

August 30, 2004

IODP EXPEDITION 301T: TRANSIT/COSTA RICA APL WEEK 1 REPORT

OPERATIONS

PORT CALL: The Astoria port call was an abbreviated port call with normal port call activities kept to a minimum. The original plan called for offloading Expedition 301 scrap iron, cores, and samples (including microbiological samples). The ship was also to take on fuel, water, food supplies, ODL/Transocean freight, and bulk material. Shortly after arrival, the vessel was informed by customs that the correct procedure to provide advance notice of material to be offloaded in Astoria had not been followed. This problem was not resolved by Friday, 20 August, and the schedule precluded a solution by departure time on Sunday morning. The vessel was forced to reload all material that had already been offloaded onto the dock and to sail with all material originally scheduled for offloading in Astoria. Loading included 1000 metric tons (316,443 gal.) of marine gas oil, 22 ST of bentonite gel, 97 ST of sepiolite. Confusion in the loading sequence of the bulk material resulted in bentonite being loaded into a sepiolite pod. This incident is under study. Other port call activities included ODL and IODP/TAMU crew change/crossover, loading of additional specialty hardware required for the Costa Rica operation, the dispatching of all Expedition 301 scientists, and the boarding of all Exp-301T scientific staff.

PORT CALL SECURITY: During the Astoria-2 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 1255: The last line away Pier 1 Astoria, Oregon was at 0645 hr Sunday 22 August. The forward/aft tugs were released and the JR proceeded down the Columbia River and across the Columbia Bar. The pilot was dispatched via helicopter at 0824 hrs and the vessel was underway at full speed on a course of 183°T for Site 1255. The transit to date has been uneventful with the ship averaging 11.2 knots over the 1784 Nm covered. IODP/TAMU operations and engineering personnel have been engaged in completing the technical documentation of the recently completed Expedition 301, assisting in the refinement of the procedures for recovery and replacement of the Costa Rica osmotic sampler instrument string, and in the training of a new operations superintendent.

SCIENCE

Scientific activities during the transit have been centered on preparation of the replacement osmotic samplers to be installed in Holes 1255A and 1253A and preparation of the fishing tools/sinker bar strings required for removal of the currently installed instruments. In addition, a science/technical meeting was held to discuss the proposed operations at the Costa Rica sites.

TECHNICAL SUPPORT AND HSE ACTIVITIES

The technical group assisted with loading and distribution of laboratory and scientific equipment and supplies during the Astoria II port call. There were few shipments to the load because this port was viewed as primarily a personnel transfer and the St. Johns port call has been targeted as the major re-supply for technical supplies for the ship.

Problems with customs precluded the technical staff from off loading any of the off going shipments from X301. This had the largest effect on the microbiological samples. Some of the samples are live cultures stored in refrigerated containers while other samples are deep frozen (-80° C) DNA studies. We are attempting to remedy this situation by offloading and shipping the refrigerated samples to the scientific participants when we arrive in Panama next month. The deep frozen microbiological samples will last in the freezers and will be offloaded and shipped when the ship arrives in St. Johns later next month.

Jamie Allan/NSF was present at the port call and addressed the IODP staff at the port call meeting. He discussed the current status of the IODP phase I operations and NSF perspective on future operations.

New technicians have been training in their respective labs and technical staff are also cross training in different labs during the transit. ET's are working to resolve problems with the towed magnetometer and a temperature gauge was replaced on the Haskris chill water pump for the XRD. The computer system managers have been busy ensuring functionality of all hardware, software, and communications systems. The ship is preparing to switch satellites on the Vsat system as we transit from the Pacific to the Atlantic Ocean. Training on the balance systems is continuing for the staff as they optimize the fine-tuning and calibration.

A GeoWall-2 Visualization system was loaded during the port call. This was set up and confirmed to be in good working order. A programmer from the Electronic Visualization Lab will board the ship in Panama and will develop IODP applications for the GeoWall-2 in collaboration with IODP staff. The software is being designed to provide real-time access to both MST data and core image data on a section by section basis. Images and data can be moved around the screen using SPLICER and SAGAN type applications, as well as scrolled across with core sections linked end to end in a continuous path.

The technical staff are preparing and planning for Expedition 303, the next high latitude expedition. In preparation for Expedition 303, cold weather supplies are being inventoried and cold weather gear is being requisitioned. Heaters are being checked and parts ordered.

The technical staff has been assisting the scientific party as they prepare for the retrieval and replacement of two OsmoSamplers as part of the Costa Rica APL. The technical staff will assist in the distribution of the water samples and are helping prepare sampling containers and print labels.

Two JOI personnel are sailing during the transit to photo document the labs and conduct interviews with personnel. Stereoscopic photos are being taken of various labs and locations on the ship and personnel are being interviewed and filmed.

HSE: A fire and boat drill was conducted to familiarize new personnel with the location of their lifeboat. The technical staff joined other non-assigned personnel at the lifeboats. Technical personnel are continuing to sign up for mandatory safety training courses developed to educate the sea-going staff and satisfy international marine safety requirements.