

September 3, 2005

**IODP EXPEDITION 311:
CASCADIA MARGIN GAS HYDRATES
WEEK 1 REPORT**

OPERATIONS

PORT CALL: The *JOIDES Resolution* arrived in Balboa, Panama and dropped anchor in the Balboa Explosives Anchorage at 0029 hr 28 August 2005 officially ending Expedition 309 and beginning Expedition 311. There was no dock available in Balboa so all port call activities were conducted at anchorage. The IODP/TAMU technical staff crew change took place via crew boat the morning of the 28th. The Transocean crew change took place the following morning. Due to a personnel dispute the Catermar catering crew did not board the vessel initially, however, this was resolved quickly and the crew change was completed without incident. In addition to technical staff, a number of scientists and computer technicians associated with the J-Cores development testing came aboard. The Expedition 311 staff scientist and science participants will board the ship in Astoria, Oregon.

Because all port call activities were conducted at anchorage all shipboard security and safety issues were minimal. The ship did operate under a security level of MARSEC Level 1 (Yellow) and appropriate security measures were in effect during the time at anchorage. All personnel who had not sailed within the last six months were given safety briefings and participated in a safety drill upon their arrival.

The ship took on 1501.27 metric tons of marine gas oil and IODP/TAMU freight loading/unloading was conducted by barge alongside. The VIT (coax) winch heat exchanger was offloaded early the first day for repair/refurbishment locally or for airfreight to the USA. The unit will be put back aboard ship in Astoria. Along with the standard ship re-supply other items critical to Expedition 311 operations were loaded for installation during the transit to Astoria. Fresh fruits and vegetables were loaded in Balboa, however, the remainder of the food, dry goods, and all Transocean freight was deferred to Astoria. Items offloaded included junk tubulars or those requiring re-cut and the German DMT whole core imaging scanner.

Pacing item for the port call was the armature/field coil replacement in the number 15B propulsion motor. Because this motor is in the middle of a bank of 3 motors the repair work included disassembly of the number 13B motor. Once the repairs were completed the ship weighed anchor and at 0700 hr 31 August the sea voyage was begun for Astoria, Oregon.

TRANSIT TO ASTORIA, OREGON: As of midnight Saturday, 3 September, the vessel had transited 1021 nmi at an average speed of 11.3 knots. During the transit we were unable to maintain 24-hr satellite coverage and therefore the captain made periodic course corrections to allow internet access and email exchange. A late afternoon/early evening arrival at the Astoria pilot station is currently anticipated for Thursday, 15 September.

TECHNICAL SUPPORT ACTIVITIES: On August 29th the oncoming technical staff had a meeting with USIO management to review current events at IODP including updates on the status of the SODV project and employment options for the technical staff. Underway watch began for the transit to Astoria. Once underway the placement of

plywood to enclose the catwalk was begun. Inserts for shipping pressure vessels were fabricated. Construction of tables to be used in the new reefer van was begun. The technicians also worked with the J-Cores team in testing software.

ENGINEERING DEVELOPMENT ACTIVITIES: Included in the Panama air freight was a vertical ice bath for temporary storage of pressurized core barrels and a jib crane to lift pressurized core barrels from the rig floor to the Lab Stack roof for processing in a refrigerated van. The rails for the ice bath have been welded in place on the moon pool doors. The ice bath, constructed of 10-3/4" casing with 4" of foam insulation, will be suspended on the rails into the moon pool and aligned with the middle core barrel shuck on the rig floor. The ice machine, dedicated to keeping the ice bath filled, will be located in the Subsea Shop. A chute structure is being designed that will be mounted in the Subsea Shop floor hatch opening and extend down approximately 15 feet to the vertical ice bath. The chute will be fabricated from 10" diameter PVC pipe, which will be delivered to Astoria. The jib crane pedestal has been welded to the Lab Stack roof and the crane assembled and made operational. The crane was positioned on the inboard aft corner of the Lab Stack roof. The reach of the crane allows pressurized core barrels to be hoisted from the rig floor to the Lab Stack roof and quickly moved into a refrigerated van for degassing and logging.

J-CORES TESTING: We boarded the ship in the morning of Sunday, Aug. 28. We had the initial planning meeting in the afternoon, discussed the schedule and finalized the test plan. We agreed on daily schedule from 7:30 AM to 5 PM. We decided to start every day with an initial briefing meeting at 7:30 AM and a daily wrap up meeting at 4:30 PM. When we finish testing one tool the wrap up meeting would start at 4 PM.

Test 1 (Operation, Curation, Sample)

These J-CORES applications were tested on Aug. 29, 30 and 31. Kyoma Takahashi started with a training session on how to use these applications. Every one who tested these applications completed his/her evaluation and sent it to Bernard Miville. In addition to the people who are sailing specifically for J-CORES testing, the testers were Mike Storms (Operations), Lisa Hawkins and Heather Paul (Corelab Techs.), Phil Rumford and David Fackler.

Test 3 (Uploader)

The J-CORES Uploader was tested on Sept. 1 and 2. Kyoma Takahashi gave a training session. We had an extended wrap up meeting in the afternoon of Sept. 2. All evaluations have been completed and sent to Bernard. The additional testers were Heather Paul (PP), Lisa Hawkins (Chem), Jason Deardorff (Xray) and Jennifer Henderson (Paleomag).

Test 3 (Visual Core Description)

The J-CORES VCD testing is scheduled for Sept. 3, 4 and 5. The test process started with a training session on Sept. 3. Jay Miller and Peter Blum are the main testers of this application. This testing is on-going as of Sept. 3, 2005.