

November 22, 2004

**IODP EXPEDITION 304:
OCEAN CORE COMPLEX FORMATION, ATLANTIS MASSIF
WEEK 1 REPORT**

OPERATIONS

PORT CALL: The Ponta Delgada port call was completed in 3.5 days. There were logistics problems resulting in some of our air freight not reaching the vessel, however, none of the wayward freight was critical to the expedition. Portcall activities included loading 500 metric tons of marine gas oil and the loading of ODP Leg 209 core samples for use by the Expedition 304 scientists. Other port call activities included ODL and IODP/TAMU crew change/crossover, loading of additional specialty hardware required for the Advanced Diamond Core Barrel System, the Hard Rock Re-entry System, the departure of all Expedition 303 scientists, and the boarding of all Expedition 304 scientific staff.

A representative from Maritime Hydraulics attended the port call to perform maintenance on the active heave compensator (AHC). Inspection by the Transocean rig mechanic revealed that intermittent disruptions to routine performance of the AHC during Expedition 303 were likely due to a problem in an electro-hydraulic servo valve. A new valve was delivered to the portcall where it was installed and tested. The test failed and further evaluation revealed that the valve was not properly configured for our operation. An internal plug was removed and the valve was successfully returned to service and the AHC tested to the satisfaction of the rig mechanics. Additional work was undertaken to try to establish the data link used to evaluate the performance of the active heave system remotely from Norway. This link had not been reestablished since the start of the new IODP Phase 1 contract. We were not successful in reestablishing the link. This project will be continued until we manage to complete the high speed data link.

PORT CALL SECURITY: During the Ponta Delgada port call the JR operated under a security level of MARSEC Level 1 (Yellow) and appropriate security measures were in effect. All personnel were required to register with the ship's staff before being allowed on the ship and were also required to wear proper identification at all times.

TRANSIT TO SITE U1309 (Prospectus Site AMFW-01A): The last line away from Berth 12, Ponta Delgada, Azores was at 2012 hr Saturday 20 November 2004. The pilot was dispatched at 2024 hrs and the vessel was underway at full speed on a course of 241°T for Site U1309. The transit to Sunday at midnight has been uneventful with the ship averaging 10.5 knots over the 301.8 nm covered. ETA 1024 hours 24 November. IODP/TAMU operations and engineering personnel have been engaged in preparing for the complex operations required for Expedition 304 and the training of a new operations superintendent.

SCIENCE SUMMARY

The science party arrived onboard 18 November. Safety indoctrination was held for all participants. Organizational meetings and laboratory orientation continued throughout the portcall and first day of transit.

LABORATORY STATUS

The technical staff arrived in the Azores experiencing a few surprises and one loss, when one individual needed a transit visa to go through Britain and was rerouted while another, applying for US Citizenship, was unable to leave the US. Once in port, activities proceeded on schedule and smoothly. Frozen specimens were packed in imported dry ice and sent via

World Courier. Crossover for the two crews was conducted on 17 November followed by a marine mammal procedures refresher course as a VSP experiment is planned.

670 boxes of core from Expedition 303 were off loaded 18 November; stevedores loaded the two 40' refrigerated containers. Training in underway geophysics continued, as did ALO activities with shipments, PFT information and gas bottle usage projections. A well-attended early Christmas party was held at a local cantina in the evening.

The remaining port time focused on receiving our surface and airfreight and dispersing it into the laboratories and storage areas. The microscope laboratory was surveyed to see how best to accommodate a microprobe under the watch of a shipboard scientist. Training in the use of the SPOT cameras on some of the microscopes was conducted.

Lost baggage arrived at the last minute but one container of airfreight remained missing. It contained equipment needed to develop a next generation weighing system, hardware for dual monitor applications, electronic spares and a personal box. An express package was also lost in transit but adequate replacements were acquired locally with the agent's assistance.

This first day underway has been routine in most respects, continuing to work through the laboratory changes, doing equipment calibrations, getting JANUS working and practicing uploads. A work around was needed to open curation access to JANUS until shore assistance is gained. Underway watches were initiated.

HSE

New personnel were released the 17 November to TransOcean for Safety Indoctrination. During a later Staff/Scientist get acquainted meeting the Ship Safety Officer discussed the Level 1 security conditions the ship was operating under, emphasizing the need to wear ID cards at all times while in port, checking in with the gangway watch, and the consequences the ship faces if there is an infraction.