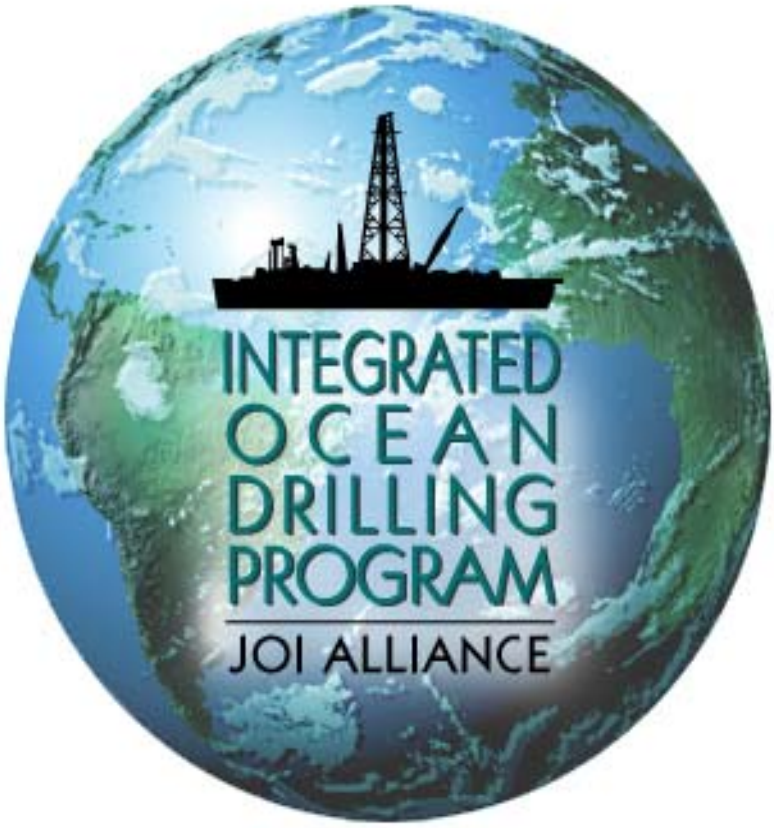
15 May 2007



1 January–31 March 2007

FY07 Quarterly Report 2

NSF Contract No. OCE-0352500

Submitted by the JOI Alliance to

The National Science Foundation

and

IODP Management International, Inc.

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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) FY07 Annual Program Plan as implemented during the second quarter of FY07 by the USIO, which is composed of Joint Oceanographic Institutions, Inc. (JOI), and its partners, Texas A&M University (TAMU) and Lamont-Doherty Earth Observatory (LDEO) of Columbia University.[1]

EXPEDITION OPERATIONS

EXPEDITION PLANNING AND IMPLEMENTATION ACTIVITIES

FY08 budget constraints resulted in major revisions to the USIO expedition schedule during this quarter. On 12 March 2007, the USIO issued a draft revised schedule to be used for internal FY08 budget preparation and planning of FY07 spending related to FY08 expeditions. Changes from the previous planning schedule that was issued on 6 September 2006 included the following:

- The Phase 2 operational start date was changed from 1 November 2007 to 1 January 2008;
- Transit from Singapore to Yokohama, Japan, was scheduled for 1–18 January 2008;
- Operations from the original two IODP-USIO Nankai Trough Seismogenic Zone Experiment (NanTroSEIZE) expeditions were merged into one expedition, without circulation obviation retrofit kits (CORKs), scheduled for 18 January–19 March 2008;
- The Pacific Equatorial Age Transect (PEAT) expeditions were shifted to new positions in the schedule, 19 March–19 May 2008 and 19 May–19 July 2008;
- The full Juan de Fuca Hydrogeology expedition was eliminated and replaced with an estimated four operation days for remedial cementing added to the end of PEAT Expedition 2; and
- The Bering Sea expedition was moved to 19 July–18 September 2008.

IODP-USIO PACIFIC EQUATORIAL AGE TRANSECT EXPEDITIONS 1 AND 2

Expedition Planning: A pre-expedition meeting was held 8–9 February 2007 in College Station, Texas, to finalize expedition operational plans and complete a draft of the Scientific Prospectus for the PEAT expeditions. The operations plans and prospectus were subsequently revised according to the revision of the USIO expedition planning schedule.

Expedition Staffing: The second Co-Chief Scientist accepted an invitation to sail on PEAT Expedition 2, completing Co-Chief Scientist staffing for the PEAT program. An initial review of 114 applications began, with a first round of invitations to be issued early in the next quarter.

NANTROSEIZE PROJECT STAGE 1 EXPEDITIONS

Expedition Planning: The two previously scheduled IODP-USIO NanTroSEIZE expeditions (Subduction Inputs and Kumano Basin Observatory) were merged into a single expedition with nearly identical science objectives. The Kumano Basin Observatory was removed from the plan, as well as significant use of casing. The merged plan will focus mainly on obtaining the coring

[1] In this document, references to USIO-TAMU include Texas A&M Research Foundation (TAMRF).

objectives from the Subduction Inputs and Kumano Basin sites. The two original Scientific Prospectuses were merged and submitted as a single report for review, and the clearance request was submitted.

Expedition Staffing: All invitations for Co-Chief Scientists and scientists were cancelled. A complete reassessment of science staffing has commenced among the USIO, Program Member Offices (PMOs), and NanTroSEIZE Project Management Team (PMT). The Center for Deep Earth Exploration (CDEX) has delayed issuing the second round of invitations for the CDEX Stage 1 expeditions because the science staffing reassessment will likely impact their staffing strategies.

IODP-USIO Juan de Fuca Hydrogeology 2 Expedition

Expedition Planning: With the exception of one four-day operational activity, the Juan de Fuca Hydrogeology 2 expedition was removed from the FY08 schedule because of budget constraints. At the end of PEAT Expedition 2, the ship will transit to the Juan de Fuca operating area to conduct remedial cementing of the observatories installed in Holes U1301A and U1302B in 2004.

Engineering Design/Technology: An engineering meeting was held in College Station, Texas, on 22 February 2007, where a Juan de Fuca Co-Chief Scientist and the proponent engineer reviewed the status of design work on the CORK IIs. It was determined that the third-party engineering/design effort will continue and design drawings will be delivered the USIO when completed.

IODP-USIO Bering Sea Expedition

Expedition Staffing: Both Co-Chief Scientists accepted invitations to sail. USIO staff began working with the Co-Chief Scientists to produce an expedition summary to accompany a call for applications.

Expedition Planning: The pre-expedition meeting was scheduled for 18–19 June 2007.

IODP-USIO *JOIDES Resolution* Phase 1 Demobilization

The Wireline Heave Compensator completed its transit from Singapore to the United States, arriving on 13 April 2007 at the Schlumberger offices in Houston, Texas, where initial inspection will be conducted before shipping the unit to USIO-LDEO.

ENGINEERING AND TECHNOLOGY DEVELOPMENT

Projects and Other Activities

USIO-TAMU Engineering Services

Simulated Borehole Test Facility: A new 20V three-phase electrical outlet was added to the clay mixer in the Simulated Borehole Test Facility (SBTF). The mixer was used to mix clay, sand, and water into sediment samples that were subsequently compressed to simulate the formation, and then evaluated for their grain size distribution and porosity (moisture content).

Common Downhole Data Logger: Work continued on the data logger schematic diagram, which is near completion. Several software routines were written for controlling onboard intelligent devices.

Calibration Laboratory: Pressure transducers from the temperature/dual pressure (T2P) downhole temperature and pressure tool were calibrated using the dead weight tester and the temperature bath.

Downhole Sensor Sub: Both Downhole Sensor Sub (DSS) tools were tested at Schlumberger's Genesis test facility on 31 March 2007. The tools were run in tandem, with the first tool positioned ~3 m from the bit and the second tool ~7 m above the bit. Preliminary results indicated that weight on bit (WOB) and torque on bit (TOB) were successfully measured and recorded during the tests. Further analysis of the test results began.

Test Facility: The 3-ton hoist in the Test Facility (TFAC) derrick was removed for servicing, during which the hook on the hoist was deemed unsafe for operations. The hoist was sent to an outside vendor for evaluation for repair.

Instrumented Water Sampler: Work resumed on Instrumented Water Sampler (IWS) development. The AutoCAD-based design was converted to SolidWorks format. Design recommendations from Leg 208 as well as the implementation of the new Common Data Acquisition (CDAQ) electronics are being incorporated.

Instrumented Load Pins: Instrumented load pins, which are mounted at the pivot joint of the hook, are used to measure drill string hook load. The four IODP-USIO load pins were sent to the manufacturer for calibration and upgraded electronics. The rig instrumentation vendor, Epoch Well Services, was approached to supply the wireless interface for the load pin data, which will be transmitted to the rig instrumentation via a wireless link.

Advanced Piston Corer Temperature Tool 3 Implementation: USIO-TAMU Engineering Services staff members and a CDEX staff member visited Antares Datensysteme GmbH in Bremen, Germany, on 5 March 2007 to launch the joint USIO/CDEX implementation of the Advanced Piston Corer Temperature Tool 3 (APCT-3). Work began on procurement, loans, calibration, and testing plans.

USIO-TAMU Analytical Services

IODP Sample Material Curation System–Central Inventory: The Central Inventory system plans and developments were discussed on 2 March 2007 with the curators at the IODP Curators and Data Management Coordination Group (DMCG) joint meeting in Bremen, Germany. Personnel from each implementing organization (IO) were designated as contact points for developing the interfaces from the various sample databases to the Central Inventory.

USIO-LDEO Engineering and Technical Services

Environmental Qualification Facility: USIO-LDEO received an M-RAD shock machine, which will provide mechanical shock testing in line with industry standards. Two USIO-LDEO engineers visited M-RAD Corporation in Woburn, Massachusetts, for operational training on the machine. Design of the test fixture used for securing logging tools to the shock machine was completed, and manufacture and delivery of the fixture was scheduled for the next quarter.

Modular High-Temperature Tool: Meetings were held between USIO-LDEO and Schlumberger electronic technicians to discuss telemetry and inclusion of the modular high-temperature tool (MTT) in the Schlumberger tool string.

Logging-While-Coring Project: USIO-LDEO and USIO-TAMU engineers began initial review of the specifications and documents for currently used USIO coring tools. A survey of

commercially available coring tools was initiated, after which a decision will be made whether to complete the project through an off-the-shelf commercial purchase or an in-house development strategy.

USIO-LDEO Science Services

Core-Log Integration Platform Software: The new Core-Log Integration Platform (NCLIP), the successor to Splicer and Sagan, was hosted at the Electronic Visualization Laboratory of the University of Illinois, Chicago, to expedite the next stage of development (www.evl.uic.edu/cavern/corewall/NClip/).

INFORMATION TECHNOLOGY

Projects and Other Activities

USIO-TAMU Information Technology and Data Services

Storage Area Network: Most of the UNIX data/services were relocated to a storage area network (SAN)-hosted volume, leaving only a small amount of data remaining that will be migrated later this fiscal year.

CommVault Server: The CommVault Galaxy Server is a comprehensive multiplatform data backup solution that replaces the ineffective Computer Associates Arcserve data backup software. All the purchased CommVault software was installed and configured and additional client licenses were requested due to additional hardware purchases.

Virtualization: A new virtual server was added (dropship) on physical server dropstone.iodp.tamu.edu for Raja Consultancy Incorporated (RCI) to test synchronization between onshore and shipboard materials-handling databases.

Web Services: Testing was initiated in a project to migrate from the SUN IPlanet Web server to Apache and Tomcat.

Operational Support: Air conditioning was temporarily augmented in the computer room with the introduction of building air. Integrated Lights Out Management (iLo) was added to a total of nine servers as a first step toward providing more complete manageability. Daylight Savings Time software patches were applied to all servers. The e-mail client GroupWise was upgraded to version 7 and the new client was installed on a limited number of desktops as a test.

Cumulus Digital Asset Management Installation: The shore component of the Cumulus Digital Asset Management (DAM) installation was extensively planned and installation, configuration, and user training was scheduled to take place during the next quarter.

Network Infrastructure: Planning began for network infrastructure additions for the new laboratory being built in the Gulf Coast Repository (GCR).

USIO-LDEO Information Services

Log Database Replacement: The new relational database model was demonstrated at the March 2007 DMCG meeting in Bremen, Germany. Feedback obtained from DMCG and the Scientific Earth Drilling Information Service (SEDIS) Phase I developer was incorporated into a revised model that was implemented to allow links from the metadata directly to each log data file. Development of Web services began, with basic Representational State Transfer (REST) queries available for testing.

Operations Database: Work continued on the development of a new operations database schema. The system will be deployed on the ship as a stand-alone system to capture details of logging operations to enable data to be transmitted to shore and stored in a master Operations Database. The Operations Database will be for internal use; however, relevant information will be exported and included within the new Logging Database to enable more complicated searches.

HEALTH, SAFETY, AND ENVIRONMENT

PROJECTS AND OTHER ACTIVITIES

USIO-TAMU HEADQUARTERS

Crisis Management Plan: A draft of the revised Crisis Management Plan was prepared for review by USIO-TAMU management. Once finalized, the revised plan will be shared with the other USIO partners to review shared applicability.

Building Security: Development of a card access system was completed and installation began, with final implementation expected during the third quarter of FY07.

REPORTS/PUBLICATIONS

IODP-USIO REPORTS

FY07 IODP QUARTERLY REPORT

The IODP-USIO report for the first quarter of FY07 (October–December 2006) was submitted to National Science Foundation (NSF) and IODP Management International, Inc. (IODP-MI), on 14 February 2007.

FY06 ANNUAL REPORT

The IODP-USIO FY06 Annual Report was completed and submitted to NSF and IODP-MI on 24 January 2007.

IODP SCIENTIFIC PUBLICATIONS

PROCEEDINGS OF THE INTEGRATED OCEAN DRILLING PROGRAM

Volume 310 (Tahiti Sea Level): Published on 4 March 2007 (see "Appendix H").

PROJECTS AND OTHER ACTIVITIES

IODP PUBLICATIONS SERVER HOSTED BY THE USIO

On 20 February 2007, IODP-MI, Sapporo, approved the design of Web banners for the new IODP server for scientific reports and publications. USIO staff members then began incorporating the new *Scientific Prospectus* and *Preliminary Report* series banners and migrating existing files to the new server (publications.iodp.org). At the end of the quarter, almost all IODP Phase 1 scientific reports and publications had been transferred.

COPYRIGHT FORMS

On 23 March 2007, in an effort to streamline the collection of copyright assignment forms from all authors of articles published in IODP's journal *Scientific Drilling* or chapters published in the *Proceedings of the Integrated Ocean Drilling Program,* the IODP-MI Sapporo office sent the USIO a revision of a waiver that would grant Staff Scientists assigned to IODP expeditions the

right to sign copyright statements for IODP publications on behalf of expedition participants. The waiver was under review by the USIO at the end of the quarter.

EDUCATION AND OUTREACH

PUBLIC AFFAIRS

USIO Communications and outreach activities this quarter focused on opportunities to publicize scientific ocean drilling through related publications and events with the goal of raising public and media awareness.

In support of USIO outreach, J. Corsiglia (Communications Associate, JOI) gave an introductory public and media outreach presentation to expedition Co-Chief Scientists, Staff Scientist, and key operations staff at the PEAT Pre-expedition Meeting held 8 and 9 February 2007 in College Station, Texas.

PUBLIC RELATIONS MATERIALS

USIO MEDIA ADVISORIES/NEWS RELEASES

The following media advisories were distributed this quarter:

- Climate Change Expert Lectures at University of South Florida, St. Petersburg (17 January 2007).
- Climate Change Expert Lectures at Florida A&M University (19 January 2007).

ARTICLES AUTHORED BY USIO STAFF

Science and other articles authored by USIO staff published during this quarter include the following. Other Program-related science articles are available online through the ocean drilling citation database (iodp.tamu.edu/publications/citations/database.html) and the IODP Expedition-related bibliography (iodp.tamu.edu/publications/citations.html).

- Peart, L., and Klaus, Ann, 2007. Retooling ocean drilling science into earth science educational resources. *Sci. Drill.,* 4:35–37.
- Prouhet, T., and Sharoff, J., 2007. An expedition to the seafloor: using Google Earth and ocean cores to analyze seafloor spreading. *Flotsam & Jetsam: A Newsletter for Massachusetts Marine Educators,* Spring 2007.

NEWS ARTICLES, PROGRAMS, MEDIA CITATIONS, OR PUBLIC COMMENTARY

News articles, programs, media citations, or public commentary published during this quarter resulting from IODP media and public awareness efforts included the following. See the "IODP in the news" Web page (www.iodp-usio.org/Newsroom/news.html) for other articles that raise the profile of the Program.

- *Discover,* 2007. The top 100 science stories of 2006—90. Drillers tap into foundation of Earth's crust. *Discover,* January 2007. http://discovermagazine.com/2007/jan/cover
- Krajick, K., 2007. Race to plumb the frigid depths. *Science,* 315(5818):1525–1528. doi:10.1126/science.315.5818.1525
- *La Recherche,* 2007. 1 an de science: la croûte océanique de part en part. *La Recherche,* 404. http://www.larecherche.fr/arch/07/01 (membership required)

- Lankes, C., 2007. Global warming debate heats up: experts discuss level of effects on Earth's atmosphere. *The [Texas A&M University] Battalion*, 21 March 2007. http://media.www.thebatt.com/media/storage/paper657/news/2007/03/21/News/Global.Warming.Debate.Heats.Up-2783614.shtml
- MacPherson, K., 2007. He warned of warming long before it was cool. *The [Newark, NJ] Star-Ledger,* 4 February 2007.
- *Sea Technology,* 2007. Annual review & forecast: new opportunities and challenges for ocean science research. *Sea Technol.,* 48(1). http://www.sea-technology.com/2007/2007AnnualIndex/Jan2007_annual_index.html
- *The Eagle,* 2007. Chinese educators to visit A&M. *The Eagle* [Bryan–College Station, Texas], 28 March 2007. http://www.theeagle.com/stories/032807/am_20070328051.php
- Tobin, H., 2007. Research highlights: A geophysicist wonders how and why faults behave in so many different ways. *Nature (London, U. K.),* 445(7130):798–799. doi:10.1038/445798a
- University of Arkansas, 2007. Geosciences lecture: probing the microbiology of deeply buried marine sediments. *Univ. Arkansas Daily Headlines,* 23 January 2007. http://dailyheadlines.uark.edu/9884.htm

MUSEUM PARTNERSHIPS

M. Leckie (Professor of Geosciences, University of Massachusetts, Amherst) and D. Thomas (Assistant Professor of Oceanography and member of Ocean Drilling and Sustainable Earth Science [ODASES], TAMU) conducted a teacher workshop called "Hot Times on Planet Earth" for 24 local teachers at the Denver Museum of Nature and Science. The day-long Saturday workshop was designed to prepare teachers for "Rapid Rise in Greenhouse Gas Concentrations 55 Million Years Ago: A Deep Sea Perspective on the Causes and Consequences," a U.S. Science Support Program (USSSP)-sponsored Distinguished Lecture Series talk by J. Zachos (Professor of Earth and Planetary Sciences, University of California, Santa Cruz).

EDUCATION OUTREACH/CONFERENCES

National Science Teachers Association Annual Conference: *JOI Learning* was well represented and well received at the National Science Teachers Association (NSTA) Annual Conference held 28 March–1 April 2007 in St. Louis, Missouri. The *JOI Learning* booth, representing both USIO and USSSP educational efforts, was manned by USIO staff, technicians, scientists, and Teacher-at-Sea and School of Rock teacher participants. Conference attendees were invited to view microfossil slides; examine Cretaceous/Paleogene (K/P) boundary and Paleocene/Eocene thermal maximum (PETM) cores; chat with educators, scientists and technicians; and enter a drawing for a mini-PETM core fabricated by P. Weiss (Marine Laboratory Specialist, USIO-TAMU). *JOI Learning* also sponsored the Informal Science Share-a-thon, presented a workshop based on School of Rock materials and posters, and performed Google Earth and plate tectonics demonstrations at two share-a-thons sponsored by the National Earth Science Teachers Association (NESTA). Approximately 900 science educators visited the booth or participated in a *JOI Learning* activity, and significant contacts were established with informal science providers and educators from across the United States, South America, Singapore, Europe, and the United Kingdom.

IODP-USIO WEB SITE

Main activities during this quarter included migration of the *Scientific Prospectus*, *Preliminary Report*, and *Proceedings* documents to the IODP publications server (publications.iodp.org) and production and posting of educational materials to the *JOI Learning* Web site (www.joilearning.org). See "Appendix I" for new Web content and access statistics.

PUBLICATIONS

This quarter saw publication of the Expedition 310 volume of the *Proceedings of the Integrated Ocean Drilling Program* (see "Appendix H" for dates and URLs).

USIO INTERACTIONS WITH IODP-MI AND OTHER IMPLEMENTING ORGANIZATIONS

INTERACTIONS

APCT-3 IMPLEMENTATION

USIO and CDEX commenced activities on the joint implementation of the APCT-3. See "Projects and Other Activities, USIO-TAMU Engineering Services" in the "Engineering and Technology Development" section for more information.

VISUAL CORE DESCRIPTIONS

USIO representatives communicated with the IODP-MI Sapporo office in January 2007 about minimum presentation requirements for visual core descriptions (VCDs) in preparation for the 5–7 February 2007 VCD/Lithology Meeting at CDEX. IODP-MI's goal was to ensure that VCDs and other graphical plots use a common look and layout throughout Program publications. During January, discussion focused on existing publication standards and the USIO's desire to find a replacement for the core description program AppleCORE. There was also discussion on whether the USIO should send a Publication Services representative on an early *CHIKYU* expedition to help, coach, and educate CDEX's staff about requirements for shipboard-produced reports that will be submitted to the USIO for editing and production and whether the USIO should host a technical editor from CDEX for an orientation on publications requirements and style in advance of Phase 2 operations. IODP-MI was supportive of both trips if the USIO has the necessary personnel and if CDEX agrees.

MEETINGS

ENVIRONMENTAL PROTECTION AND SAFETY PANEL

The Environmental Protection and Safety Panel (EPSP) meeting was held 9–11 January 2007 in Yokohama, Japan (see "Appendix E" for list of USIO attendees). J. Baldauf (Deputy Director of Science Services, USIO-TAMU) presented the USIO review and noted key operational issues.

ENGINEERING DEVELOPMENT PANEL

The Engineering Development Panel (EDP) meeting was held 17–19 January 2007 in New York City, New York (see "Appendix E" for list of USIO attendees). USIO representatives presented updates on current projects and participated in discussions of the emerging Technology Roadmap content and priorities and the new IODP-MI engineering project proposal process. The EDP meeting was preceded by an informal IO/IODP-MI meeting to discuss relevant issues.

VCD/LITHOLOGY

A VCD/Lithology Meeting was held 5–7 February 2007 at CDEX in Yokohama, Japan (see "Appendix E" for list of USIO attendees). The purpose of the meeting was to develop a consensus among IOs and Program management on how to present data in standard IODP publications and reports. The USIO was assigned to develop templates with the PC-based software application Strater that could be used by all IOs to generate VCDs and other types of data plots. Review of the templates began in preparation for submission to IODP-MI.

SITE SURVEY PANEL

The Site Survey Panel (SSP) meeting was held 20–22 February 2007 in San Diego, California (see "Appendix E" for list of USIO attendees). SSP conducted its normal review of the site survey status of active proposals and discussed expedition "safety" packages, what triggers SSP proposal review, and whether IOs can put IO site survey or hazard evaluations into the Site Survey Databank. Adam Klaus (Supervisor of Science Support, USIO-TAMU) gave a presentation covering major current USIO operational and planning activities and issues.

OPERATIONS TASK FORCE

A preliminary Operations Task Force (OTF) meeting was held at IODP-MI on 22 February 2007 in Washington, D.C. (see "Appendix E" for list of USIO attendees). The primary focus of the meeting was a discussion of revisions to the USIO FY08 operational schedule needed in light of budget guidance and other factors. A preliminary schedule was developed, which was presented to the Science Planning Committee (SPC) for approval at their March 2007 meeting. An OTF meeting was held on 2 March 2007 in Osaka, Japan, to approve a revised draft USIO operations schedule, which was issued 12 March 2007 (see "Expedition Planning and Implementing Activities" in the "Expedition Operations" section for details).

IODP CURATORS

The first IODP Curators Meeting was held 28 February–2 March 2007 in Bremen, Germany (see "Appendix E" for list of USIO attendees). This meeting included further exchange of information and training to arrange core shipments from the Bremen Core Repository (BCR) to the GCR and to help prepare CDEX curatorial staff for receipt of legacy cores as well as review and discussion of standardized curatorial procedures and policies for IODP.

DATA MANAGEMENT COORDINATION GROUP

An IODP DMCG meeting was held 2–4 March 2007 in Bremen, Germany (see "Appendix E" for list of USIO attendees). USIO attendees participated in discussions related to the IODP-MI portal, SEDIS, which is currently under development at Bremen, Germany, and the Sample Request Management system currently under development at USIO-TAMU.

SCIENCE PLANNING COMMITTEE

The SPC meeting was held 4–7 March 2007 in Osaka, Japan (see "Appendix E" for list of USIO attendees). J. Baldauf (Deputy Director of Science Services, USIO-TAMU) presented the USIO report.

IODP Quality Assurance/Quality Control Task Force

An IODP Quality Assurance/Quality Control (QA/QC) Task Force meeting was held 19–21 March 2007 at Leicester, U.K. (see "Appendix E" for list of USIO attendees). The purpose of this meeting was to develop a framework for QA/QC for measurements across IODP. A draft quality assurance plan for the Program was established, inter-IO calibration and quality checks were discussed, and a list of subject matter experts was nominated to act as a forum for QA/QC issues that will arise during Phase 2 operations. The Task Force was in consensus that its existence should be short lived, and that the Science Advisory Structure (SAS), specifically the Scientific Technology Panel (STP), should take on the responsibility of coordinating QA/QC activities throughout the life of IODP.

APPENDIX A: CONTRACTUAL ACTIVITIES

JOI

NSF CONTRACT OCE-0352500 WITH JOI

JOI received no modifications from NSF that were not related to the U.S. Scientific Ocean Drilling Vessel (SODV) Project.

JOI SUBCONTRACT JSC 4-03 WITH LDEO

JOI issued the following modifications during the reporting period:

- Modification 14: Provided funds in the amount of $651,751 toward the science operating cost (SOC) portion of the FY07 Annual Program Plan.
- Modification 15: Provided funds in the amount of $180,000 toward the SOC portion of the FY07 Annual Program Plan.

JOI SUBCONTRACT JSC 4-02 WITH USIO-TAMU

JOI issued the following modifications during the reporting period:

- Modification 21: Provided funds in the amount of $2,614,717 toward the SOC portion of the FY07 Annual Program Plan.
- Modification 22: Provided funds in the amount of $700,000 toward the SOC portion of the FY07 Annual Program Plan.

TAMU

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

- 31 January 2007: Received approval from JOI for the purchase of two new underreamers and their associated parts and the inspection, servicing, and function testing of the two previously purchased underreamers. The purchase order was issued to Hole Opener Corporation in the amount of $256,710.
- 27 March 2007: Received approval from JOI for an exception to the prior approval requirement for sole source orders/agreements over $100,000 when the pricing is based on previously competed/reasonable pricing.

APPENDIX B: FINANCE REPORT

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

APPENDIX C: PERSONNEL STATUS

JOI

There were no positions vacated during the quarter.

There were no positions opened and advertised during the quarter.

The following positions were filled during the quarter:

- Associate Director (Sean Higgins): 8 January 2007
- Assistant Director of Education (Sharon Katz Cooper): 5 March 2007

USIO-LDEO

There were no positions vacated during the quarter.

The following positions were opened and advertised during the quarter:

- Project Coordinator
- Log Analyst

The following positions were filled during the quarter:

- Project Coordinator (David Grames): 1 February 2007

USIO-TAMU

The following positions were vacated during the quarter:

- Marine Laboratory Specialist (Clayton Kurtis): 1 February 2007
- Curatorial Specialist (Keith Gentry): 3 February 2007

The following positions were opened and advertised during the quarter:

- Microcomputer Specialist
- Marine Laboratory Specialists (10)
- Staff Scientist

The following positions were filled during the quarter:

- Staff Scientist (Joerg Geldmacher): 1 January 2007
- Applications Developer II (Rupal Haribhakti): 1 January 2007
- Manager of Tools and Analytical Services (Peter Blum): 1 January 2007
- Editor (Jami Castillo): 5 February 2007
- Supervisor of Science Support (Adam Klaus): 12 February 2007
- Research Specialist (Lester Lembke-Jene): 1 March 2007
- Marine Computer Specialist (Grant Banta): 26 March 2007

APPENDIX D: CONFERENCE AND MEETING SCHEDULE*

Conference/Meeting	Date	Location
Environmental Protection and Safety Panel (EPSP) Meeting	9–11 January 2007	Yokohama, Japan
Engineering Development Panel (EDP) Meeting	17–19 January 2007	New York, New York
Industry-Integrated Ocean Drilling Program (IODP) Science Program Planning Group (IIS PPG) Meeting	19 and 20 January 2007	Houston, Texas
National Science Foundation (NSF)–Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) Meeting	23 and 24 January 2007	College Station, Texas
Visual Core Description (VCD)/Lithology Meeting	5–7 February 2007	Yokohama, Japan
Pacific Equatorial Age Transect (PEAT) Pre-expedition Meeting	8 and 9 February 2007	College Station, Texas
Site Survey Panel (SSP)	20–22 February 2007	San Diego, California
Integrated Ocean Drilling Program Management International, Inc. (IODP-MI), Implementing Organization (IO) Meeting	21 February 2007	Washington, D.C.
Operations Task Force (OTF) Meeting	22 February 2007	Washington, D.C.
IODP Curators Meeting	28 February–2 March 2007	Bremen, Germany
OTF Meeting	2 March 2007	Osaka, Japan
IODP Management International, Inc. (IODP-MI) Data Management Coordination Group (DMCG) Meeting	2–4 March 2007	Bremen, Germany
Science Planning Committee (SPC)	4–7 March 2007	Osaka, Japan
IODP-MI Quality Assurance/Quality Control (QA/QC) Task Force Meeting	19–21 March 2007	Leicester, United Kingdom
National Science Teachers Association (NSTA) Annual Meeting	28 March–1 April 20078	St. Louis, Missouri

*Implementing organization meetings, IODP-MI task force meetings, Science Advisory Structure (SAS) panel meetings, and scientific and educational conferences at which the USIO had a booth or exhibit.

APPENDIX E: TRAVEL*

Purpose	Date	Location	Personnel	Institution
Inspection of drill pipe coating	4–17 January 2007	Singapore	P. Thompson	USIO-TAMU
Environmental Protection and Safety Panel (EPSP) Meeting and meeting with Center for Deep Earth Exploration (CDEX) about NanTroSEIZE issues	6–16 January 2007	Yokohama, Japan	J. Baldauf	USIO-TAMU
EPSP Meeting	9–11 January 2007	Yokohama, Japan	N. DeSilva, M. Hovland	USIO-TAMU
Restek Comprehensive Gas Chromatograph Training	9 and 10 January 2007	Houston, Texas	C. Bennight, L. Brandt, K. Fujine, Y. Vasilyeva	USIO-TAMU
Schlumberger Meeting	10–15 January 2007	College Station, Texas	S. Mrozewski	USIO-LDEO
Engineering Development Panel (EDP) Meeting	15–19 January 2007	New York, New York	D. Goldberg, E. Meissner	USIO-LDEO
EDP Meeting	17–19 January 2007	New York, New York	P. Blum, L. Chen, K. Grigar, J. Miller	USIO-TAMU
Ocean Design, Inc., Meeting	17–19 January 2007	Orlando, Florida	B. Aduddell, M. Gray, D. Schroeder	USIO-TAMU
National Science Foundation (NSF)–Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) Meeting	23 and 24 January 2007	College Station, Texas	D. Divins	JOI
Educational outreach collaboration with Ft. Worth Museum of Science	22 January 2007	Ft. Worth, Texas	Ann Klaus, K. Petronotis	USIO-TAMU
Pick up automobile	25 January 2007	Austin, Texas	K. Hillis, R. Kralich	USIO-TAMU

Core packing at West Coast Repository (WCR)	28 January–3 February 2007	New York, New York	S. Prinz	USIO-TAMU
Conduct research	28 January–7 February 2007	Muscat, Oman	J. Miller	USIO-TAMU
PDMWorks Software Training	30 and 31 January 2007	Houston, Texas	B. Aduddell, M. Butler, M. Gray, K. Grigar, E. Schulte	USIO-TAMU
Conversion Management Team (CMT) Meeting**	31 January 2007	College Station, Texas	D. Divins	JOI
Business Writing Seminar	31 January–3 February	Nashville, Tennessee	C. Escamilla	USIO-TAMU
Gulf of Mexico Hydrogeology II (GOM2) Scoping Meeting	1 February 2007	Houston, Texas	R. Grout, C. John, M. Malone, M. Storms	USIO-TAMU
Downhole Tool System Design Meeting with Peter Flemings	1 February 2007	Houston, Texas	K. Grigar, D. Schroeder	USIO-TAMU
Investigation of Texas Instruments facility	1 February 2007	Houston, Texas	T. Bronk, B. Hamlin	USIO-TAMU
Gartner Wireless & Mobile Summit	4–7 February 2007	Dallas, Texas	C. Flores	USIO-TAMU
USIO Management Meeting	5 and 6 February 2007	Washington, D.C.	D. Goldberg	USIO-LDEO
USIO Management Meeting	5 and 6 February 2007	Washington, D.C.	F. Fox	USIO-TAMU
Visual Core Description (VCD)/Lithology Meeting	5–7 February	Yokohama, Japan	P. Blum, Z. Mateo, D. Partain, S. Zeliadt	USIO-TAMU
Pacific Equatorial Age Transect (PEAT) Pre-expedition Meeting	8 and 9 February 2007	College Station, Texas	J. Corsiglia, K. Sjo-Gaber	JOI
PEAT Pre-expedition Meeting	8 and 9 February 2007	College Station, Texas	S. Higgins	USIO-LDEO
OrCAD Training	11–14 February 2007	San Jose, California	M. Meiring	USIO-TAMU
Texas A&M University (TAMU) Trans-Texas Videoconference Network (TTVN) Annual Conference	13–17 February 2007	Galveston, Texas	D. Becker	USIO-TAMU
Visiting Scholar Program—James Madison University (Diversity Initiative)	14–16 February 2007	Harrisonburg, Virginia	N. Abdul	JOI
Business Writing Seminar	14–17 February 2007	Washington, D.C.	B. Lancaster	USIO-TAMU
Stress Engineering Services Meeting	20 February 2007	Houston, Texas	K. Grigar, M. Storms	USIO-TAMU
Monitoring of drill pipe refurbishment	20 February–17 March 2007	Singapore	P. Thompson	USIO-TAMU
Site Survey Panel (SSP) Meeting	20–22 February 2007	San Diego, California	Adam Klaus	USIO-TAMU
Cyber Security Summit Meeting	21 February 2007	Washington D.C.	T. Baker	USIO-LDEO
Visit to directors of CDEX and Japan Agency for Marine-Earth Science and Technology (JAMSTEC)	21–24 February 2007	Yokohama, Japan	J. Fox	USIO-TAMU
Operations Task Force (OTF) Meeting	22 February 2007	Washington, D.C.	M Reagan	USIO-LDEO
OTF Meeting	22 February 2007	Washington, D.C.	J. Baldauf, B. Wasson	USIO-TAMU
Galil Motion Control Training	25–28 February 2007	Rocklin, California	T. Cobine, M. Hastedt	USIO-TAMU
IODP Curators Meeting	28 February–2 March 2007	Bremen, Germany	C. Broyles, G. Esmay, J. Firth, K. Fujine, R. Mithal, S. Prinz, P. Rumford, D. Sims	USIO-TAMU
Microsoft Launch Tour	1 March 2007	Austin, Texas	T. Bloxom, J. Cordray	USIO-TAMU
OTF Meeting	2 March 2007	Osaka, Japan	D. Divins	JOI
OTF Meeting	2 March 2007	Osaka, Japan	J. Baldauf	USIO-TAMU

IODP Data Management Coordination Group (DMCG) Meeting	2–4 March 2007	Bremen, Germany	D. Quoidbach	USIO-LDEO
IODP DMCG Meeting	2–4 March 2007	Bremen, Germany	P. Blum, P. Foster, B. Lambi, R. Mithal, D. Sims	USIO-TAMU
Third-party Tool Integration Project Meeting at Bremen University	5 March 2007	Bremen, Germany	P. Blum, D. Ferrell, P. Foster, L. Lembke	USIO-TAMU
Visit to Antares for Advanced Piston Corer Temperature Tool 3 Implementation Project	6 March 2007	Bremen, Germany	P. Blum, D. Ferrell, P. Foster, L. Lembke	USIO-TAMU
Science Planning Committee (SPC) Meeting	4–7 March 2007	Osaka, Japan	D. Divins	JOI
SPC Meeting	4–7 March 2007	Osaka, Japan	A. Malinverno	USIO-LDEO
SPC Meeting	4–7 March 2007	Osaka, Japan	J. Baldauf	USIO-TAMU
U.S. General Services Administration (GSA) Utilization and Disposal Seminar	4–10 March 2007	Fort Worth, Texas	T. Salamone	USIO-TAMU
Stress Engineering Services Meeting	5 March 2007	Houston, Texas	K. Grigar, J. Miller, M. Storms	USIO-TAMU
Bringing Books to Life (Education Initiative)	5–7 March 2007	New York City, New York	S. Cooper	JOI
Society for Technical Communication (STC) Meeting	13–14 March 2007	Houston, Texas	K. Graber	USIO-TAMU
JOI-full Day Program (Historically Black Colleges and Universities [HBCU]/Diversity Initiative)	19 March 2007	Washington, D.C.	L. Aluwihare, D. Brown, D. Hasting	JOI
CosmosWorks Training	19–21 March 2007	Dallas, Texas	B. Aduddell, K. Grigar	USIO-TAMU
Customer Service Conference	19–21 March 2007	Houston, Texas	D. Becker, T. Bloxom, J. Cordray, P. Gates, Ann Klaus, M. Nobles, M. Petersen	USIO-TAMU
IODP Quality Assurance/Quality Control (QA/QC) Meeting	19–21 March 2007	Leicester, United Kingdom	T. Williams	USIO-LDEO
IODP QA/QC Meeting	19–21 March 2007	Leicester, United Kingdom	D. Houpt	USIO-TAMU
Inspection of M-RAD shock machine	22–23 March 2007	Woburn, Massachusetts	W. Masterson, S. Mrozewski	USIO-LDEO
Teacher Workshop at Denver Museum of Nature and Science	24 March 2007	Denver, Colorado	L. Peart	JOI
IODP-MI Management Forum	25–30 March 2007	Nikko, Japan	S. Bohlen	JOI
National Science Teachers Association (NSTA) Annual Meeting	28 March–1 April 2007	St. Louis, Missouri	L. Peart, J. Sharoff	JOI
NSTA Annual Meeting†	28 March–1 April 2007	St. Louis, Missouri	L. Crowder, J. Firth, C. Peng, K. Petronotis, P. Weiss	USIO-TAMU

*Travel associated with meetings, conferences, port call work, and nonroutine sailing activities.
**USIO funded this trip to a U.S. Scientific Ocean Drilling Vessel (SODV) Project meeting for D. Divins to attend as a USIO representative.
†Travel costs funded by other source.

APPENDIX F: DATA REQUESTS

JANUS DATABASE

Top 10 Countries Accessing Janus Web Database*		
Rank	**Country**	**Visitor Sessions**
1	United States	20,944
2	Germany	713
3	United Kingdom	437
4	Japan	278
5	France	254
6	China	177
7	Canada	131
8	Luxembourg	130
9	Italy	123
10	The Netherlands	91
	All others	871
	Total	**24,149**

*Excluding access from USIO-TAMU.

Top 20 Janus Web Queries*		
Rank	**Query**	**Uploads**
1	Sample report	2,033
2	Core photos	987
3	Site hole summary	529
4	Hole trivia	487
5	Moisture and density	408
6	Leg summary	390
7	Bulk density (GRA)	372
8	Sample requests	339
9	Core section summary	322
10	Point calculator	317
11	Color reflectance (RSC)	313
12	Close-up photos	312
13	Chemistry: carbonates	308
14	Chemistry: interstitial water	307
15	Hole core summary	302
16	Magnetic susceptibility	247
17	Paleontology—dictionary	217
18	Site details	192
19	Prime data images	180
20	Chemistry: gas	179
	Others	3,148
	Total	**11,889**

*Excluding access from USIO-TAMU.

Other Web Statistics*		
Database query hits		
	Entire site (successful)	50,444
	Average per day	560
Visitor sessions		
	Total number of visitor sessions	24,149
	Average per day	268
	Average length of visit	00:12:48
	International visitor sessions	13.26%
	Visitor sessions of unknown origin	0.02%
	Visitor sessions from United States	86.73%
Visitors		
	Unique visitors	4,296
	Visitors who only visited once	2,358
	Visitors who visited more than once	1,938
	Average visits per visitor	5.62

*Excluding access from USIO-TAMU.

Data Requests to Data Librarian*	
Requests	**Total**
Country:	
United States	21
France	7
Germany	4
Sweden	3
Canada	2
Denmark	2
United Kingdom	2
China	1
Norway	1
Total	**43**
Data:	
Data request	22
Photo request	9
Data question	3
Publication inquiry	3
DB query problem/question	2
Moratorium access	2
Publication permission	1
Sample info	1
Total	**43**

*Excluding access from USIO-TAMU.

LOG DATABASE

Top 10 Countries Accessing Log Web Database*		
Rank	**Country**	**Visitor Sessions**
1	United States	2,021
2	Japan	199
3	United Kingdom	116
4	France	113
5	Germany	70
6	Brazil	32
7	Canada	31
8	Russia	22
9	The Netherlands	22
10	Australia	16
	All others	3,389
	Total	**6,031**

*Excluding access from USIO-LDEO.

Other Log Web Statistics*		
Database query hits		
	Entire site (successful)	44,319
	Average per day	1,512
Visitor sessions		
	Total number of visitor sessions	6,031
	Average per day	203
	Average length of visit	5:05
	International visitor sessions	15.91%
	Visitor sessions of unknown origin	50.58%
	Visitor sessions from United States	33.50%
Visitors		
	Unique visitors	2,881
	Visitors who only visited once	2,417
	Visitors who visited more than once	464
	Average visits per visitor	2.09

*Excluding access from USIO-LDEO.

Data Requests to Log Data Supervisor		
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:			
		20932B, Peucker-Ehrenbrink, USA	51
		20952B, Kalb/Bralower, USA	59
	1	20999A, Talling/Wynn, UK (viewed archives)	No samples
		21085A, Thomas/Murphy, USA	83
		21092A, Harting/de Boer/van der Zwan, The Netherlands	269
		21107A, Rajmon, USA	2
		21120A, Clarke, UK	65
		21131A, Hayward, New Zealand	17
		21134A, De Bernardi/Petrizzo/Erba, Italy	197
		21141A, Benthien/Hoenisch/Mollenhauer, Germany	49
		21153A, Foster, UK	12
		21154A, Lazarus/Kotrc/Schmidt, Germany	14
		21158A, Griffith/Paytan, USA	5
		21162A, Lazarus/Kaminski, Germany	31
		21175A, Thomas/Alegret, USA	30
		21189A, Yanagisawa, Japan	362
Total science	1		
Total education	0		
Total PR	0		
Total:	**1**	**15**	**1,246**
Gulf Coast Repository:			
		21110A, Clarke, UK	470
		21132A, Triptai, UK	515
		21142A, Grocke, Canada	257
		21137A, Carlut, France	28
		21107A, Rajmon, USA	1
		20836A, Toyoda, Japan	47
		21017C, Bernardi, Italy	205
		21147A, Takada, Japan	40
		21152A, Zhimin, China	173
		20508B, Sawyer, USA	3
		21168A, Goldstein, USA	3
		21123A, Fantle, USA	57
		21157A, Steinke, Germany	257
		21146A, Lear, UK	67
		21145A, Mitterer, USA	51
		21158A, Griffith, USA	10
		21160A, Gray, USA	18
		21175A, Thomas, USA	26
	1	21188A, Rodriguez, USA	114
		21165A, Youhai, China	85
		21178A, Mattioli, France	5
		21092A, Harting, The Netherlands	124
		21111A, Swart, USA	1,815
		21171A, Westerhold, Germany	946
		21169A, Ling, China	98
	3	21215A, Carter, Australia	5

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
	4	21149A, Ravelo, USA	2,467
		20788A, Tikku, USA	16
		21198A, Liu, USA	10
		20996B, Singh, India	485
		21127A, Bonifacie, USA	16
	20	Public Relations Tour for Chinese Visitors (1)	No samples
	2	Public Relations Tours (2)	No samples
Total science	8		
Total education:	0		
Total PR:	22		
Total:	**30**	**31**	**8,414**
West Coast Repository:			
		21172A, Frische, Germany	19
	25	20936A, Dekov, Bulgaria	13
	25	20089G, Diester-Haus, Germany	33
		20913B, Potter, Australia	3
	25	21143A, Hunt, USA	7
	25	21210A, Erba, Italy	403
		21223A, Moss, Australia	15
	25	Educational Tour and Sampling Orientation, Dick Norris, USA	No samples
Total science:	0		
Total education:	2		
Total PR:	0		
Total:	**2**	**7**	**493**

APPENDIX H: PUBLICATIONS

Publication	Release Date	URL
Proceedings of the Integrated Ocean Drilling Program:		
Expedition 310 (Tahiti Sea Level)	4 March 2007	http://publications.iodp.org/proceedings/310/310title.htm

APPENDIX I: WEB

Comparison of Web access statistics averages between FY07 Q1 and FY07 Q2 indicates an 8% increase in Web site traffic.

USIO

FY07 Q2 USIO Web Site* (Servers: www.iodp-usio.org, iodp.ldeo.columbia.edu, iodp.tamu.edu)				
Parameter	**JOI**	**LDEO**	**TAMU**	**Totals**
Page views	20,761	11,078	470,909	502,748
Site visits*	12,519	8,044	60,556	81,119

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

New and updated Web pages	Release date	URL
Publications: FY06 Annual Report	Jan 2007	http://iodp.tamu.edu/publications/AR.html
Publications order form	Jan 2007	http://iodp.tamu.edu/publications/order.html
Travel: Postcruise meeting schedule	Jan 2007	http://iodp.tamu.edu/travel/
Publications: *Proceedings* Volume 310	Mar 2007	http://publications.iodp.org/proceedings/310/310title.htm
Expeditions: Expedition schedule	Mar 2007	http://iodp.tamu.edu/scienceops/
Expeditions: NanTroSEIZE expedition information	Mar 2007	http://iodp.tamu.edu/scienceops/expeditions/nantroseize.html
Expeditions: Equatorial Pacific expedition information	Mar 2007	http://iodp.tamu.edu/scienceops/expeditions/equatorial_pacific.html
Expeditions: Juan de Fuca expedition information	Mar 2007	http://iodp.tamu.edu/scienceops/expeditions/juan_de_fuca.html
Expeditions: Bering Sea expedition information	Mar 2007	http://iodp.tamu.edu/scienceops/expeditions/bering_sea.html
Education: School of Rock 2007 application	Mar 2007	http://www.iodp-usio.org/Education/SOR.html
USIO sponsored sites		
JOI Learning: Seafloor spreading classroom activity	Jan 2007	http://www.joilearning.org/classroom/seafloor_spreading.html
JOI Learning: Paleontology laboratory brief	Mar 2007	http://www.joilearning.org/classroom/lab_briefs.html
JOI Learning: Sediment deposition classroom activity	Mar 2007	http://www.joilearning.org/classroom/seafloor_bathymetry.html

APPENDIX J: DSDP/ODP CORE REDISTRIBUTION PROJECT

Five core shipments were sent from the East Coast Repository (ECR) to the BCR and two core shipments were sent from the BCR to the GCR. Staff members were hired and initial preparations were made to begin packing and shipping cores from the West Coast Repository (WCR) and the GCR to the Kochi Core Center (KCC).

APPENDIX K: EDUCATION

U.S. education activities are supported by NSF through systems integration contract (SIC) funding. These activities are not included in the platform operating cost (POC) and SOC budgets.

JOI LEARNING

MATERIALS DEVELOPMENT AND EDUCATION PROGRAMS

"A World of Physics: Extracting Physics from the Earth and Sea," a new poster targeting high school students, was completed in time for distribution at the NSTA conference held 28 March–1 April 2007 in St. Louis, Missouri. The poster includes adaptations of Underway Geophysics and Paleomagnetism Laboratory Briefs written by 2004 Teacher-at-Sea J. Rice (Science Teacher, Green Mountain Union High School, Chester, Vermont) in addition to career profiles featuring R. Grout (Operations Superintendent, USIO-TAMU) and J. Jordan (USIO Major Research Equipment and Facility Construction [MREFC] naval architect). The profiles were written by K. Petronotis (Web Administrator, USIO-TAMU) and J. Sharoff (Education Intern, JOI), respectively.

Two diversity-related outreach programs were piloted successfully this quarter. The first, "Bringing Books to Life," took J. Sharoff and S. Cooper (Assistant Education Director, JOI) to nine public schools in New York City, New York, to read two JOI-related children's books, *Using Water* and *Learning About Fossils,* and conduct associated hands-on activities with

diverse groups of early elementary students. The program was conducted 5–7 March 2007 through a partnership with City Year New York.

The second program, "A JOI-Full Day," introduced ~50 seventh- and eighth-grade students to scientific ocean drilling through in-classroom activities developed by *JOI Learning.* E. Auxiliaire (Historically Black Colleges and Universities [HBCU] Fellow, JOI) and volunteer scientists D. Hastings (Eckerd College), L. Aluhiware (Scripps Institution of Oceanography), and D. Brown (Georgia State University) visited Tree of Life Public Charter School in Washington, D.C., for a day of hands-on activities designed to introduce students to scientists and to provide scientists with outreach experience. After debriefing, both programs will serve as templates for future outreach-based proposals.

JOI DIVERSITY (MINORITY OUTREACH)

HISTORICALLY BLACK COLLEGES AND UNIVERSITIES FELLOWSHIP

Spring semester payments of $7,500 each were made for two HBCU Fellows, both of whom are Masters students; Auxiliaire in mass communications and media studies at Howard University and N. Abdul in marine science at Savannah State University.

In March 2007, Auxiliaire implemented her fellowship project, "A JOI-Full Day," as described above in "Materials Development and Education Programs."

The HBCU Fellowship application for FY08 was released on 27 March 2007. Following the model used at Savannah State University, K. Ellins (Program Manager, University of Texas Institute for Geophsyics [UTIG]) agreed to serve as a mentor for a student from Huston-Tillotson University in Austin, Texas, whose fellowship project will entail working with UTIG in implementing "Earth Science Revolution Workshops," a professional development series for teachers and teacher mentors.

MINORITIES STRIVING AND PURSUING HIGHER DEGREES OF SUCCESS IN EARTH SYSTEM SCIENCE INITIATIVE

Planning has begun for the participation of four Minorities Striving and Pursuing Higher Degrees of Success in Earth System Science (MS PHD'S) students and a program representative in the upcoming Science Steering and Evaluation Panel (SSEP) meeting scheduled for 29 May–1 June 2007 in Houston, Texas. As in past years, the USIO will provide travel support. MS PHD'S attendees will include the program representative, two graduate students from the University of South Florida, one graduate student from Stanford University, and one undergraduate student from City University of New York (CUNY), Lehman College.

SUPPLEMENTAL EDUCATION FUNDING

In line with guidance from NSF, significant activity was undertaken during the quarter in pursuit of supplemental funding for USIO-related educational projects. While not all proposals included USIO staff as Principal Investigators, it is important to note (1) the strong network that is coalescing in support of the development of additional scientific drilling education efforts that will build on or integrate with *JOI Learning*/USIO educational materials and programs and (2) the importance of USIO participation and/or endorsement of such proposals.

TAMU PROPOSAL SUBMISSIONS

Two NSF proposals were submitted through TAMU that, if funded, will extend and multiply the reach of *JOI Learning* education materials and programs. Members of TAMU's College of

Geosciences, including USIO-TAMU staff members Ann Klaus (Deputy Director of Data Services) and K. Petronotis, submitted a proposal on 1 March 2007 to the NSF Centers for Ocean Science Education Excellence (COSEE) program "COSEE-Cores, Ocean Research, and Earth Science (CORES)." The proposed COSEE Center would focus on increasing public understanding of the scientific discoveries achieved by exploring Earth's history through ocean drilling. The Center would use the remarkable scientific contributions of four decades of scientific ocean drilling as a basis for introducing ocean science to a national audience of teachers, informal educators, and students, using a blend of new materials and the existing School of Rock educational products and activities initiated through USIO funding over the last two fiscal years. L. Peart (Education Director, JOI) wrote a supporting letter for this proposal and, along with three other core team members of the USIO School of Rock program, agreed to serve as an advisor to the Center. If funded, this five-year project would begin in the fall of 2007.

S. Slough (Associate Professor of Teaching, Learning, and Culture and member of ODASES, TAMU) and B. Yalvac (Assistant Professor of Teaching, Learning, and Culture and member of ODASES, TAMU) submitted a proposal to NSF on 28 March 2007 titled "Learning Environment and Research Network in GeoScience (LEARN)." L. Peart and Ann Klaus wrote supporting letters on behalf of *JOI Learning* and IODP-USIO, respectively, and both agreed to serve as advisors to the project. Through the recruitment and immersion of five LEARN scholars into the ODASES/IODP-USIO environment, this project would serve as a vehicle for the development of a new generation of cutting-edge K–12 Science, Technology, Engineering, and Mathematics (STEM) curricular materials that focus on student engagement in authentic science. Since this program is designed to build on the successful USIO-funded School of Rock Expedition programs, it would open opportunities for the resulting materials to be field tested and disseminated on a national scale through *JOI Learning*'s collaborative ocean science education program network. Additionally, the LEARN project would provide a mechanism that would advance IODP-USIO's efforts to exponentially disseminate ocean drilling science education materials. If funded, this five-year project would begin in the fall of 2007.

NATIONAL COLLABORATIONS

Two national collaborations were established. *JOI Learning* agreed to collaborate with the Exploratorium (San Francisco, California) if they receive funding for their grant proposal "Ice Stories," an NSF International Polar Year project that would provide training for scientists serving as reporters to a nation-wide informal learning audience during the USIO Bering Sea and/or Wilkes Land Expeditions.

JOI Learning also provided a letter of support and L. Peart agreed to advise curriculum development teams during the project design phase for the National Center for Science and Civic Engagement (Harrisburg University, Harrisburg, Pennsylvania) grant proposal titled "Promoting Environmental Literacy and Civic Responsibility in Pre-Service Teacher Education." If funded, this National Oceanic and Atmospheric Administration (NOAA) Environmental Literacy project would position *JOI Learning* as a recognized source for climate change and environmental education.

CONGRESSIONAL OUTREACH

JOI distributed an informative 2007 calendar and cover letter addressing the state of ocean research and highlighting scientific ocean drilling to all 100 offices of the U.S. Senate, relevant Senate committee offices, all 435 U.S. House of Representatives offices, and relevant House committee offices.

APPENDIX L: IODP-USIO QUARTERLY REPORT DISTRIBUTION LIST

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