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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) FY06 Annual Program Plan as implemented by the Joint Oceanographic Institutions, Inc., (JOI) Alliance during the fourth quarter of FY06.

EXPEDITION OPERATIONS

EXPEDITION PLANNING AND IMPLEMENTATION ACTIVITIES IODP-USIO EQUATORIAL PACIFIC 1 AND 2 EXPEDITIONS

Interaction was initiated with the primary proposal proponent for development of a science and operation summary to accompany a call for applications. A proposed timeline for staffing was submitted to the IODP central management office (IODP Management International, Inc. [IODP-MI]) and the Program Member Offices (PMOs) for comments, with a call for applications to be released in the first quarter of FY07.

IODP-USIO NANTROSEIZE 1 EXPEDITION

Operational planning and preparations are under way for the pre-expedition meeting to be held 7–8 December 2006. A call for applications was released on 4 August 2006, with nominations due to the USIO by 1 November 2006.

IODP-USIO NANTROSEIZE 2 EXPEDITION

Design work continued on a stacked advanced circulation obviation retrofit kit (ACORK) and circulation obviation retrofit kit (CORK) II to be installed in a single borehole during the IODP-USIO NanTroSEIZE 2 Expedition. A review meeting was held 10 and 11 August 2006, focusing on the seismometer, tiltmeter, and strainmeter engineering design. D. Schroeder (Supervisor of Engineering Services, IODP-USIO Science Services, Texas A&M University [TAMU]) will meet with E. Araki (Observatory Scientist, Japan Marine Science Technology Center [JAMSTEC]) during October 2006 to discuss the seismometer/tiltmeter carrier, the strainmeter carrier, and the interface between them. Operational planning and preparations continue for the pre-expedition/engineering design finalization meeting to be held 6–8 November 2006. A call for applications was released on 4 August 2006 with nominations due to the USIO by 1 November 2006.

IODP-USIO JUAN DE FUCA HYDROGEOLOGY 2 EXPEDITION

Preliminary design work is under way on a CORK II to be deployed on the Juan de Fuca Hydrogeology 2 Expedition. The design will include a "free flow" CORK II head and a 10 3/4 inch to 16 inch casing seal. The casing seal design was completed and put out for bid and a test fixture for the casing seal was designed; parts for both were put on order, with delivery expected in the first quarter of FY07.

STATUS OF EQUIPMENT LOAN OF IODP-USIO EQUIPMENT

IODP equipment loaned by the USIO, with National Science Foundation (NSF) and JOI approval, to Overseas Drilling Limited (ODL) was in use on the *JOIDES Resolution* during the ODL India Gas Hydrate drilling program (19 March–31 August 2006). USIO custodians

supervised use of all loaned equipment during this program. The ODL program was completed, and demobilization of the vessel took place in Singapore in August 2006. (This was not an IODP-USIO activity).

IODP-USIO JOIDES RESOLUTION PHASE 1 DEMOBILIZATION

Final IODP-USIO Phase 1 demobilization activities began on 28 August 2006 in Singapore with drill pipe offloaded and transferred to a local yard for storage. Pipe and pup joints were inspected and coated as required. The IODP-USIO Inventory Team conducted an inventory of equipment and supplies left on board the ship in Galveston, Texas, after initial Phase 1 demobilization activities in order to determine items consumed by ODL during the India Gas Hydrate drilling program. Physical inventory activities and offloading were completed by 31 August 2006, with certain personnel remaining in Singapore until 7 September 2006 to coordinate packing and shipment of items for return and packing of items for removal and storage at the conversion shipyard.

TECHNOLOGY DEVELOPMENT

PROJECTS AND OTHER ACTIVITIES IODP-USIO SCIENCE SERVICES, TAMU, ENGINEERING SERVICES

Simulated Borehole Test Facility: A mixer for preparing sediment was placed on order, with delivery scheduled for early FY07. Engineering Services and Analytical Services are working together to determine the appropriate sediment mixture to accurately simulate typical downhole conditions. Designs for a separate consolidation chamber are in progress and will be finalized when the proper sediment consolidation methods have been developed.

Common Downhole Data Logger: Preliminary design of the common downhole data logger was completed. Evaluation boards for critical components were purchased, and testing began. Evaluation of the feasibility of using existing Persistor software architecture was in progress.

Calibration Laboratory: The TAMU Physical Plant Department will begin modifying the Engineering Services laboratory areas at the 1000 Discovery Drive facility in College Station, Texas, to accommodate the calibration laboratory as soon as their schedule permits. The temperature standard and deadweight tester were sent to their respective manufacturers (Hart Scientific and Ametek) for yearly recalibration, and were returned in late September 2006. After its return, the deadweight tester was rebuilt, new seals were installed, and the tester was thoroughly cleaned following instructions from Ametek technical support. An annealing furnace, used to condition standard platinum resistive thermometers (SPRTs), and a DewQ temperature and humidity monitor, used to verify stability of environmental conditions in the calibration laboratory, have been placed on order with delivery expected in early FY07.

Downhole Sensor Sub (DSS): APS Technology repaired the DSS tools but had some setbacks while trying to make the tools ready for testing. The bond between the strain gauges and the tool body had deteriorated and the strain gauges needed to be reset. APS has selected a new epoxy and is in the process of repairing the tools, which are scheduled for delivery to IODP in mid-November 2006. A new test date at Schlumberger's Genesis rig has not yet been scheduled.

IODP-USIO SCIENCE SERVICES, TAMU, ANALYTICAL SERVICES

IODP Sample Material Curation System (SMCS): A contract was signed with Complete Solutions, Inc., to produce a set of applications in support of the SMCS Central Inventory

(SMCS-CI). Special funds for this project were received from IODP-MI (FY05 excess) this quarter.

Additional Software Acquisitions: Software was purchased for visualization of geological data (INT J-WellLog) and for standard reporting (Crystal Reports).

IODP-USIO SCIENCE SERVICES, LDEO, ENGINEERING AND TECHNICAL SERVICES

Modular High-Temperature Tool (MTT): The calibration procedure for the MTT was largely completed, and machining of mechanical components for a backup MTT began. Test equipment for the Schlumberger telemetry mode was completed and documented. The tool's run time at high temperature now meets the design goal of 6 hours at 250°C. The user interface software was completed and writing of documentation is under way.

IODP-USIO SCIENCE SERVICES, LDEO, SCIENCE SERVICES

Core Log Integration Platform (CLIP) Software: Beta version 1.0 of the NCLIP software was released for comments in August 2006.

REPORTS/PUBLICATIONS

IODP-USIO ANNUAL PROGRAM PLAN FOR IODP-MI AND NSF FY07 ANNUAL PROGRAM PLAN

On 31 July 2006, the USIO (JOI Alliance) submitted to IODP-MI and NSF for review and evaluation a revised version of the IODP-USIO FY07 Annual Program Plan for science operating cost (SOC) and platform operating cost (POC) funds, which incorporated text edits requested by IODP-MI on 21 April 2006 and a \$330,000 budget reduction requested in mid-July 2006. Subsequent lead agency and IODP-MI review comments were received on 1 September 2006, and the USIO submitted a final revision of the FY07 Annual Program Plan on 6 September 2006. The FY07 Annual Program Plan consists of requests for continuing SOC shore-based activities during FY07 and long—lead time items and associated costs for expeditions proposed for FY08. The IODP-USIO FY07 Annual Program Plan budget totals \$15,244,097, with \$9,856,438 requested in SOCs (from IODP-MI) and \$5,387,659 requested in POCs (from NSF). The IODP-USIO FY07 Annual Program Plan was approved on 22 September 2006.

On 28 August 2006, the USIO submitted to NSF a revised Appendix to the IODP-USIO FY07 Annual Program Plan. This appendix outlines requests related to the IODP-USIO U.S. Systems Integration Contract (SIC), which include costs that (a) are required to maintain a future U.S. scientific ocean drilling capability for the IODP; (b) relate to the initiation of mobilization activities of the U.S. riserless drilling vessel in FY07, after completion of the Major Research Equipment and Facility Construction (MREFC)-funded U.S. Scientific Ocean Drilling Vessel (SODV) project, in preparation for completion of conversion, acceptance, and commissioning of the SODV, and (c) support education and outreach efforts to establish measures to effectively communicate shore- and ship-based components of IODP activities to the public in collaboration with IODP-MI and the other implementing organizations (IOs). After receipt of review comments, a final revision of the Appendix to the IODP-USIO FY07 Annual Program Plan was submitted on 7 September 2006 and approved on 22 September 2006.

IODP-USIO FY06 IODP QUARTERLY REPORT

The report for the second quarter of FY06 (January–March 2006) was submitted to NSF and IODP-MI on 14 August 2006.

IODP-USIO FY06 ANNUAL REPORT

Production of the IODP-USIO FY06 Annual Report was initiated with a planning meeting on 8 September 2006, during which the table of contents and production schedule were drafted. Efforts began toward development of the first draft of text, tables, and figures; photographs were requested from the USIO for inclusion in the report.

IODP SCIENTIFIC PUBLICATIONS

SCIENTIFIC PROSPECTUS

NanTroSEIZE Project Stage 1: The edited and formatted report was forwarded to the IODP-MI on 4 August 2006 for publication on the IODP Web server.

PROCEEDINGS OF THE INTEGRATED OCEAN DRILLING PROGRAM

Volume 303/306 (North Atlantic Climate): Published on 9 September (see "Appendix H").

Volume 308 (Gulf of Mexico Hydrogeology): Published on 8 July 2006 (see "Appendix H").

OCEAN DRILLING CITATION DATABASE

The Ocean Drilling Citation Database, which contained almost 22,000 citation records related to the Deep Sea Drilling Project (DSDP) and Ocean Drilling Program (ODP) in February 2006, is produced by the American Geological Institute (AGI). Citation records related to the Integrated Ocean Drilling Program (IODP) have also been included beginning in 2006. Study of the records in the Ocean Drilling Citation Database can provide information on how Program-related research is being disseminated into scientific literature. Since 1999, the Publication Services Department at ODP and, starting in 2004, the IODP-USIO on behalf of IODP have produced annual studies of the Ocean Drilling Citation Database. The results of these studies have been included in panel reports and have been used to track Program publication trends, and individual reports have been provided to member countries.

The 2006 study was produced this quarter and is available online at www.iodp.tamu.edu/publications/citations/AGI_study.pdf. Beginning in 2007, the USIO on behalf of IODP will update the annual Ocean Drilling Citation Report based on the data that exists in the AGI Ocean Drilling Citation Database as of February of each calendar year, and will produce and make the report available online by October of that same year. IODP funding agencies, IOs, PMOs, or individual member countries may request customized reports at any time (contact CitationStats@iodp.tamu.edu).

OUTREACH

MUSEUM PARTNERSHIPS SCIENCE MUSEUM OF MINNESOTA

One of the Expedition 312 drill bits was featured as the September Object of the Month in the Science Buzz exhibit at Science Museum of Minnesota and on the Science Buzz Web site (ltc.smm.org/buzz/museum/object/2006_09_drill_bit). Museum guests and online visitors to

Science Buzz were able to create their own descriptions of the bit; these descriptions will later be compiled and posted on Science Buzz.

Public Affairs

USIO communications and outreach activities this quarter included capitalizing on opportunities to publicize scientific ocean drilling through related publications and events, and continuing to disseminate Program messages as part of the development plan to broadcast the USIO and IODP media presence.

PUBLIC RELATIONS MATERIALS

The following news releases were distributed to more than 200 science journalists this quarter:

- New Director of Ocean Drilling Programs at Joint Oceanographic Institutions (7 August 2006).
- "Frozen" Natural Gas Discovered at Unexpectedly Shallow Depths Below Seafloor (26 August 2006).

Science articles written by USIO staff and news articles, programs, media citations, or public commentary related to IODP expeditions and postexpedition activities involving the USIO that were published during this quarter included the following:

- AsiaPulse Pty. Limited, 2006. S. Korea wins membership in international ocean drilling program. *Yonhap News Agency of Korea*, 5 July 2006.
- Berhmann, J., Flemings, P.B., **John, C.M.**, and the IODP Expedition 308 Scientists, 2006. Rapid sedimentation, overpressure and focused fluid flow, Gulf of Mexico continental margin. *Sci. Drill.*, 3:12–17. doi:10.2204/iodp.sd.3.03.2006
- Blakemore, B., 2006. How deadly for your child—or world? Experimenting on Earth—gambling with the threat of global warming. *ABC News*, 29 August 2006. http://abcnews.go.com/Technology/US/story?id=2370176&page=1
- George, J., 2006. Frozen methane could be boon or disaster: ice that burns holds vast energy reserves—or potential climate change horror. *Nunatsiaq News*, 22 September 2006. http://www.nunatsiaq.com/archives/60922/news/climate/60922_01.html
- Glass, J., 2006. Methane mimosas on ice. *Northwest Sci. Technol. Mag.*, Fall 2006. https://depts.washington.edu/nwst/issues/index.php?issueID=fall_2006&storyID=792
- Gramling, C., 2006. All aboard the School of Rock. *Geotimes*, September 2006. http://www.geotimes.org/sept06/education.html
- *Hindustan Times*, 2006. India to join global ocean drillers' club. *Hindustan Times*, 24 August 2006.
- Ildefonse, B., Blackman, D., John, B.E., Ohara, Y., **Miller, D.J.**, MacLeod, C.J., and the IODP Expeditions 304–305 Scientists, 2006. IODP Expeditions 304 & 305 characterize the lithology, structure, and alteration of an oceanic core complex. *Sci. Drill.*, 3:4–11. doi:10.2204/iodp.sd.3.01.2006
- Lee, M., 2006. Drilling expert joins UNL Antarctic research team. *Lincoln Journal Star*, 1
 August 2006.
 http://www.journalstar/com/articles/2006/08/02/local/doc44cfde923e894785152185.txt

- Riedel, M., Collett, T., **Malone, M.J.**, and the IODP Expedition 311 Scientists, 2006. Gas hydrate transect across northern Cascadia margin. *Eos, Trans. Am. Geophys. Union*, 87(33):325, 330, 332. doi:10.1029/2006EO330002
- Riedel, M., Collett, T.S., Malone, M.J., and the IODP Expedition 311 Scientists, 2006.
 Stages of gas-hydrate evolution on the northern Cascadia margin. Sci. Drill., 3:18–24.
 doi:10.2204/iodp.sd.3.04.2006
- Schubel, K.A., Veblen, D.R., and **Malone, M.J.,** 2006. Microstructures and textures of experimentally altered Bahamian ooids: implications for reaction mechanisms of dolomitization. *Carbonates Evaporites*, 21:1–13.
- Science Daily, 2006. Frozen natural gas discovered at unexpectedly shallow depths below seafloor. Sci. Daily, 22 August 2006. http://www.sciencedaily.com/releases/2006/08/060821215939.htm
- Science Daily, 2006. South Korea joins Integrated Ocean Drilling Program. Sci. Daily, 4 July 2006.
- *Sea Technology*, September 2006. Frozen natural gas discovered at very shallow depths. *Sea Technol.*, September 2006.
- Soeding, E., Evans, D., **Klaus, Ann,** Kuramoto, S., Larsen, H.C., and **Miller, A.,** 2006. An overview of IODP scientific publications. *Sci. Drill.*, 3:50–51. doi:10.2204/iodp.sd.3.11.2006
- *The Korea Times*, 2006. Korea now scientific-drilling member. *The Korea Times*, 5 July 2006.
- United Press International, 2006. Study: gas hydrate found at shallow depth. *United Press International (UPI)*, 21 August 2006.
- Westgate, T., 2006. Frozen fuel find rewrites rule book. *Chem. World*, 23 August 2006. http://pubs.rsc.org/chemistryworld/News/2006/August/23080601.asp
- Zielinski, S., 2006. NSF updates science board on major facilities projects. *Eos, Trans. Am. Geophys. Union*, 87(34):338.

CONGRESSIONAL OUTREACH

On 12–13 September 2006, 80 scientists and engineers visited more than 100 congressional offices to ask for continued support and funding to NSF. The Coalition for National Science Funding (CNSF) hosted the event, and the USIO invited and sponsored the attendance of M. Malone (Manager of Science Operations, IODP-USIO Science Services, TAMU), B. John (Professor of Geology and Geophysics, University of Wyoming), and E. Martin (Associate Professor of Geology, University of Florida). During their orientation, the researchers heard a detailed status update of science funding in the upcoming year. While visiting with congressional representatives from the state of their home institution, USIO-sponsored researchers helped to stress the importance of overall science funding by citing ODP and IODP success stories.

IODP-USIO WEB SITE

Changes were made to the USIO photo collections to address the different needs of the media and the public. The IODP Photo Gallery available from the Newsroom pages is now reserved for official photos taken by IODP shipboard photographers. Informal photos depicting life at sea,

which have less strict quality and content standards, were moved to the Friends & Family Photo Gallery under Expeditions. See "Appendix I" for new Web content and access statistics.

PUBLICATIONS

This quarter saw the publication of the Expedition 308 and Expedition 303/306 volumes of the *Proceedings of the Integrated Ocean Drilling Program*. See "Appendix H" for dates and URLs.

IODP DATABASES

Janus Database: Data from Expeditions 301 and 303–308 are available to the public online. Coring summary data, site trivia, and sampling data from Expedition 302 are available to the public online. Data from Expeditions 309, 311, and 312 are under moratorium and therefore available only to the science parties.

Log Database: Work continued on the project to transition to a relational database for logging metadata. This change will allow better integration with other USIO databases, simplify the generation of metadata, and allow for more complex search queries by end users. Specifications for the database were completed during this quarter and Phase 1 implementation began. Phase 1, which duplicates the existing database functionality using the new architecture, will end 30 November 2006 with the new system available as an alternative search on the USIO Web pages. Both systems will run parallel for several months to test the functionality of the new system. Additional search enhancements will follow in Phase 2, and a Web services interface will be added in Phase 3.

IODP-USIO SUPPORT ACTIVITIES

INTERACTIONS WITH IODP-MI AND IODP IMPLEMENTING ORGANIZATIONS SITE SURVEY PANEL

The Site Survey Panel (SSP) meeting was held 24-26 July 2006 in Sapporo, Japan (see "Appendix E" for list of USIO attendees). SSP conducted its normal review of the site survey status of active proposals. Also included on the agenda were a presentation of a prototype matrix Web site, a review of the SSP site classification definitions, a demonstration of a prototype Data Access System, and feedback on the operation of the Site Survey Data Bank (SSDB). C. Zarikian (Staff Scientist, IODP-USIO Science Services, TAMU) gave a presentation covering major current USIO operational and planning activities and issues, including the SODV status and the possibility of acquiring a towed seismic reflection system for the SODV.

SCIENCE PLANNING COMMITTEE

The Science Planning Committee (SPC) meeting was held 28–31 August 2006 in Bergen, Norway (see "Appendix E" for list of USIO attendees). J. Baldauf (Deputy Director of Science Services, IODP-USIO Science Services, TAMU) presented the USIO report. The SPC approved the science plan and operations schedule recommended for the SODV for FY08 and early FY09, with contingency plans for possible delays in the start of SODV operations in FY08. The SPC also approved a ship-track model for USIO operations in FY09 and FY10 that would proceed clockwise through the Pacific Ocean.

DATA MANAGEMENT COORDINATION

IODP-MI sponsored three meetings held 25–28 September 2006 in College Station, Texas, and 29–30 September 2006 in Houston, Texas, to address topics raised over the past 18 months by

the Data Management Coordination Group (DMCG) (see "Appendix E" for list of USIO attendees). The IODP Depth Scale Meeting (25–26 September 2006) focused on development of a common IODP depth scale definition and nomenclature. The IODP VCD/Lithology Meeting (27–28 September 2006) focused on establishment of a consistent core description method using well-defined lithologic names and characteristics so that all IODP VCD data can be searched in a consistent way and exchanged using a common format. The IODP Paleontology Meeting (29–30 September 2006) focused on development of a Digital Taxa Dictionary (DTD) to improve IODP's paleo data resolution and reproducibility, and ensure effective use of DSDP and ODP legacy site data for Program-wide use.

PUBLICATIONS INTERACTIONS

IODP Publications Server: IODP-MI initiated preliminary discussions with the USIO in July 2006 regarding the feasibility of the USIO hosting a server for all IODP scientific reports and publications. Documents housed on the new server would have a neutral Program design rather than an IO-specific affiliation. The idea of a common server for Program publications based at TAMU grew out of the April 2006 IODP decision that the USIO will be responsible for providing technical editing and production of all IODP scientific reports and publications through FY08.

Copyright Forms: In July 2006, IODP-MI requested that all authors of Program publications sign IODP's copyright assignment forms. The USIO requested clarification from IODP-MI on whether copyright assignment forms need to be collected from authors of Program publications written by all expedition scientists. In ODP, individual members of the science party were not considered to have intellectual property rights associated with shipboard reports and did not sign ODP's copyright license forms.

APPENDIX A: CONTRACTUAL ACTIVITIES

JOI

NSF CONTRACT OCE-0352500 WITH JOI

JOI received the following modifications during the reporting period.

- Modification 18: Removed F. Rack and added D. Divins as Director, Ocean Drilling Programs. It also provided \$742,764 in incremental funding for FY06 management and POC activities.
- Modification 20: Approved the FY07 Annual Program Plan at \$10,996,136 and provided \$1,064,081 of incremental funding for FY07 Management and POC activities.

JOI SUBCONTRACT JSC 4-02 WITH TAMRF

JOI issued the following modifications during the reporting period.

- Modification 16: Provided the final increment of FY06 funding in the amount of \$1,164,217 and removed F. Rack and added D. Divins as Contracting Officer's Technical Representative for JOI.
- Modification 17: Added additional publications work to Section C.3 Task 3 for FY07 and increased/funded the FY06 Annual Program Plan by \$100,000 for SIC non-demobilization activities.
- Modification 18: Decreased SOC activities for FY06 by \$700,000 with associated funding decrease.

LDEO

CONTRACTS/PROCUREMENT ACTIVITY (100K OR GREATER)

• 14 August 2006: Technical approval was received to purchase shock testing equipment and ancillary equipment for handling longer tools. Purchase orders were issued to M/RAD Corporation in the amount of \$109,025 and \$8,010.

TAMRF

CONTRACTS/PROCUREMENT ACTIVITY (100K OR GREATER)

- 18 September 2006: A purchase order was issued to Complete Solutions, Inc., for the SMCS in the amount of \$135,070. Approval was received last quarter via JOI Modification 14 to add the SMCS as a project in the IODP subcontract.
- 31 July 2006: Approval was received to purchase 5-1/2 inch drill pipe. A purchase order was issued to Grant Prideco, Inc., in the amount of \$469,594.
- 2 August 2006: Approval was received to purchase drill collars, core barrels, and seal bores/outer core barrels. A purchase order was issued to Houston Downhole Tools, Inc. in the amount of \$399,600.
- 21 August 2006: Approval was received to add additional air conditioning to rooms A207 and C116 in the IODP building and purchase equipment to keep computer networking equipment that is located in these rooms at an acceptable temperature. A work order was issued to the Texas A&M Physical Plant.

- 23 August 2006: Technical approval was received to purchase knobbies (Program Plan Change JSC4-02-1-POC and SIC). A purchase order was issued to Houston Downhole Tools, Inc., in the amount of \$112,394.
- 23 August 2006: Technical approval was received to purchase a natural gamma ray (NGR) multisensor system. This was originally planned as an SODV purchase, but approval was received to utilize IODP funds (Program Plan Change JSC4-02-2-SIC). A purchase order was issued to Saint-Gobain Crystals & Detectors in the amount of \$131,900.
- 31 August 2006: Approval was received for the purchase of drill pipe coating and inspection. A purchase order was issued to Tuboscope National Oilwell Varco in the amount of \$544,365.
- 4 September 2006: Approval was received to improve the drainage and habitability of Building 8031 at the Riverside Campus. A work order has been issued to the Texas A&M Physical Plant.
- 14 September 2006: Approval was received to purchase core bits. A purchase order was issued to Ulterra Drilling Technologies, L.P., in the amount of \$489,331.
- 20 September 2006: Approval was received to purchase a Carbon Hydrogen Nitrogen Sulfur Analyzer (CHNS) and thermal conductivity equipment. Multiple purchase orders have been issued.

MISCELLANEOUS ACTIVITY

- 31 August 2006: Relief of accountability was received from NSF for stolen camera equipment.
- 13 September 2006: Approval was received to transfer title of a mini-center power distribution unit and output interface with cables for disposal purposes.

APPENDIX B: FINANCE REPORT

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

APPENDIX C: PERSONNEL STATUS

JOI

The following positions were vacated during the quarter:

- Director, Ocean Drilling Programs (Frank Rack): 4 August 2006
- Associate Directory, Ocean Drilling Programs (David Divins): 7 August 2006
- Program Associate, Ocean Drilling Programs (Matthew Niemitz): 25 August 2006

The following positions were opened and advertised during the quarter:

- Associate Director, Ocean Drilling Programs
- Assistant Director, Ocean Drilling Programs

The following positions were filled during the quarter:

- Director, Ocean Drilling Programs (David Divins): 7 August 2006
- Historically Black Colleges and Universities (HBCU) Fellow (Elda Auxiliaire): 28 August 2006

LDEO

There were no positions vacated during the quarter.

The following positions were opened and advertised during the quarter:

- Logging Scientist
- Manager of Engineering and Technical Services
- Electrical Engineer

The following positions were filled during the quarter:

- Logging Scientist (Jill Weinberger): 1 September 2006
- Manager of Engineering and Technical Services (Eric Meissner): 29 September 2006

TAMU/TAMRF

The following positions were vacated during the quarter:

- Staff Scientist (Neil Banerjee): 20 July 2006
- Budget Analyst (Latasha Lewis): 20 July 2006
- Editor (Abbi Balsmeier): 31 August 2006
- Travel Specialist (Sande Rogers): 9 August 2006

The following positions were opened and advertised during the quarter:

- Editor
- Budget Analyst

- Supervisor of Science Support
- Manager of Tools and Analytical Services
- Systems Administrator
- Lead Software Applications Developer
- Assistant Laboratory Officer
- Laboratory Officer
- Senior Software Applications Developer
- Travel Specialist

The following positions were filled during the quarter:

- Editor (Jennifer Hesse): 25 July 2006
- Administrative Assistant (Sande Rogers): 9 August 2006
- Engineer (Matt Butler): 14 August 2006
- Production Specialist I (Mary Chapman): 28 August 2006
- Travel Specialist (Sharon Gillespie): 1 September 2006

APPENDIX D: CONFERENCE AND MEETING SCHEDULE*

Conference/Meeting	Date	Location
Industry-IODP Science Program Planning Group (IIS PPG) Meeting	7–8 July 2006	Den Haag, Netherlands
Site Survey Panel (SSP) Meeting	24-26 July 2006	Sapporo, Japan
National Marine Educator's Association Conference	15-23 July 2006	New York City, New York
Operations Review Task Force (ORTF) Meeting: Expedition 310, Tahiti Sea Level	2–3 August 2006	Washington, D.C.
Science Planning Committee (SPC) Meeting	28-31 August 2006	Bergen, Norway
IODP-MI Depth Scale and VCD/Lithology Meetings	25–28 September 2006	College Station, Texas
IODP-MI Paleontology Meeting	29–30 September 2006	Houston, Texas

^{*}Implementing organization meetings, IODP-MI task force meetings, SAS panel meetings, and scientific and educational conferences at which the USIO has a booth.

APPENDIX E: TRAVEL*

Purpose	Dates	Location	Personnel	Institution
Douglas Lake Summit on Scientific Integrity, University of Michigan Biological Station (UMBS)	5–7 July 2006	Pellston, Michigan	S. Bohlen	JOI
JOI Alliance Systems Management (JASMT) Meeting	5–8 July 2006	Washington, D.C.	J. Baldauf, J. Fox, A. Klaus	TAMU
United States Implementing Organization (USIO) Management Meeting	6–7 July 2006	Washington, D.C.	D. Goldberg, M. Reagan	LDEO
Science Advisory Structure (SAS) Executive Committee (SASEC) Meeting	11–12 July 2006	Washington, D.C.	D. Divins	JOI

Purpose	Dates	Location	Personnel	Institution
Expedition 310 Postexpedition Meeting and FY07 Annual Program Plan preparation	12–22 July 2006	College Station, Texas	G. Lowe	TAMU
Expedition 310 Postexpedition Meeting	17–22 July 2006	College Station, Texas	K. Petronotis	TAMU
National Business Travel Association (NBTA) Conference	16–20 July 2006	Chigaco, Illinois	K. Bass	TAMRF
National Science Foundation (NSF) Geophysical Porous Media Workshop	16–29 July 2006	Indianapolis, Indiana	A. Cook	LDEO
National Marine Educators Association Conference	17–21 July 2006	New York, New York	M. Niemitz	JOI
Rock Eval VI and SR Analyzer evaluations	20 July 2006	Houston, Texas	C. Bennight, L. Brandt, D. Houpt, E. Moortgat	TAMU
Performance Based Statements of Work: Maximize Supplier Performance Seminar	20–26 July 2006	San Diego, California	R. Watkins	TAMRF
Site Survey Panel (SSP) Meeting	21–27 July 2006	Sapporo, Japan	C. Alvarez Zarikian	TAMU
East Coast Repository (ECR) core redistribution	24–28 July 2006	Palisades, New York	S. Prinz	TAMU
Human Resources Management Advanced Training	25–29 July 2006	Orlando, Florida	K. Johnson	TAMRF
Oracle Training	26 July 2006	Houston, Texas	P. Clark, P. Gates	TAMU
NanTroSEIZE Project Management Team Meeting	26–29 July 2006	Seattle, Washington	Adam Klaus	TAMU
HazMat Training	30 July-5 August 2006	Baltimore, Maryland	B. Kralich	TAMU
Operations Review Task Force (ORTF) Meeting: Expedition 310, Tahiti Sea Level	2–3 August 2006	Washington, D.C.	D. Divins	JOI
Sailed on Center for Deep Earth Exploration (CDEX) CHIKYU shakedown cruise	2–18 August 2006	Tokyo, Japan	D. Gentry, S. Prinz	TAMU
Evaluation of GEO software	3 August 2006	Houston, Texas	C. Bennight, P. Blum, Z. Mateo, C. John., B. Lambi	TAMU
National Conferences of Standards Laboratories International (NCSLI) Workshop and Symposium	4–7 August 2006	Nashville, Tennessee	D. Ferrell	TAMU
School of Rock Expedition Posexpedition Meeting	6-9 August 2006	College Station, Texas	M. Niemitz	JOI
National Instruments NIWeek Seminar	8–10 August 2006	Austin, Texas	L. Chen, T. Cobine, D. Ferrell, M. Meiring, E. Moortgat	TAMU
Employee relocation	8-10 August 2006	College Station, Texas	B. Zunk	TAMU
Temp-Metrology Seminar	8–13 August 2006	Salt Lake City, Utah	M. Meiring	TAMU
NanTroSEIZE Engineering Design Review Meeting	9–11 August 2006	College Station, Texas	D. Saffer	TAMU
Oracle Training	12-26 August 2006	Denver, Colorado	D. Sims	TAMU
Digital and Design Training	13–17 August 2006	Dallas, Texas	T. Fulton	TAMU
Digital and Design Training	13-18 August 2006	Dallas, Texas	B. Crawford	TAMU
APC3 calibration at Scripps	15–18 August 2006	San Diego, California	D. Ferrell	TAMU
Expedition 307 Second Postexpedition Meeting	18 August–2 September 2006	Japan	T. Williams	TAMU

Purpose	Dates	Location	Personnel	Institution
International Sedimentological Congress	18 August–6 September 2006	Fukuoka, Japan	T. Williams	LDEO
Commvault Software Training	20-23 August 2006	Orlando, Florida	J. Hutchinson	TAMU
Coretray Vendor Meeting	23 August 2006	Houston, Texas	P. Rumford	TAMU
JOIDES Resolution Phase 1 demobilization: Custodian	25 August–26 November 2006	Singapore	P. Pretorius	TAMU
JOIDES Resolution Phase 1 demobilization	24 August–3 September 2006	Singapore	B. Julson	TAMU
JOIDES Resolution Phase 1 demobilization	26 August–3 September 2006	Singapore	T. Bronk, K. Grigar, R. Grout, J. Hutchinson, R. Mitchell, L. Crowder	TAMU
JOIDES Resolution Phase 1 demobilization	26 August–3 September 2006	Singapore	R. McPherson, M.P. Thraen	TAMRF
JOIDES Resolution Phase 1 demobilization: site inspection/hotel negotiations	26 August–3 September 2006	Singapore	D. DeShetler	TAMRF
JOIDES Resolution Phase 1 demobilization	27 August–3 September 2006	Singapore	M. Storms	TAMU
Science Planning Committee (SPC) Meeting	25 August–1 September 2006	Bergen, Norway	J. Baldauf	TAMU
SPC Meeting	26 August–1 September 2006	Bergen, Norway	A. Malinverno	LDEO
Galaxy 6.1 Level 1 Class	27-30 August 2006	Oceanport, New Jersey	M. Mefferd	TAMU
Learning Tree Seminar	28 August–2 September	El Segundo, California	Y. Zhu	TAMU
Sailed on CDEX CHIKYU shakedown cruise and visited Kochi Core Center and CDEX facilities	29 August–20 September 2006	Yokohama, Japan	R. Culberson, J. Firth, P. Rumford	TAMU
Visit to vendor (Panalpina)	31 August–1 September 2006	Houston, Texas	S. Dillard	TAMU
Ocean Lithosphere Workshop	6–9 September 2006	Portland, Oregon	K. Grigar, R. Grout, J. Miller	TAMU
Integrated Ocean Drilling Program (IODP) Mission Moho Meeting	6–12 September 2006	Portland, Oregon	G. Iturrino	LDEO
Video Editing Training	10-16 September 2006	Dallas, Texas	J. Beck	TAMU
Sun Cluster 3.1 Administration Training	10–17 September 2006	Broomfield, Colorado	M. Mefferd	TAMU
Allen Press Editorial Seminar	13–16 September 2006	Lawrence, Kansas	G. Delgado	TAMU
Visit to vendor (Langham Creek Machine Works)	14 September 2006	Houston, Texas	M. Butler	TAMU
IODP Workshop on Continental Breakup	14–20 September 2006	Pontresina, Switzerland	G. Pollard	TAMU
Solidworks Training	15–21 September 2006	Dallas, Texas	M. Butler	TAMU
ESI International Government Contract Audit Course	16–20 September 2006	Washington, D.C.	B. Lancaster	TAMRF
Colorado International Hydrate Workshop	16–23 September 2006	Golden, Colorado	A. Cook	LDEO
LabVIEW Advanced Training	17–20 September 2006	Austin, Texas	R. Busse, T. Cobine, D. Fackler, D. Hornbacher	TAMU
Gartner IT and Software Asset Management Summit	17–22 September 2006	Orlando, Florida	D. Ponzio	TAMU
Windows Internals Training	17–23 September 2006	San Francisco, California	M. Hodge, D. Morley, M. Petersen, A. Trefethen	TAMU
JASMT Meeting	18–20 September 2006	Washington, D.C.	D. Goldberg, M. Reagan	LDEO

Purpose	Dates	Location	Personnel	Institution
JASMT Meeting	18–21 September 2006	Washington, D.C.	J. Baldauf, J. Fox, Ann Klaus	TAMU
SQL Server 2006 Database Administration Training	23 September–1 October 2006	Ed Segundo, California	Y. Zhu	TAMU
IODP Management International, Inc. (IODP-MI) Depth Scale and VCD/Lithology Meetings	24–28 September 2006	College Station, Texas	T. Williams	LDEO
Society of Petroleum Engineers (SPE) Annual Technical Conference	25–26 September 2006	San Antonio, Texas	K. Grigar, M. Storms	TAMU
National Association of Black Geologists and Geophysicists (NABGG) Annual Technology Conference	27–28 September 2006	Houston, Texas	J. Corsiglia, Q. Conyers	JOI
IODP-MI Paleontology Meeting	29–30 September 2006	Houston, Texas	P. Blum, I. Goll, R. Goll, D. Houpt, Ann Klaus, Z. Mateo, R. Mithal, E. Slone	TAMU

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

APPENDIX F: DATA REQUESTS

Top 1	Top 10 Countries Accessing Janus Web Database			
Rank	Country Visitor Sessions			
1	United States	17,867		
2	Germany	592		
3	United Kingdom	353		
4	Japan	186		
5	Netherlands	118		
6	Canada	92		
7	Italy	92		
8	China	79		
9	France	74		
10	Switzerland	67		
	All others	563		
	Total	20,083		

^{*}Excluding access from IODP-USIO Science Services, TAMU.

Top 20 Janus Web Queries			
Rank	Query	Uploads	
1	Sample report	1,866	
2	Core photos	666	
3	Hole trivia	568	
4	Chemistry (IW)	501	
5	Point calculator	379	
6	Site hole summary	365	
7	Leg summary	329	
8	Color reflectance (RSC)	302	
9	Core section summary	298	
10	Bulk density (GRA)	267	
11	Moisture and density (MAD)	264	
12	Requests	253	
13	Magnetic susceptibility	247	
14	Hole core summary	231	
15	P-wave velocity (PWL)	211	
16	Site details	190	
17	Age model	177	
18	Range table	163	
19	Chemistry carbonates	155	
20	Rock eval	146	
	Others	2,498	
	Total	10,076	

^{*}Excluding access from IODP-USIO Science Services, TAMU.

	Other Web Statistics				
Database	e query hits				
	Entire site (successful)	44,886			
	Average per day	487			
Visitor se	essions				
	Total number of visitor sessions	20,083			
	Average per day	218			
	Average length of visit	00:12:56			
	International visitor sessions	10.84%			
	Visitor sessions of unknown origin	0.19%			
	Visitor sessions from United States	88.97%			
Visitors	·				
	Unique visitors	4,082			
	Visitors who only visited once	1,886			
	Visitors who visited more than once	2,196			
	Average visits per visitor	4.92			

Data Requests to Data Librarian		
Requests	Total	
Country:		
United States	21	
Germany	2	
Australia	1	
Canada	1	
New Zealand	1	
Switzerland	1	
United Kingdom	1	
Unknown	1	
Total	29	
Data:		
Data request	15	
Photo request	7	
DB query problem/question	3	
Data correction	2	
Moratorium log-in problem	1	
Data question	1	
Total	29	

 $[*]Excluding\ access\ from\ IODP-USIO\ Science\ Services,\ TAMU.$

IODP-USIO Science Services, LDEO, Logging Data Requests				
Expedition	Expedition Request Number, Name, Affiliation, Country Type of Data			
	There were no data requests for this period.			

APPENDIX G: SAMPLE REQUESTS

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples	
East Coast Repository:				
	1	20239C, Tipple, Pagani, USA	122	
		20116C, Eldrett, Brinkhuis, Scotland	42	
		21024A, Verosub, Jovane, Florindo, USA	31	
		20858A, Veevers, Australia	107	
		20086B, Piotrowski, United Kingdom	51	
		20197H, Bohaty, Florindo, Zachos	83	
		20289E, Chun, Delaney, USA	51	
		20758B, Roters, Henrich, Germany	16	
	2	20882A, Rosenthal, Sosdian, USA	259	
		20909B, Tripati, Eldrett, USA	408	
		20961A, Maiorano, Lirer, Italy	235	
		20992A, Delaney, Scher, USA	91	
		20995A, Storkey, Hannah, New Zealand	58	
		21002A, Huber, Georgescu, USA	68	
		21039A, Lonnee, USA	12	
		21045A, Khelifi, Sarnthein, Weinelt, Germany	258	
	3	21067A, van de Flierdt, Williams, USA	39	
Total science	6			
Total education:	0			
Total PR:	0			
Total:	6	17	1931	
Gulf Coast Reposit	torv			
Guii Goust Reposit	.0.7.	17631B, Clarke, United Kingdom	41	
		17956C, Tiederman, Germany	7	
		18396B, Nicolo, Dickens, USA	40	
		18396C, Nicolo, Dickens, USA	83	
		18396D, Nicolo, Dickens, USA	83	
		18475B, Ishii, Haraguchi, Machida, Japan	1	
		20089E, Diester-Haass, Emeis, Germany	130	
		20469D, Fantle, USA	13	
		20723C, MacLeod, USA	5	
		20780E, Koepke, Germany	30	
		20810C, Henrich, Preiss-Daimler, Germany	90	
		20835B, Whaley, Sautter, USA	5	
		20842B, Shimada, Japan	128	
		20873B, Morris, Gill, USA	6	
		20890A, Norris, USA	62	
		20922A, Pettke, Kodolanyi, Spandler, Switzerland	15	
		20953A, Godfrey, USA	234	
		20956A, Wortmann, Canada	116	
		20966A, Gray, Paytan, USA	109	
		20967D, VanLaningham, USA	2	
		20972B, Miyoshi, Japan	35	
		20973A, Herron, USA	233	
		20985A, Shamrock, Watkins, USA	81	
		20988A, Hayes, Ireland	30	
		ZOBOOA, Hayes, Helaliu	30	

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples	
		20989A, Veres, Sweden	1019	
		20996A, Singh, India	337	
		20997A, Gray, Paytan, USA	1	
		20998A, Balestra, Italy	63	
	1	21001A, Pirmez, Banks, USA	34	
		21009A, Suzuki, Chiba, Japan	96	
		21017A, De Bernardi, Petrizzo, Erba, Italy	602	
		21026A, Land, Wust, Carter, Australia	56	
		21027A Koepke, Germany	53	
		21029A, Clarke, United Kingdom	61	
		21030A, Sato, Nakamura, Ishibashi, Japan	18	
		21031A, Ferretti, McCave, Elderfield, United Kingdom	438	
		21033A, Hovan, Ravelo, USA	494	
		21034A, Swann, United Kingdom	56	
		21036A, Seyfried, USA	1	
		21038A, Moss, Australia	157	
		21043A, Leckie, USA	14	
		21053A, Westerhold, Germany	69	
		21055A, Winckler, Anderson, USA	98	
		21058A, Bassinot, France	45	
		21062A, Norris, USA	184	
	1	21063A, Firth, USA	3	
	16	Public Relations Tours (2)	No samples	
Total science	2			
Total education	0			
Total PR	16			
Total:	18	46	5478	
Nest Coast Repos	itory:			
		20723C, MacLeod, USA	9	
		20972B, Miyoshi, Japan	34	
		20994A, Huber, Georgescu, USA	114	
		21037A, Galy, France-Lanord, France	10	
		21040A, Haig, Rex, Laurie, USA	52	
		21056A, Pringle, Frey, USA	20	
		21065A, Lear, Wade, United Kingdom	227	
Total science:	0			
Total education:	0			
Total PR:	0			
Total:	0	7	466	

APPENDIX H: PUBLICATIONS

Publication	Release Date	URL		
Scientific Prospectus				
NanTroSEIZE Project Stage 1 (prepared by USIO)	4 August 2006	http://www.iodp.org/nantroseize-stage-1-scientific-prospectus/		
Proceedings of the Integrated Ocean Drilling Program:				
Expedition 308 (Gulf of Mexico Hydrogeology)	8 July 2006	http://iodp.tamu.edu/publications/exp308/308toc.htm		
Expedition 303/306 (North Atlantic Climate)	9 September 2006	http://iodp.tamu.edu/publications/exp303_306/30306toc.htm		

APPENDIX I: WEB

Comparison of Web access statistics averages between FY06 Q3 and FY06 Q4 indicates a 6% increase in Web site traffic. Comparison of Web access statistics totals between FY05 Q4 and FY06 Q4 indicates a 2.5% increase in Web site traffic.

USIO

FY06 Q4 USIO Web Site (Servers: www.iodp-usio.org, iodp.ldeo.columbia.edu, iodp.tamu.edu)				
Parameter	JOI	LDEO	TAMU	Totals
Page views	21,998	7,087	305,829	334,914
Site visits*	13,306	5,917	49,707	68,930
FY06 Q1-Q4 USIO Web Site				
Parameter	JOI	LDEO	TAMU	Totals
Page views	84,334	23,119	1,355,430	1,462,883
Site visits*	50,691	21,589	186,938	259,218

^{*}Where possible, visits by USIO employees and search engine spiders and robots have been filtered out.

New and updated web pages	Release date	URL
Expeditions: ship report compilations	Jul 2006	http://iodp.tamu.edu/scienceops/sitesumm_prev.html
Database: ODP/DSDP data migration	Jul 2006	http://iodp.tamu.edu/database/migration.html
Database: moratorium dates	Jul 2006	http://iodp.tamu.edu/database/moratorium.html
Publications: <i>Proceedings</i> Volume 308	Jul 2006	http://iodp.tamu.edu/publications/exp308/308toc.htm
Newsroom: added news releases	Jul 2006	http://www.iodp-usio.org/Newsroom/releases.html
Newsroom: added news stories	Jul 2006	http://www.iodp-usio.org/Newsroom/news.html
Participants: merchandise products	Jul 2006	http://iodp.tamu.edu/publicinfo/merchandise.html
Expeditions: Expedition 310 maps	Aug 2006	http://iodp.tamu.edu/scienceops/maps/exp/
Expeditions: DSDP/ODP/IODP poster	Aug 2006	http://iodp.tamu.edu/scienceops/maps/poster/combined.html
Expeditions: friends & family photos	Aug 2006	http://iodp.tamu.edu/scienceops/gallery.html
Newsroom: official/media photos	Aug 2006	http://iodp.tamu.edu/spublicinfo/gallery.html
Labs: Analytical Services wiki	Aug 2006	http://millstone.iodp.tamu.edu/wiki/index.php/Main_Page
Expeditions: operations schedule	Sep 2006	http://iodp.tamu.edu/scienceops/
Publications: <i>Proceedings</i> Volume 303/306	Sep 2006	http://iodp.tamu.edu/publications/exp303_306/30306toc.htm
Tools: toolstring selection	Sep 2006	http://iodp.ldeo.columbia.edu/TOOLS_LABS/toolstring_selection.html
Tools: tools by measurement	Sep 2006	http://iodp.ldeo.columbia.edu/TOOLS_LABS/tools_by_measurement.html
USIO sponsored sites		
JOI Learning: career profiles	Jul 2006	http://www.joilearning.org/careers/careers_flash.html
ODASES (TAMU)	Sep 2006	http://odases.tamu.edu/
LODOS (LDEO)	Sep 2006	http://www.ldeo.columbia.edu/res/div/mgg/lodos/

APPENDIX J: DSDP/ODP CORE REDISTRIBUTION PROJECT

During this quarter, the East Cost Repository (ECR) hired three full-time staff and five summer students to initiate the core redistribution project. Initial labor was devoted to arranging appropriate work space and purchasing and setting up equipment and supplies to allow the full-time staff to have a permanent area for core packing. Four shipments (three core containers and one container of residues and core-catcher [CC] boxes) were sent from ECR to Bremen Core Repository (BCR), and one shipment of sample residues from the West Coast Repository (WCR) was shipped to BCR. A new shrink-wrapping/vacuum-sealing machine and an electric pallet jack were ordered for the WCR so that it will be set up well before core packing begins in FY07.

A schedule for shipping core containers from ECR to BCR was posted on an IODP-MI public Web page to inform the community of the expected times that cores will be unavailable for sampling (www.iodp.org/core-redistribution-plan). Monthly updates of the project's progress were given to USIO management and to IODP-MI.

The USIO invested considerable time and effort in training curatorial representatives from the Center for Deep Earth Exploration (CDEX). In July 2006, the USIO curatorial staff hosted the CDEX staff at the GCR and WCR for one week at each repository and provided training in curatorial procedures, policy, and repository management. USIO curatorial staff sailed on the *CHIKYU* shakedown cruises in August and September 2006 to provide shipboard advice on core flow and curatorial techniques and procedures, and visited the Kochi Core Center (KCC) and advised CDEX and Kochi University representatives on how to prepare the KCC repository facility for receiving the DSDP/ODP core collection, sampling cores, and hosting scientists. The USIO curatorial staff also had discussions with other CDEX staff at JAMSTEC.

APPENDIX K: EDUCATION

U.S. education activities are supported by NSF through SIC funding. These activities are not included in the POC and SOC budgets.

JOI LEARNING

EDUCATION VISUAL IDENTITY—JOI LEARNING WEBSITE

In August 2006, a new career interactive activity was added to the JOI Learning Web site that links 20 career profiles to the *JOIDES Resolution* photo mosaic. Viewers may now scroll over the mosaic to find and print profiles for a wide array of IODP-related careers. Because the interactive activity has room for as many as 80 more profiles, interviews with key scientists are now under way. In addition, site content may now be accessed by audience, science topic, National Science Education content standard, and alphabetical searches. Finally, the JOI Learning Web site was chosen by Bridge (a Centers for Ocean Sciences Education Excellence [COSEE] partner supported by SEAGRANT and the National Marine Educators' Association) as the "Teacher's Top Web Pick" for September 2006.

MATERIALS DEVELOPMENT AND EDUCATION PROGRAMS SCHOOL OF ROCK EXPEDITION

The School of Rock postexpedition meeting was held 6–9 August 2006 at the GCR. Activities included a repository tour and lecture, a peer review of new SOR materials, and participant outreach updates. D. Thomas, Ocean Drilling and Sustainable Earth Science (ODASES) initiative faculty member and paleoceanographer, presented her paleoclimate research in the

context of School of Rock experiences. Her talk was followed by a lively discussion of the uses of paleoclimate data and research methods in the teaching of modern climate change topics. IODP technicians, staff, and scientists were also on hand to add to the discussion.

To date, expedition participants have conducted 17 outreach events ranging from 1 hour introductions to a 5 day graduate course for teachers at Western Michigan University. The program has also been covered in 25 print and Web-based publications, including two trade books, *GeoTimes, Scientific Drilling*, and *Eos, Transactions of the American Geophysical Union*.

OUTREACH AND MATERIALS DEVELOPMENT

"A Bolt from the Blue," the methane hydrate poster developed late last fiscal year, was a finalist in the 2006 Science and Engineering Visualization Contest sponsored by NSF and *Science*. The poster was chosen from more than 200 submissions from the United States and abroad.

A new poster, "Microfossils: The Ocean's Storytellers," was completed and printed at the end of July. The poster includes a range of activities designed to link Earth science content and concepts to other more commonly offered disciplines. This poster, based on microphotographs made by SOR participants and data from DSDP Leg 3 and ODP Leg 146 (Hole 893A), includes activities designed for use in high school Earth systems, chemistry, and biology courses. In keeping with our overall strategic plan, one of the activities can be adapted for younger audiences and two can be adapted for early undergraduates. The poster can be viewed at www.joilearning.org/posters/microfossils.html.

Two additional posters are in development, one using cores from Expedition 309 to teach visual core description and one introducing paleomagnetism and content related to the physical sciences.

In August, L. Peart (Director of Education, JOI) and N. Felix (Intern, JOI) introduced JOI Learning materials to 100 District of Columbia elementary teachers through a program called Reading Across Curriculum. Five hundred packets of materials were also distributed to Ohio science teachers through an annual conference in Toledo, and JOI Learning was invited to share materials with a group of 40 National Ocean Science Bowl coaches from across the United States during a workshop conducted by our partners at the Consortium for Oceanographic Research (CORE). Orders of materials received through the Web site continue at more than twice the rate of 2005, with increasing numbers of requests for multiple packets.

HISTORICALLY BLACK COLLEGES AND UNIVERSITIES FELLOWSHIP

Fall semester payments of \$7,500 each for the two HBCU Fellows were released to Howard University in July 2006. Both HBCU Fellows are Masters students in mass communication and media studies at Howard University. Q. Conyers, a second-year HBCU Fellow, will continue her work on USIO public outreach activities. E. Auxiliaire, the first-year HBCU Fellow, has an interest in science education and will work on education activities, including a special outreach project with the Washington, D.C., area public schools.

The USIO continues to face significant challenges in recruiting fellowship applicants from HBCUs and thus continues to discuss if the fellowship is the best mechanism to attract (and retain) minorities to the Earth and geosciences.

OUTREACH/CONFERENCES

The Association for the Advancement of Computing in Education invited M. Niemitz (Program Assistant, JOI) to submit for publication in one of their journals his highly rated paper "Ship-to-shore Educational Communications and Interactivity via the World Wide Web: The School of Rock Expedition Case Study," presented at the ED-MEDIA conference last quarter.

JOI representatives also staffed a booth at the National Marine Educator's Association conference held 15–23 July 2006 in New York City, New York.

APPENDIX L: IODP-USIO QUARTERLY REPORT DISTRIBUTION LIST

- J. Allan, NSF, jallan@nsf.gov
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