and addressing some long-standing maintenance issues. A hoisting inspection on the rig floor equipment and non-destructive testing of the sheaves associated with the rig floor air tuggers has been carried out during this period. Corroded sections of the 12-inch supporting beams on both triplex mud motors are in the process of being removed and replaced. Weathered steel cross members under the core receiving platform outside the bridge deck entrance are also being replaced.

The vessel continues to operate under a MARSEC Security Level I (lowest). On 20 May, there was a simulated unauthorized access to the vessel that was performed in concert with the weekly fire and boat drill.

TECHNICAL SUPPORT ACTIVITES

The vessel arrived this week on May 16 at Ponta Delgada, Azores. The Expedition 307 scientists disembarked. Frozen and refrigerated samples collected on the expedition were shipped off via World Courier. The technical staff remained on board for the transit to Mobile, Alabama. Cores from Hole U1317C are being frozen and split during the transit.