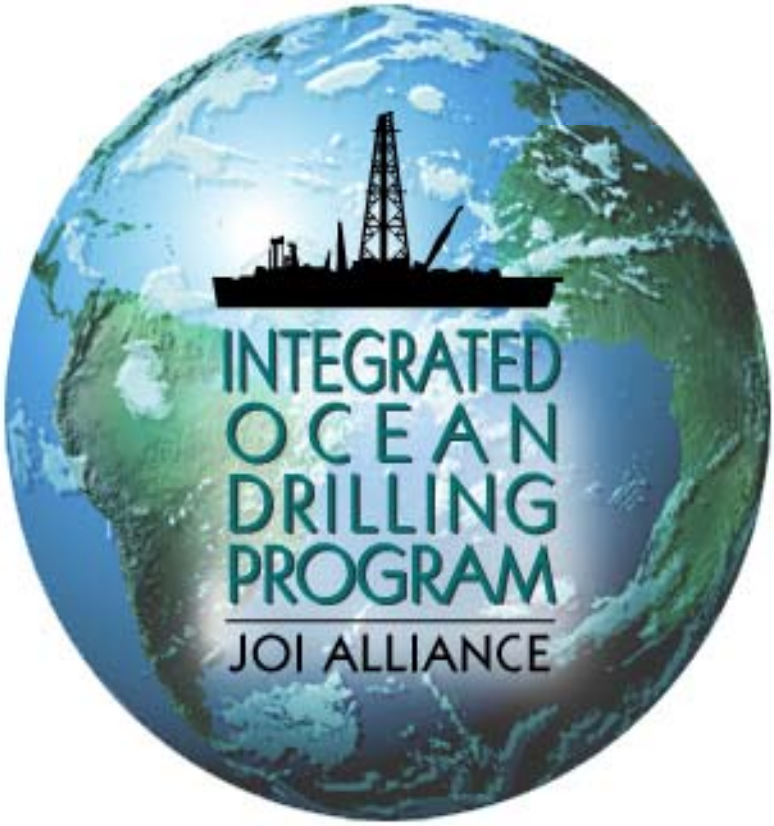
15 November 2004



1 July–30 September 2004

Quarterly Report 4

Contract No. NSF OCE-0352500

Submitted by the JOI Alliance to

The National Science Foundation

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INTRODUCTION

The organization of this quarterly report reflects activities and deliverables that are outlined in the Integrated Ocean Drilling Program U.S. Implementing Organization (IODP-USIO) Program Plan as implemented by the JOI Alliance during the fourth quarter of FY04.

PHASE 1 EXPEDITION OPERATIONS

IODP-USIO EXPEDITION SCHEDULE

The following IDOP-USIO operational schedule, which was originally issued on 7 May 2004, has been updated to reflect slight modifications that were made to this schedule due to weather and port call requirements resulting from Expedition 301T. Modifications are in italics (see "Expedition Planning and Implementation Activities, IODP-USIO Expedition 301T: Costa Rica Hydrogeology/Transit Expedition Implementation" section for details).

*	Cruise*	Port (Origin)	Dates[1, 2]	Total Days (Port/Sea)	Days at Sea (Transit[3]/Ops[4])	Co-Chief Scientists	Alliance Contacts
	Transit	Gamagori, Japan	1[4]–20 June 2004	19 (2/17)	17/0	N/A	N/A
	Mobilization	Astoria	20–27 June	7 (7/0)	(0/0)	N/A	N/A
1	Juan de Fuca Hydrogeology	Astoria	27 June–21 August	55 (1/54)	2/52	Andrew Fisher Tetsuro Urabe	TAMU: A. Klaus LDEO: G. Iturrino
	Costa Rica Hydrogeology/ Transit	Astoria	21 August–*25* September	32 (1/31)	28/3	TBN	TAMU: M. Malone
2	North Atlantic Climate 1	St. John's, Newfoundland	*25* September–*17 November*	53 (5/48)	5/43	James Channell Tokiyuki Sato	TAMU: M. Malone LDEO: S. Robinson
3	Oceanic Core Complex 1	Ponta Delgada	*17 November 2004–8 January 2005*	52 (5/47)	7/40	Chris MacLeod Barbara John	TAMU: D.J. Miller LDEO: F. Einaudi
4	Oceanic Core Complex 2	Ponta Delgada	*8 January–2 March*	53 (5/48)	7/41	Donna Blackman Yasuhiko Ohara	TAMU: D.J. Miller LDEO: H. Delius
5	North Atlantic Climate 2	Ponta Delgada	*2 March–25 April*	54 (5/49)	4/45	Rudiger Stein Toshiya Kanamatsu	TAMU: M. Malone LDEO: B. Rea
	Transit	Reykjavik	*25 April–13 May*	18 (3/15)	15/0	N/A	N/A
	Demobilization	Galveston	*13 May–4 June*	22 (22/0)	0/0	N/A	N/A

Notes:

Acceptance of the vessel will take place on 31 May 2004.

* Expedition nomenclature will be adjusted in the future to reflect naming protocols to be established by IODP-MI.

1 Ship is scheduled to arrive 0600 hr on first day of port call.

2 Initial cruise date reflects first day of port call; ship sails when ready.

3 Transit = estimated time to/from port to the operating area.

4 Ops = operations (includes both on-site and between-site times).

EXPEDITION PLANNING AND IMPLEMENTATION ACTIVITIES

IODP-USIO EXPEDITION 301: JUAN DE FUCA HYDROGEOLOGY

Expedition Implementation: Expedition 301, the first expedition of IODP, commenced on 27 June 2004 when the *JOIDES Resolution* departed Astoria, Oregon. Expedition 301 concluded when the ship returned to the same port on 20 August 2004. During Expedition 301, the

Circulation Obviation Retrofit Kit (CORK) observatory that was installed in Hole U1026B during Ocean Drilling Program (ODP) Leg 168 in 1996 was successfully replaced. Two new basement holes were also drilled and instrumented with multilevel CORK observatories. Holes U1301A and U1301B penetrate 108 and 320 m into basement, respectively. All of the holes have multiple isolated intervals that will be monitored for pressure, temperature, chemistry, and microbiology.

Clearance and Permitting Activities: Clearance for Expeditions 301 activities was received from Canada in June 2004. Submittal to National Oceanic and Atmospheric Administration (NOAA) of a request for a letter of authorization in July 2004 cleared the way for the vertical seismic profile (VSP) scheduled for later in the expedition.

Expedition Staffing: Expedition Project Manager/Staff Scientist: A. Klaus; Co-Chief Scientists, A. Fisher and T. Urabe. Scientific staffing for the expedition included eight participants each from the U.S. Science Support Program (USSSP), Japan Drilling Earth Science Consortium (J-DESC), and European Consortium for Ocean Research Drilling (ECORD) and one participant from China.

Technology: The top drive electronics and rig floor electronics were removed from the ship after Expedition 301. During Expedition 301, the electronics demonstrated chronic failures and had to be repaired multiple times. It became apparent that the operational life of the system had reached its limit. One Davis-Villinger Temperature-Pressure Probe (DVTPP) was sent back from Expedition 301 for testing in the Simulated Borehole Test Facility.

Four wireline logging strings were run in Hole U1301B to characterize formation properties at a scale intermediate between hand samples and regional seismic data. The triple-combination (triple combo) tool string (natural gamma ray, lithodensity, porosity, spontaneous potential) penetrated essentially to total depth, yielding excellent data over most of the open hole (350–580 mbsf). Unfortunately, subsequent logging strings (formation microscanner [FMS], sonic, borehole televiewer, VSP) could not penetrate across an obstruction at 410 mbsf, limiting data collection to the uppermost part of the cored interval. Data were also collected through casing, but data from this interval are highly attenuated.

Much of the upper 100 m of open hole is washed out, with the caliper logs open to full scale near 400 mbsf. The lower 120 m of the hole is almost entirely in gauge, being only slightly larger in diameter than the 9-7/8 in coring bit. Collectively, logging data from the triple combo tool string help to define two main igneous intervals in basement. The uppermost 100 m of open hole are enlarged, have highly variable bulk density, and very low electrical resistivity. The lower 120 m of open hole has a diameter close to that of the coring bit, less variable bulk density, and higher electrical resistivity. The boundary between these two zones, at ~460 mbsf, is an important one for subsequent packer testing and CORK monitoring.

P-wave velocities determined with the sonic log in the upper 80 m of open basement are generally in the range of 4.0–6.0 km/s and are broadly consistent with physical property measurements. A VSP run over a depth range of ~360–420 mbsf (100–160 msb) indicates an interval velocity in upper basement of 5.0 km/s.

IODP-USIO EXPEDITION 301T: COSTA RICA HYDROGEOLOGY/TRANSIT

Expedition Implementation: Expedition 301T commenced at 0430 on 20 August 2004 when the *JOIDES Resolution* arrived in Astoria, Oregon. Port call activities concluded at 0645 on 22 August 2004.

Problems with Customs and Border Protection at Astoria prevented the offloading of anything other than personal effects of personnel disembarking in Astoria. The problem arose from a change in the interpretation of Customs requirements. Since the issue could not be resolved during the brief port call, hardware and other items scheduled to be removed at the end of Expedition 301 were taken off in St. John's, Newfoundland, Canada, prior to Expedition 303.

The principal objective during Expedition 301T was to recover OsmoSamplers installed at Sites U1253 and U1255 during ODP Leg 205 and to install replacement OsmoSamplers. Operations were conducted off Costa Rica (Sites U1253 and U1255) 4–8 September 2004. Operations at Site U1255 were completely successful. At Site U1253, the float and some of the Spectra line attached to the OsmoSamplers were recovered, but the line parted, allowing the OsmoSamplers to fall to the seafloor. After replacement OsmoSamplers were installed, a search of the seafloor around Site 1253 was conducted with the vibration-isolated television (VIT) camera. After 7 hr of survey, the upper sampler was found on the seafloor within about 20 m of the wellhead. This sampler was successfully grappled and recovered. The whereabouts of the lower OsmoSampler and sinker bar remain uncertain.

The *JOIDES Resolution* arrived in Panama on 10 September 2004 and departed on 12 September 2004 for the transit to St. John's. Expedition 301 samples, including frozen and refrigerated microbiology samples that had to be left on the ship at the conclusion of Expedition 301 in Astoria, were shipped from Panama to expedition participants.

The transit from Panama to St. John's was prolonged because the ship had to detour to avoid Hurricanes Jeanne and Karl in the northern Caribbean, and as a result, the expedition was extended by 3 days. Expedition 301T concluded at 0628 on 25 September 2004 when the *JOIDES Resolution* docked in St. John's.

Expedition Staffing: Expedition Project Manager/Staff Scientist (nonsailing): M. Malone; Co-Chief Scientist: M. Kastner. Scientific staffing for the expedition included five USSSP participants and one participant each from J-DESC and ECORD, all of who departed the vessel in Panama. In addition, three observers (T. Pettigrew, consultant; R. Burger, Associate Program Director, USSSP, at JOI; M. Niemitz, Program Assistant at JOI) sailed on the Astoria to Panama segment and two observers (L. Peart, Education Coordinator at JOI; A. Rao, "Corewall" Developer, University of Illinois at Chicago) sailed on the Panama to St. John's segment.

R. Burger and M. Neimitz collected digital photographs and video of science operations and other shipboard activities for use in future education and outreach efforts, and IODP promotional materials. L. Peart interviewed technicians and staff to learn as much as possible about the *JOIDES Resolution,* its laboratories, and its operations. A. Rao brought a Personal GeoWall-2 visualization system aboard and worked on developing an integrated visual core analysis and display software that will allow a scientist to view and scroll through coregistered core logging data and the visual core images, as well as accomplish other tasks to optimize the visual core description process.

Clearance and Permitting Activities: Clearance from Costa Rica was received in September 2004.

Technology: Modifications to the OsmoSampler recovery system (CORK reentry tool) were designed and fabricated by an outside contractor at the expense of the principal investigator (M. Kastner). The CORK reentry tool was returned to College Station from the ship, reworked, and shipped to the Expedition 301T port call.

IODP-USIO EXPEDITIONS 303 AND 306: NORTH ATLANTIC CLIMATE 1 AND NORTH ATLANTIC CLIMATE 2

Expedition Planning: In July 2004 arrangements were made for a weather/ice observer to sail on Expedition 303, as well as for daily weather reports to be delivered to the *JOIDES Resolution* from the Danish Meteorological Institute. In addition, a marine contingency plan was developed by Overseas Drilling Ltd. (ODL) to guide decision making in the event that bad weather or ice conditions are encountered during Expeditions 303 and 306. These protocols include: (1) a review of the ice management plan for the expedition, (2) obtaining weather forecasts and sailing a meteorologist familiar with the operating area, (3) securing the ship if the forecast is for >50 kt winds, (4) ensuring the protection of crew members in forward thruster pods, drill floor, and core receiving platform areas, (5) using MARISAT as the primary means of communication, (6) clearing the weather decks of unnecessary equipment, and (7) minimizing the number of gas bottles carried on ship.

Expedition Implementation: The Expedition 303 port call commenced at 0630 on 25 September 2004 in St. John's, Newfoundland, Canada, and was extended to almost 6 days, concluding at 1930 on 30 September 2004. This extension was primarily to allow time for the American Bureau of Shipping (ABS) to perform required underwater inspections of all hull penetrations (in lieu of drydock in FY05). Other port call activities included offloading remaining Expedition 301 materials and cores and installation of a new "fast track" multisensor track (MST) in the core laboratory to facilitate rapid stratigraphic correlation. IODP-USIO Science Services, Lamont-Doherty Earth Observatory of Columbia University (LDEO), installed a new data acquisition system to be used for third-party logging tools.

Projected arrival at the first site was projected for early 2 October 2004.

Expedition Staffing: Expedition 303: Expedition Project Manager/Staff Scientist: M. Malone; Co-Chief Scientists: J. Channell and T. Sato; Logging Staff Scientist: S. Robinson. Scientific staffing for the expedition included the following IODP membership breakdown: eight participants each from USSSP, J-DESC, and ECORD, and one participant from China. The size of the science party for this project is larger than normal, and the composition of the party is characterized by redundancy in some fields of expertise. Both outcomes are a consequence of the contractual requirements that govern staffing. A weather observer from the Danish Meteorological Institute participated in the expedition to assist in forecasting and advise on approaching inclement weather conditions.

Expedition 306: Expedition Project Manager/Staff Scientist: C. A. Zarikian; Co-Chief Scientists: R. Stein and T. Kanamatsu; Logging Staff Scientist: B. Rea. Staffing for Expedition 306 commenced in August 2004 and continued through the end of the quarter.

Clearance and Permitting Activities: In July 2004, new alternate Eirik Drift (LAB) sites were submitted to the Environmental Protection and Safety Panel (EPSP) and the U.S. State Department. Clearance was received from Greenland in August 2004 and from Canada in September 2004. The request for clearance from Norway for the Norwegian Greenland Sea site of Expedition 306 will be submitted to the U.S. State Department in October 2004.

Technology: A noncontact resistivity (NCR) sensor was purchased for Expeditions 303 and 306. A fast-track MST system (customized Geotek track) was installed during the Expedition 303 port call for real-time determination of vertical hole offsets to ensure stratigraphically complete recovery. In September 2004 a meeting with the CORK proponent, R. Harris, was held at Richard Brancker Research Ltd. (RBR) of Ottawa, Canada, to resolve the basic design of the instrument string (thermistors and data logger) and the CORK wellhead configuration. The Engineering Services Section of the Tools and Analytical Services Department at IODP-USIO Science Services, Texas A&M University (TAMU), will design the landing/latching/release of the instrument string following a review of Expeditions 301 and 301T.

Development of a rapid core logger in support of stratigraphic correlation during Expedition 303 and 306 continued this quarter. A Geotek representative installed hardware and software upgrades during a site visit 12–13 August 2004 at the IODP-USIO Science Services, TAMU, facility in College Station, Texas. The completed Magnetic Susceptibility Core Logger **(**MSCL) was shipped to St. John's, Newfoundland, Canada, for deployment and use during Expedition 303. P. Blum (Supervisor of Analytical Services) attended the St. John's port call to oversee installation of the MSCL, to present and discuss current (and future) Analytical Services Section activities and their impact on operational activities, and to meet with USIO team members.

Discussions with the Co-Chief Scientists regarding the logging plan for these cruises occurred throughout the quarter. The IODP Operations Committee (OPCOM) has endorsed a plan that will involve the logging of the Orphan Knoll site, with additional logging during Expedition 301 to be based on the results of operations there.

IODP-USIO EXPEDITIONS 304 AND 305: OCEANIC CORE COMPLEX 1 AND OCEANIC CORE COMPLEX 2

Expedition Staffing: Expedition 304: Expedition Project Manager/Staff Scientist: D.J. Miller; Co-Chief Scientists: C. MacLeod and B. John; Logging Staff Scientist: F. Einaudi. Scientific staffing for the expedition included seven USSSP participants, five J-DESC participants, and eight ECORD participants.

Expedition 305: Expedition Project Manager/Staff Scientist: D.J. Miller; Co-Chief Scientists: D. Blackman, Y. Ohara; Logging Staff Scientist: H. Delius. Scientific staffing for the expedition included eight USSSP participants, seven J-DESC participants, and seven ECORD participants.

Technology: In preparation for third-party deployments during Expedition 304, Gearhart-Owen cable heads were assembled and delivered to the ship during the Expedition 303 port call.

Advanced Diamond Core Barrel (ADCB) parts were inventoried and will be shipped in October to the Azores for Expedition 304. Two boxes of ADCB core liner and all available 6¾ in drill collars will be shipped to the Azores. Approximately 120 m of the 6¾ in collars will be taken on Expedition 304; the rest will be stored in the Azores for possible use during Expedition 305.

Hammer drill and hammer underreamer bits were shipped from Australia to the Azores commencing on 4 September 2004. Shipping time is estimated to be 55–60 days. The reentry cone and Hard Rock Reentry System (HRRS) accessories were delivered. This equipment along with other HRRS equipment and twelve 9½ in drill collars will be shipped in October to the Azores for use during both expeditions.

Discussions continued with the Co-Chief Scientists regarding the use of specialty logging tools during this expedition. Negotiations with Schlumberger resulted in the availability of the Ultrasonic Borehole Imager (UBI) for both expeditions.

POST–IODP-USIO EXPEDITION 306 ACTIVITIES

At the June 2004 Scientific Planning Committee (SPC) meeting, the National Science Foundation (NSF) indicated that funds might become available to extend IODP Phase 1 operations in FY05 and FY06. NSF asked SPC to take this into account in ranking proposals for future drilling. As a result, 14 proposals will be forwarded to OPCOM for consideration at the October 2004 meeting. Initial assessment, including feasibility, time, and cost estimates, of these proposals was completed in September 2004. The requirement to provide realistic cost estimates is complicated by the fact that many proposals contain inadequate information to properly understand the proponents' expectations. In some cases it is clear that the expectations are unrealistic given the constraints of time, capabilities of the *JOIDES Resolution,* and likely available funding.

INSURANCE RELATED TO JOI SUBCONTRACTS

IODP-USIO Science Services, LDEO, secured downhole tool insurance coverage for FY05 operations in advance of Expedition 303 for both standard and special deployments.

ENVIRONMENTAL ASSESSMENT

GULF OF MEXICO HAZARD ASSESSMENT

A project under consideration for IODP scheduling calls for drilling in an over pressured region of the Gulf of Mexico. To evaluate the potential hazards, an independent assessment of the existing seismic data over the proposed drill sites is planned. This study was scheduled for FY04 Q4 but was put on hold until FY05 pending further discussions with OPCOM.

TECHNOLOGY DEVELOPMENT

PROJECTS AND OTHER ACTIVITIES

COSTA RICA DIVE SUPPORT

All invoices have been received, and the Texas A&M Research Foundation (TAMRF) will be rebilling the Scripps Institution of Oceanography for costs associated with engineering support provided by the USIO.

MISSION-SPECIFIC PLATFORM SUPPORT

One advanced piston corer temperature (APCT) system tested and shipped with one backup electronics and spare parts to the British Geological Survey (BGS) for Expedition 302.

IODP-USIO SCIENCE SERVICES, TAMU, ENGINEERING SERVICES

Advanced Piston Corer Methane (APC-M) Tool: The APC-M tool is a collaborative effort with MBARI to develop a tool that determines in situ gas concentrations. New microprocessors were received this quarter for use in the electronics upgrade. The tool, which was fabricated during ODP, will be run during Expedition 306 to collect data for tool characterization.

APCT Tool: The APCT (Adara) firmware was recoded to reflect current calibration factors. Three systems were deployed during Expedition 301, and two during Expedition 302. Testing of the APCT2 prototype electronics is near completion. The electronics will be repackaged for shock and vibration resistance. The new system will be tested in the simulated borehole test facility. The APCT3 project is a collaborative effort with third-party principal investigators to provide a next-generation APCT. All APCT3 shoe and core catcher hardware drawings have been checked. The principal investigator has ordered prototype parts. Sea trials of this tool will be attempted in late FY05.

Dead Weight Tester: Delivery of the dead weight tester is past due. The vendor is checking into the situation. The tester is laboratory equipment that will be used to calibrated pressure transducers used in downhole tools and test instrumentation.

Drilling Sensor Sub (DSS): Acceptance testing of the two DSS tools was conducted the week of 27 September 2004. The DSS 2 underwent 12 hr of drilling at the Schlumberger facility in Sugar Land. DSSs 1 and 2 went through a pressure test sequence to 10,000 psi at ambient temperature. The results are being evaluated. The tools will be accepted after successful completion of both tests. DSS 2 is slated for deployment during Expedition 304. Following successful completion of acceptance testing, DSS 1 will be used in the acceptance testing of the Core Barrel–Retrievable Memory Module (CB-RMM) in the Schlumberger test well.

Instrumented Water Sampler (IWS): Mechanical improvements of the IWS are on hold until funding becomes available in FY05.

Simulated Borehole Test Facility: The pressure vessel dollies, the mud tank stand, and half of the pressure vessels, including the mud tank, were received this quarter. The balance of parts is due in October 2004.

Weight-on-Bit (WOB) Filter: The top drive electronics and rig floor electronics were removed from the ship after Expedition 301. Over the course of Expedition 301, the electronics exhibited chronic failures and had to be repaired multiple times. It became apparent that the operational life of the system had reached its limit. After failures during Expedition 301, a new electronics system made up of off-the-shelf, surface-mounted modules and rugged connectors will replace the original prototype used on Expedition 301. The driller's large dial display of weight-on-bit fluctuation (WOBF) data was replaced with Active Heave Compensator (AHC) cylinder force data. AHC cylinder force is a good approximation of WOB generated by the AHC. The cylinder force is a 10 s average, which is only displayed when the AHC is on.

IODP-USIO SCIENCE SERVICES, TAMU, ANALYTICAL SERVICES

Core Applications: A number of core applications (e.g., Corelog, curation, sampling, etc.) are in the process of being migrated to Java and are at the stage that requires user evaluation and testing. A user group reviewed the Corelog application this quarter, and the bug list was updated

and addressed. The sampling/curation applications test group met on 23 September 2004, benefiting from a visit by P. Weiss (Curatorial Specialist).

Core Section Viewer: In preparation for the development of a Core Section Viewer application that allows display of core section digital images at life size.

Digital Close-up Application: A new digital close-up image data management application was deployed on the *JOIDES Resolution* during Expedition 31 to enter close-up metadata in the Janus database. The scientists are now able to access digital close-up images on the ship in real time.

Laboratory Information Management System (LIMS): Development of the first laboratory systems and document inventory database, which began in May 2004, continued throughout the quarter. The Oracle database is nearly complete, and three prototype applications are available for viewing and/or editing data. Documentation is nearly complete.

Research: Market research was initiated for a graphics tool kit to be used in future applications development that can provide state-of-the-art data visualization directly from the database. An applications server (a low-cost Sun system) was installed and will be used to test user-interactive applications for the LIMS; the application server will change the way applications are used how the database is accessed, making data access both more accessible and more secure.

Miscellaneous Activities: A new type of Mettler-Toledo balance was purchased and is being tested as a potential off-the-shelf replacement for the current ScienTech balances on the *JOIDES Resolution.* A replacement vane shear system was purchased from a German manufacturer to replace the cannibalized and dysfunctional Automated Vane Shear (AVS) System on the ship.

IODP-USIO Science Services, LDEO, Engineering and Technical Services

Wireline Heave Compensator: The new wireline heave compensator was used for logging one hole during Expedition 301 and yielded mixed results. Mechanically, the unit worked flawlessly; however, problems with software led to depth errors while logging. Schlumberger system developers have been working on the problem. Several tests with logging tools and the winch occurred during the transit to St John's, Newfoundland, Canada, by suspending an accelerometer-equipped logging tool in the derrick. Software patches were subsequently sent to the ship via the very small aperture terminal (VSAT) link, and the unit is now approaching full functionality. During the Expedition 303 port call, the logging equipment was set up to utilize the ODP wireline heave compensator for the first logging run of Expedition 303. Engineering time will be requested during Expeditions 304–306 (~6–8 hr per expedition) to perform side-by-side heave compensation tests using both the old and new heave compensators with a maximum amount of downhole instrumentation.

Engineering Development: LDEO personnel supervised the construction of new fabrication and testing facilities that now house state-of-the-art workshops and equipment. The construction of these facilities concluded during the reporting period. Equipment and furniture have been moved into this space, and are now being used for IODP vessel support and engineering purposes.

Refinement of the logging-while-coring system was a goal set in the FY04 program plan to improve the core barrels for this emerging technology. LDEO and TAMU staff reviewed concept

drawings and began creating final drawings for manufacture. The final design and manufacturing of these core barrels should be completed late in FY05.

INFORMATION TECHNOLOGY

SHIP-TO-SHORE COMMUNICATION STRATEGY

A satellite communications system was set up on the *JOIDES Resolution* by provider RigNet (Telenor) during the Expedition 301T port call. The configuration expands total bandwidth available on the vessel to a total of 256 Kb (64 Kb for Transocean; 192 Kb for the USIO/JOI Alliance).

The Interim Communications Policy was distributed in July 2004.

JOI Alliance members crafted a plan for a USIO Data Communications Task Force, which will formulate recommendations for (1) possible changes in types and levels of data communications and network systems to be provided by the USIO if IODP Phase 1 is extended and (2) the plan for Phase 2.

INVENTORY MANAGEMENT SYSTEM

A request for proposals (RFP) will be issued in late October to mid-November in preparation for activities described in the FY05 Program Plan.

REPORTS/PUBLICATIONS

IODP-USIO PROGRAM PLAN FOR IODP-MI AND NSF

A revised FY05 Program Plan was submitted to IODP-MI on 30 August 2004 assuming a contract between IODP-MI and the JOI Alliance would be in place by the end of September 2004; however, this was not accomplished and the JOI Alliance will begin FY05 with science operating costs (SOCs) continuing to be funded under the NSF System Integration Contract, as agreed to by NSF in communications in late September, until a new contract with IODP-MI is finalized.

USIO-IODP FY04 IODP QUARTERLY REPORT

The report for the third quarter of FY04 (April–June) was submitted to NSF on 19 August 2004.

IODP SCIENTIFIC PUBLICATIONS

SCIENTIFIC PROSPECTUS

Expedition 301T (Costa Rica Hydrogeology): Published on 20 August 2004 (see "Appendix H").

Expeditions 303 and 306 (North Atlantic Climate): Published on 3 September 2004 (see "Appendix H").

Expedition 304/305 (Oceanic Core Complex Formation, Atlantis Massif): Published on 5 August 2004 (see "Appendix H").

PRELIMINARY REPORT

Expedition 301 (Juan de Fuca Hydrogeology): Written, produced, and reviewed in August–September 2004. Final review by the scientific party, and publication is expected in October 2004.

Expedition 302 (Artic Coring): The USIO assisted the ECORD Science Operator (ESO) by sharing report format and style guidelines in preparation of the production of Expedition 302 reports.

IODP LEGACY REPORTS

The JOI Alliance continued to develop IODP legacy document lists during the quarter.

EDUCATION/OUTREACH

EDUCATION

TEACHER AT SEA INITIATIVE

During Expedition 301, teacher J. Rice, Ph.D. and National Board Certified Teacher, worked under Logging Staff Scientist G. Iturrino's guidance on two projects: development of laboratory briefs, or fact sheets that describe the function, equipment, and types of research questions that are investigated associated with a lab, written for teachers and high school students and production of a journal documenting his experience that was posted on the IODP-USIO, Web site (iodp.ldeo.columbia.edu/EDU/TAS/).

LABORATORY BRIEFS

The first four *JOIDES Resolution* laboratory briefs were written during Expedition 301 (microbiology, paleomagnetism, chemistry, physical properties) and are in review and/or production. J. Rice (Expedition 301 Teacher at Sea) plans to have the four remaining briefs (downhole measurements, underway geophysics, micropaleontology, core laboratory) completed by the Expedition 301 initial postcruise meeting (1–3 March 2005). During the quarter, JOI Alliance members overseeing the project agreed on a procedure for drafting and editing the laboratory briefs and approved a preliminary design for the print version.

HISTORICALLY BLACK COLLEGES AND UNIVERSITIES FELLOWSHIP PROGRAM

In July and August 2004, eight Historically Black Colleges and Universities (HBCU) Fellowship projects were developed (six will be offered in FY05):

- Assessing the Effectiveness of JOI's Educational Products in Reaching Students of Color (Mentor: L. Peart, JOI Education Coordinator).
- Developing Keyword Search Lists for a Scientific Ocean Drilling Database (Mentor: M. Reagan, Deputy Director, IODP-USIO Science Services, LDEO). [not available in FY05]
- Making Microfossils More Memorable (Mentor: J. Firth, Curator, IODP-USIO Science Services, TAMU).
- Making Sense of 200 Million Years of Earth's History (Mentor: J. Fox, Director of Science Operations, IODP-USIO Science Services, TAMU).
- Managing Large-Scale Science Programs for the U.S. Science Community (Mentor: M Kleinrock, JOI Associate Director, Ocean Drilling Programs).

- Migrating Publications to XML: Multiple Products, One Document (Mentor: A Miller, Interim Manager of Publication Services, IODP-USIO Science Services, TAMU).
- Outreach to Environmental and Geotechnical Companies (Mentor: D. Goldberg, Director of Science Operations, IODP-USIO Science Services, LDEO). [not available in FY05]
- Utilizing Scientific Ocean Drilling Research in the Public Affairs and Media Relations Arena (Mentor: K. White, JOI Director of Public Affairs).

During the pilot year of the program, HBCUs within commuting distance from TAMU and JOI are being strategically targeted. There are two HBCUs in Washington, D.C., (Howard University and the University of the District of Columbia), one within commuting distance of TAMU (Prairie View A&M University), and none within commuting distance of LDEO. Outreach efforts to encourage Fellowship applicants from these HBCU institutions were ongoing during the quarter.

IODP-USIO WEB SITE

The redesign of the USIO Web site (www.iodp-usio.org) was completed on 31 August 2004. There is also an intranet Web site (iodp.tamu.edu/internal/) that is accessible only by IODP-USIO staff.

IODP DATABASES

Online Database: IODP Expedition 301 core data were added to the online Janus database in September 2004. These data are still in moratorium and are available only to the scientists who sailed on this expedition. The Janus data are available on the Web (iodp.tamu.edu/database).

Log Data: The first IODP log data were put online in September 2004. The online presentation (iodp.ldeo.columbia.edu/DATA/ODP) mirrors the general format used for ODP log data, with some changes in the documentation templates such as the inclusion of summary tables and active links.

PROCESSED LOGS

Hole U1301B conventional and FMS data have been processed and put online. Documentation for both data sets was also prepared and made available online.

PUBLIC AFFAIRS

CONGRESSIONAL OUTREACH

On 22 June 2004, JOI participated in Science @ Work, the 10th Annual Coalition for National Science Funding (CNSF) Exhibition and Reception on Capitol Hill in Washington, D.C. The CNSF exhibition, for congressional members and their staff, showcased research funded by the National Science Foundation. More than 370 attendees including J. Marburger, Science Advisor to the President, were able to view an ocean core sample and accompanying research data. Although the core sample represents over 65 million years of Earth's history, G. Filippelli, Professor and Chair of the Department of Geological and Environmental Sciences at Indiana University–Purdue University Indianapolis and incoming U.S. Science Advisory Committee (USSAC) chair, emphasized how scientific ocean drilling is used to address issues that directly affect our nation's health and prosperity today.

PUBLIC RELATIONS MATERIALS

News releases are distributed to more than 100 science journalists worldwide, as well as member country offices. News releases distributed during the quarter include

- *JOIDES Resolution* Retrieves Data from Underwater Observatories Key to Understanding the Deep Biosphere, Gas Hydrate Formation, and Earthquakes (21 September 2004).
- Ocean Research Team Returns, Seafloor Observatories Successfully Established (24 August 2004).
- Ocean Drilling Program Research Highlighted at the 32nd International Geological Congress (19 August 2004).

News articles and programs on IODP riserless drilling published during this quarter include

- Assa, Lori, "Deep Subject," *The Daily Astorian,* 22 June 2004.
- "Drilling for Knowledge," Earthwatch Radio, 25 August 2004, http://ewradio.org/program.aspx?ProgramID=3807
- "Expedition to Establish Seafloor Observatories" *Sea Technology*, July 2004.
- Hayden, Thomas, "The Blue Planet" *US News and World Reports,* 16 August 2004, 48–55.
- Ledford, Heidi, "Drilling for Information," *The Oregonian,* 7 July 2004, B11–12.
- "ODP Cores Provide Insight on Magnetic Field Reversal," *Sea Technology,* May 2004, 63.
- Ramsayer, Kate, "Drilling at Sea," Science News for Kids, <http://www.sciencenewsforkids.org/articles/20040908/Feature1.asp>
- Ramsayer, Kate, "Venture Drills Water from Rock," *The Daily Astorian,* 28 June 2004.
- Wolff, Susan, "The Journey Continues," *GeoConnections,* 2004, 11–12.

The USIO assisted the ECORD Science Operator (ESO) with promotion of Expedition 302 in the United States. News media included an article in the *Boston Globe* (http://www.boston.com/news/science/articles/2004/08/10/drilling_deep_at_the_poles/). In addition, The USIO assisted in promotion of a live interview that ran on the BBC, and JOI worked with a reporter from the *New York Times* to promote the expedition.

PORT CALL EVENTS

During the Expedition 303 port call in St. John's, Newfoundland, Canada, JOI Alliance staff members worked with Canadian scientists to arrange tours of the *JOIDES Resolution* on 26 and 27 September 2004 for about 50 local industry personnel and Memorial University staff and students and assisted with a news conference aboard the ship. St. John's television media representatives visited the ship on 26 September 2004, which led to a brief report on the evening news.

IODP-USIO SUPPORT ACTIVITIES

INTERACTIONS WITH IODP-MI AND IODP IMPLEMENTING ORGANIZATIONS

IODP-MI AND IODP IMPLEMENTING ORGANIZATIONS MEETING

IODP-USIO Science Services, LDEO, hosted a meeting with CDEX staff on 6 August 2004. Discussions at this meeting included operations, health, safety, and environment (HSE), database and publication policies, and collaboration between organizations.

IODP-USIO Science Services, LDEO, prepared and circulated for comment among implementing organization representatives, a draft logging-while-drilling/measurement-while drilling policy for safe drilling in IODP, as per an EPSP request.

IODP PUBLICATIONS

Expedition 302 Preliminary Report and Expeditions Report: The USIO assisted the ECORD Science Operator (ESO) by sharing report format and style guidelines in preparation of the production of the Expedition 302 report.

ODP Publications and Data Base Management Review: Hans Christian Larsen met with TAMU on 9-10 August 2004 to review ODP Publications and Data Management procedures.

IODP-MI EDUCATION AND OUTREACH TASK FORCE

During July 2004, the IODP-MI Education and Outreach Task Force worked on creation of short descriptions of IODP to be used in public relations publications. In September 2004, the new IODP-MI Communications Director, N. Light, issued invitations to the next task force meeting (4–5 October 2004) in Washington, D.C. Ann Klaus (Deputy Director of Data Services at IODP-USIO Science Services, TAMU) will represent the USIO.

APPENDIX A: CONTRACTUAL ACTIVITIES

JOI

JOI CONTRACT WITH NSF OCE-0352500

JOI received the following modifications during the report period:

- Modification 6: provided $1,400,000 in funding toward the FY04 Program Plan.
- Modification 7: provided $10,038,169 of funding toward the draft FY05 Program Plan.

JOI SUBCONTRACT WITH TAMRF JSC 4-02

JOI issued the following modifications during the report period:

- Modification 3: increased the FY04 Program Plan by $1,100,000 and provided funding in that amount for operations through 30 September 2004.
- Modification 4: increased the FY04 Program Plan by $215,000 for fuel purchases and provided incremental funding in that amount for operations through 30 September.
- Requested modification to the indemnification provision contained in the contract.

JOI SUBCONTRACT WITH LDEO JSC 4-03

JOI issued the following modification during the report period:

- Modification 3: provided funding for platform operating cost (POC) activities through 15 February 2005.

IODP-MI SOLICITATION

In late August 2004, JOI received a solicitation from IODP-MI for the SOC portion of JOI's current contract with NSF (OCE-0352500). JOI responded on 14 September 2004 with a lengthy list of areas for clarification and resolution. A meeting was held with IODP-MI on 28 September 2004, and the parties are working toward a revised solicitation to JOI in October.

LDEO

LDEO SUBCONTRACT NEGOTIATIONS

IODP-USIO Science Services, LDEO, continued subcontract negotiations with Schlumberger, University of Leicester (United Kingdom), Naturalia et Biolgia (France), University of Aachen (Germany), and Ocean Research Institute (Japan).

TAMRF/TAMU

TAMRF SUBCONTRACT WITH ODL

On 4 August 2004, Modification 1 to incorporate the NSF indemnification clause was issued and is pending acceptance by JOI of insurance revisions.

CONTRACTS/PROCUREMENT ACTIVITY ($100,000 OR GREATER)

The following purchase orders were issued:

- Hewlett–Packard Company for $114,678 for computers/laptops with monitors.
- Anaheim Custom Extruders, Inc., for $101,906 for core liners.
- inSORS, Inc., for $143,916 for a video conferencing system.

OTHER CONTRACTS/PROCUREMENT ACTIVITY

The TAMRF Procurement Section developed small business training for the Procurement Specialists and other individuals as part of the small business plan.

TAMRF received a draft IODP-MI RFP for scientific operational planning and provided comments to JOI.

TAMRF forwarded a request for approval to purchase core line; approval received on 21 September 2004.

PROPERTY ACTIVITY

NSF property inventory and retagging is complete. All items except those on loan to vendors or employees have been retagged.

APPENDIX B: FINANCE REPORT

Please contact info@joiscience.org for hard copies of the financial pages.

APPENDIX C: PERSONNEL STATUS

JOI

The following positions were advertised during the quarter:

- Scientific Ocean Drilling Vessel Project Director
- Education Coordinator

The following positions were filled during the quarter:

- Scientific Ocean Drilling Vessel Project Director (S. Williams): 20 September 2004
- Education Coordinator (L. Peart): 16 August 2004

LDEO

The following position was advertised during the quarter:

- Logging Scientist (LDEO–BRG)
- Logging Staff Scientist (Leicester)

The following positions were filled during the quarter:

- Logging Scientist (S. Higgins): 9 August 2004
- Logging Staff Scientist (A. Belghoul): 1 July 2004

TAMU

The following positions were advertised during the quarter:

- Administrative Assistant
- Assistant Laboratory Officers (2)
- Operations Superintendent
- Project Manager
- Software Applications Developer

The following positions were filled or canceled during the quarter:

- Operations Superintendent (S. Midgley) 12 July 2004
- Staff Scientist: canceled
- Yeoperson (J. Presley): 23 August 2004

APPENDIX D: CONFERENCE AND MEETING SCHEDULE*

Conference/Meeting	Date	Location
Science Planning Committee (SPC)	14–17 June 2004	Yokohama, Japan
Environmental Protection and Safety Panel (EPSP)	21–22 June 2004	College Station, TX
Science Measurements Panel (SciMP)	23–25 June 2004	Boston, MA
Technical Advisory Panel (TAP)	28–30 June 2004	Nagasaki, Japan
Science Planning and Policy Oversight Committee (SPPOC)	8–9 July 2004	Paris, France

Conference/Meeting	Date	Location
U.S. Science Advisory Committee (USSAC)	14–15 July 2004	Washington, DC
National Marine Educators Association Conference	18–22 July 2004	St. Petersburg, FL
Site Survey Panel (SSP)	2–4 August 2004	Palisades, NY
Seybold Publishing Conference	16–19 August 2004	San Francisco, CA
32nd International Geological (IGC) Conference	20–28 August 2004	Florence, Italy
8th International Conference on Paleoceanography (ICP-8)	5–10 September 2004	Biarritz, France
Operations Committee (OPCOM)	30 September–1 October 2004	Washington, DC

* External meetings and conferences.

APPENDIX E: TRAVEL*

Institution	Personnel	Purpose	Date	Location
JOI	S. Bohlen, F. Rack	SPPOC Meeting	8–9 July 2004	Paris, France
JOI	F. Rack	SODV Tech Spec Meetings	21–23 July 2004	Ft. Worth and Houston, TX
JOI	M. Kleinrock	SSP Meeting	2–4 August 2004	Palisades, NY
JOI	M. Kleinrock, K. Kryc, F. Rack	Platform Team/SODV RFP Meeting	9–12 August 2004	College Station, TX
JOI	F. Rack	SODV Project Director Interviews	16–18 August 2004	Houston, TX
JOI	M. Cortes	32nd International Geological Congress (IGC)	19–26 August 2004	Florence, Italy
JOI	K. Kryc, F. Rack	8th International Conference on Paleoceanography	4–11 September 2004	Biarritz, France
JOI	K. Kryc	Offshore Communications Conference	13–16 September 2004	Houston, TX
JOI	M. Kleinrock, K. Kryc, S. Williams	Expedition 303 Port Call	24–29 September 2004	St. John's, Canada
JOI	S. Bohlen, F. Rack	U.S. SPPOC Members Meeting	29 September 2004	Denver, CO
JOI	S. Bohlen, F. Rack	OPCOM Meeting	30 September–1 October 2004	Washington DC
LDEO	G. Myers	TAP Meeting	26 June–2 July 2004	Nagasaki, Japan
LDEO	D. Goldberg	SPPOC Meeting	7–9 July 2004	Paris, France
LDEO	M. Linek	Logging Training	10–17 July 2004	Palisades, NY
LDEO	G. Myers	MREFC Meeting	12–13 July 2004	Washington, DC
LDEO	T. Baker	IT Staff Meeting	31 July–3 August 2004	College Station, TX
LDEO	M. Linek	Expedition 305 Third-Party Tool Coordination Meeting	2–6 August 2004	Goetingen, Germany
LDEO	G. Myers	MREFC Meeting	8–12 August 2004	College Station, TX
LDEO	D. Goldberg	SODV Project Director Interviews	16–18 August 2004	Houston, TX
LDEO	F. Einaudi, T. Williams	IGC Presentation	21–29 August 2004	Florence, Italy
LDEO	D. Quoidbach	JOI Alliance Information Team Meeting	24–29 September 2004	St. John's, Canada
LDEO	S. Higgins, W. Keogh, W. Masterson	Expedition 303 Port Call	24–29 September 2004	St. John's, Canada
LDEO	M. Reagan	OPCOM Meeting	30 September–1 October 2004	Washington, DC
TAMU	J. Fox	SPPOC Meeting	2–10 July 2004	Paris, France
TAMU	B. Jonasson	ITT Market Survey Meeting	6 July 2004	Houston, TX
TAMU	J. Baldauf, T. Davies, B. Jonasson, L. Schulte, B. Lancaster	Platform Team Meeting	12–13 July 2004	Washington, DC

Institution	Personnel	Purpose	Date	Location
TAMU	K. Petronotis	NMEA Conference; Web Meetings at USIO/TAMU	18–25 July 2004	St. Petersburg, FL; and College Station, TX
TAMU	K. Graber, B. Jonasson	SODV Tech Spec Meetings	21–23 July 2004	Ft. Worth and Houston, TX
TAMU	E. Slone	Microsoft Access Training	22–23 July 2004	Austin, TX
TAMU	R. Mithal	American Management Association Seminar	2–4 August 2004	San Diego, CA
TAMU	K. Petronotis	IODP-MI Publications Meeting	7–11 August 2004	College Station, TX
TAMU	D. Hammond, F. Shuh	SODV RFP Meeting	8–12 August 2004	College Station, TX
TAMU	P. Blum, J. Deardorff, J. Eastlund, D. Hornbacher, D. Houpt, D. Kannoju, P. Ténière	National Instruments NIWeek 2004 Conference	16–19 August 2004	Austin, TX
TAMU	J. Beck	Seybold San Francisco 2004 Publishing Conference	16–20 August 2004	San Francisco, CA
TAMU	J. Baldauf	Expedition 301T Port Call	19–23 August 2004	Astoria, OR
TAMU	Y. Zhu	Oracle Training	22–28 August 2004	Irving, TX
TAMU	K. Graber	Project Management Training	26–27 August 2004	Houston, TX
TAMU	J. Fox, A. Miller	Optix Software Demonstration at JOI	26–28 August 2004	Washington, DC
TAMU	K. Grigar	Vendor Visit to Schlumberger to Discuss Test Procedure for the DSS	30 August 2004	Sugar Land, TX
TAMU	R. Dixon	Revisit CORKs on the *Thomas G. Thompson*	1–17 September 2004	Victoria, Canada
TAMU	M. Mefferd, D. Sims	Oracle Training	7–11 September 2004	Atlanta, GA
TAMU	P. Thompson	Expedition 301T Port Call	7–13 September, 2004	Panama
TAMU	J. Fox	SAFOD Meeting	8–10 September 2004	San Jose, CA
TAMU	D. Schroeder	Expedition 306 CORK Conference	12–13 September 2004	Ottawa, Canada
TAMU	D. Kannoju	Motion Control Fundamentals Training	19–22 September 2004	Mountain View, CA
TAMU	Ann Klaus	Visit Bremen Core Repository	21–23 September 2004	Bremen, Germany
TAMU	T. Davies	Expedition 303 Port Call	23–30 September, 2004	St. John's, Canada
TAMU	P. Blum, J. Fox	Expedition 303 Port Call	24–30 September 2004	St. John’s, Canada
TAMU	W. Crawford	Expedition 303 Port Call	25–30 September 2004	St. John’s, Canada
TAMU	K. Grigar	DSS testing	27–29 September	Sugar Land, TX
TAMU	J. Baldauf	OPCOM Meeting	29 September–1 October 2004	Washington, DC
TAMU	K. Grigar	DSS Testing	30 September 2004	Sugar Land, TX
TAMRF	L. Schulze	Platform Team Meeting	11–13 July 2004	Washington, DC
TAMRF	B. Lancaster	Platform Team Meeting	11–14 July 2004	Washington, DC
TAMRF	C. Engledow	Business Immigration Law Workshop	20–24 July 2004	Las Vegas, NV
TAMRF	K. Bass	NBTA Conference	31 July–5 August 2004	Orlando, FL
TAMRF	D. DeShetler	Amadeus Training	9–13 August 2004	Miami, FL
TAMRF	K. Bass	Amadeus Training	23–27 August 2004	Houston, TX
TAMRF	S. Rogers	Expedition 303 Port Call	18–24 September 2004	St. John's, Canada
TAMRF	B. Skopik	Access Training	26–29 September 2004	Las Vegas, NV

* Travel associated with meetings, conferences, port call work, and nonroutine sailing activities.

APPENDIX F: DATA REQUESTS

Top 10 Countries Accessing Janus Web Database*		
Rank	**Country**	**Visitor Sessions**
1	United States	6071
2	Germany	344
3	Japan	234
4	United Kingdom	191
5	France	151
6	Canada	73
7	Italy	65
8	Australia	63
9	Netherlands	46
10	Spain	43
	All others	339
	Total	**7620**

Note: * = Excluding access from IODP/TAMU.

Top 20 Janus Web Queries*		
Rank	**Query**	**Uploads**
1	Sample report	1120
2	Special holes	941
3	Hole trivia–hole details	685
4	Site-hole summary	537
5	Leg summary	467
6	Moisture and density	421
7	Chemistry–interstitial waters	359
8	Magnetic susceptibility	342
9	Core photograph images	325
10	Core-section summary	322
11	Hole-core summary	313
12	Gamma ray attenuation bulk density	303
13	Chemistry-carbonate	236
14	Shear strength	207
15	Site summary trivia	156
16	*P*-wave velocity–whole core logger	155
17	Hole trivia–site details	143
18	*P*-wave velocity–split core	141
19	Paleontology range table	133
20	Paleontology age model	113
	Database overview and others	15296
	Total	22715

Note: * = Excluding access from IODP/TAMU.

Data Requests To Data Librarian*	
Requests	**Total**
Country:	
United States	27
Germany	7
France	3
United Kingdom	3

Data Requests To Data Librarian*	
Requests	**Total**
Peru	2
China	1
India	1
Ireland	1
Japan	1
Norway	1
Total	47
Data:	
Photographs	15
Data in general	13
Physical properties	7
Chemistry	3
Seismic/navigation	3
Paleontology	2
Sample	2
Database access	1
Visual core description	1
Total	47

Note: * = Excluding access from IODP/TAMU.

Other Web Janus Database Statistics*
Database Query Hits:
Entire site (successful): 26,103
Average per day: 283
Visitor Sessions:
Visitor sessions: 7620
Average per day: 82
Average visitor session length: N/A
International visitor sessions: 20.33%
Visitor sessions of unknown origin: 0
Visitor sessions from United States: 79.67%
Visitors:
Unique visitors: 1973
Visitors who visited once: 761
Visitors who visited more than once: 829
Average visits per visitor: 3.86

Note: * = Excluding access from IODP/TAMU.

APPENDIX G: SAMPLE REQUESTS

Repository	Requests	Request Number, Name, Country	Number of Samples
Ship	1	20000A, Buatier, France	0
Ship	1	20001A, Inagaki, Japan	155
Ship	1	20002A, Hutnak, United States	Data Request
Ship	1	20003A, Cowen, United States	10
Ship	1	20004A, Dumont, Sweden	223

Repository	Requests	Request Number, Name, Country	Number of Samples
Ship	1	20005A, Engelen, Germany	48
Ship	1	20006A, Heuer, Germany	280
Ship	1	20007A, Wheat, United States	185
Ship	1	20008A, Kiyokawa, Japan	221
Ship	1	20009A, Goto, Japan	Data request
Ship	1	20010A, Bartetzko, Germany	20
Ship	1	20011A, Becker, United States	Data request
Ship	1	20012A, Tsuji, Japan	23
Ship	1	20013A, Bartetzko, Germany	21
Ship	1	20014A, Noguchi, Japan	167
Ship	1	20015A, Sakaguchi, Japan	160
Ship	1	20016A, Steinsbu, Norway	74
Ship	1	20017A, Coggon, United Kingdom	227
Ship	1	20018A, Nielsen, United States	58
Ship	1	20019A, Fisher, United States	0
Ship	1	20020A, Lever, United States	150
Ship	1	20021A, Sager, United States	58
Ship	1	20022A, Fisher, United States	Data Request
Ship	1	20023A, Iturrino, United States	Data Request
Ship	1	20024A, Urabe, Japan	52
Ship	1	20025A, Davis, Canada	Data Request
Ship	1	20026A, Pfender, Germany	Data Request
Ship	1	20028A, Alt, United States	64
Ship	1	20029A, Thorseth, Norway	Sharing samples with #20016A
Total	**28**		**2196**

APPENDIX H: PUBLICATIONS

Publication	Release Date	URL
Scientific Prospectus:		
Expedition 301T (Costa Rica Hydrogeology)	20 August 2004	http://iodp.tamu.edu/publications/SP/301TSP/301TSP.html
Expeditions 303 and 306 (North Atlantic Climate)	3 September 2004	http://iodp.tamu.edu/publications/SP/303306SP/303306SP.html
Expedition 304 and 305 (Oceanic Core Complex Formation, Atlantis Massif)	5 August 2004	http://iodp.tamu.edu/publications/SP/304305SP/304305SP.html

APPENDIX I: WEB

The JOI Alliance Webmasters are in the process of standardizing the Web statistics gathered across all servers of the integrated USIO Web site. More complete statistics should be available starting with FY05 Q1.

JOI

Web statistics are not available for the USIO/JOI Web server. Web statistics software will be acquired once the new Web server is in place in FY05 Q1.

LDEO

iodp.ldeo.columbia.edu	FY04 Q4		
Parameter	**Jul**	**Aug**	**Sep**
Page views	—	—	2603
Site visits	—	—	1175

TAMU

iodp.tamu.edu	FY04 Q4		
Parameter	**Jul**	**Aug**	**Sep**
Page views	44296	47390	45273
Site visits*	9191	8693	9005

* TAMU employee and search engine spider visits have been filtered out.

APPENDIX J: CORE REPOSITORY CONSOLIDATION

IODP-USIO Science Services, TAMU, continues to await approval of the Deep Sea Drilling Project (DSDP)/ODP Core Repository Consolidation Plan by NSF.

APPENDIX K: MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION (MREFC) ACCOUNT–U.S. SCIENTIFIC OCEAN DRILLING VESSEL (SODV) PROJECT

U.S. SODV Project Monthly Report—September 2004

During the reporting period (1 July–30 September 2004), the JOI Alliance accomplished several major steps in the process of acquiring the new SODV. Chief among these were

- Completing review of the market survey and invitation to tender (ITT) requests for information.
- Developing a series of progressively refined drafts of an RFP to select a drilling contractor to provide the SODV in preparation for official release of this RFP in mid-October 2004.
- Advertising for and filling the position of SODV Project Director. S. Williams was hired and began in his position at JOI on 20 September. He has extensive experience overseeing the building, selection, and conversions of many research and other vessels for NOAA, the U.S. Navy, and other entities.
- Releasing significant portions of a design document (the "briefing book") to support interactions with the science community and other stakeholders.

Market Survey and Invitation to Tender Status

During the quarter, the response from market survey and ITT solicitations were reviewed separately for technical and business aspects of each response. This review included analysis of the external report on these responses by EXMAR, which was received in July 2004. The results of the review were used in conjunction with the scientific objectives and priorities outlined in the Conceptual Design Committee (CDC) report to help prioritize the critical drilling and science

systems needed for inclusion on the SODV. The responses were used to guide the development of the SODV RFP.

SODV RFP

The SODV RFP is planned to be issued in mid-October 2004. During the quarter, the draft RFP was completed and then reviewed by TAMRF, the JOI Alliance, and NSF. These reviews clarified the award criteria, the content of each of the three volumes being requested (cost, management, technical) and the deliverables expected as a result of each portion of the work planned for accomplishment. Because of funding uncertainty, the work was packaged into several logical contract tasks:

- Long-lead item procurement
- Shipyard solicitation and procurement
- Mobilization
- Conversion
- Operations
- Demobilization

ACTIVITIES OF THE JOI ALLIANCE PLATFORM TEAM

The IODP-USIO JOI Alliance Platform Team has expanded to include, at various times during the reporting period, the following: JOI: S. Williams (after 20 September 2004), F. Rack, M. Kleinrock, K. Kryc, C. Kokinda, E. Hayman; IODP-USIO Science Services, TAMU: J. Baldauf, T. Davies, B. Jonasson, L. Schulze, B. Lancaster; IODP-USIO Science Services, LDEO: G. Iturrino, G. Myers, M. Reagan.

The Platform Team met 12–13 July 2004 in Washington, D.C., to review EXMAR's report assessing the responses to the ITT and market survey and beginning preparation of an RFP for the SODV. It was determined that specific additional questions needed to be asked to clarify the EXMAR report and certain aspects of the ITT and market survey, so a meeting was held on July 23–24 in Houston including representatives from EXMAR, selected members of the Platform Team, and additional external consultants. This meeting focused on a variety of details of the drilling package (e.g., pipe racking, derrick capacity, heave compensation, etc.). The Platform team then met at the IODP-USIO Science Services, TAMU, facility in College Station, Texas, 8–12 August for a focused effort to complete a full first draft of both technical and contractual/finance sections of the RFP. This draft was then evaluated by NSF and further reviewed by the Platform Team, which led to a series of progressively more mature drafts. When S. Williams (SODV Project Director) joined the effort in September, further revisions were recommended, and work proceeded to develop a near-final draft by the end of the reporting period.

PHASE 2 COMMUNITY INVOLVEMENT

As one of the major elements of involving the scientific community in the IODP Phase 2 vessel selection and modification process, the JOI Alliance has begun posting on the Web and circulating throughout the national and international scientific community for comment and input on sections of a briefing book that summarizes enhancements that could be incorporated in the USIO SODV.

The status of the briefing book sections is as follows:

- Forward (posted on Web)
- Introduction (posted on Web)
- Vessel (draft in progress)
- Drilling and coring (draft in progress)
- Science requirements (posted on Web)
- Onboard science capability (posted on Web)
- Living facilities and habitability (posted on Web)

Six elements continue to be pursued for community involvement in the Phase 2 selection process:

- Element 1: Invite IODP-MI to coordinate an IODP Science Advisory Structure (SAS) process to provide comments on the design document(s) for the onboard science capability of the U.S. SODV.
- Element 2: Invite selected individuals from USSAC and/or SciMP to serve as community representatives on each of the design teams tasked with planning the onboard science capability for the U.S. SODV.
- Element 3: Introduce the scientific community to the MREFC Web site and encourage the use of this site as a way to become informed about U.S. IODP Phase 2 activities. The USIO will also provide updates to stakeholders via community list servers, if and when appropriate.
- Element 4: Conduct, as appropriate, "town meetings" and/or provide updates at appropriate SAS or USSAC panel meetings to ensure community awareness about the U.S. SODV planning process and to gather community input on issues. Town meetings will take place at Geological Society of America (GSA) and American Geophysical Union (AGU) meetings.
- Element 5: Invite the USSAC chair or delegate to serve as a nonvoting member on the U.S. SODV selection team.

APPENDIX L: IODP-USIO QUARTERLY REPORT DISTRIBUTION LIST

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