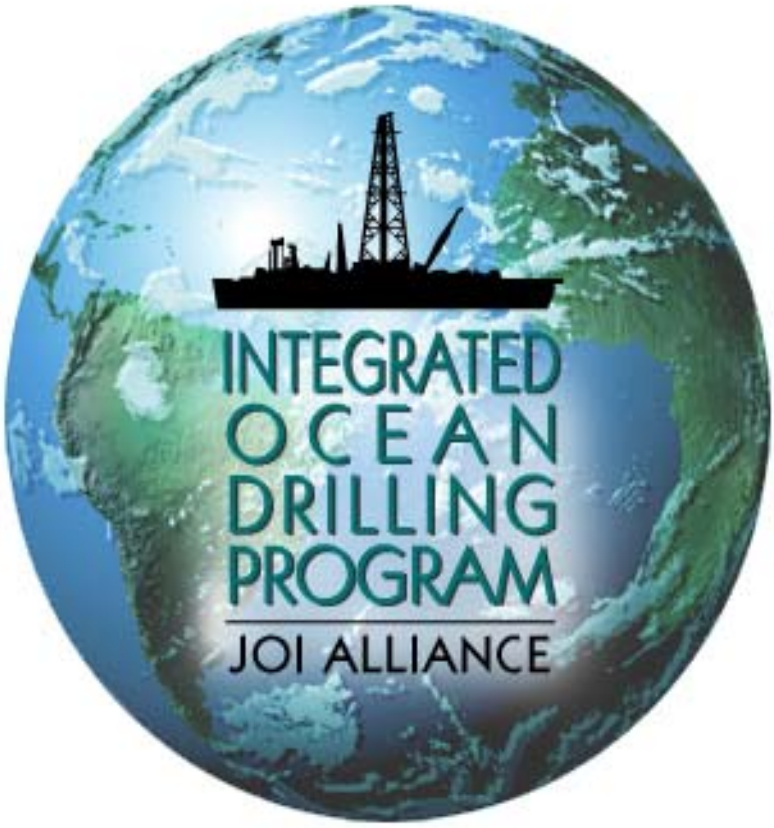
30 November 2007



1 July–30 September 2007

FY07 Quarterly Report 4

NSF Contract No. OCE-0352500

Submitted by the USIO 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 fourth quarter of FY07 by the USIO, which is composed of Consortium for Ocean Leadership, Inc. (Ocean Leadership), (formerly Joint Oceanographic Institutions [JOI]) and its partners, Texas A&M University (TAMU) and Lamont-Doherty Earth Observatory (LDEO) of Columbia University.[1]

EXPEDITION OPERATIONS

IODP-USIO EXPEDITION SCHEDULE

On 19 September 2007, the USIO issued a revised USIO Riserless Vessel Planning Schedule, which is being used for planning FY08 and FY09 expeditions.

Expedition		Port (Origin)	Dates[1, 2]	Total Days (Port/Sea)	Days at Sea (Transit/Ops)	Co-Chief Scientists	USIO Contact(s)
Deployment, mobilization, sea trials, and transit	NA	Singapore	1 April–18 May 2008[1]	47 (15/32)	25/7	NA	TAMU: J. Baldauf
Pacific Equatorial Age Transect (PEAT) 1/ Juan de Fuca Hydrogeology (Remedial Cementing)[3]	317	Honolulu, Hawaii	18 May–18 July 2008	61 (7/54)	19/35	M. Lyle, I. Raffi	TAMU: C. John LDEO: TBN
Bering Sea	318	Astoria, Oregon[4]	18 July–17 September 2008	61 (3/58)	12/46	K. Takahashi, C. Ravelo	TAMU: C. Zarikian LDEO: TBN
PEAT 2	319	Tomakomai, Japan	17 September–17 November 2008	61 (6/55)	26/29	H. Pälike, N. Ahagon	TAMU: K. Gamage LDEO: TBN
Canterbury Basin	321	Tahiti, French Polynesia	17 November 2008–17 January 2009	61 (5/56)	11/45	TBN	TAMU: J. Geldmacher LDEO: TBN
Wilkes Land[5]	323	Wellington, New Zealand	17 January–22 March 2009	64 (5/59)	16/43	TBN	TAMU: A. Klaus LDEO: TBN
Mariana Convergent Margin[6]	TBN	Wellington, New Zealand	22 March–22 May 2009	61 (5/56)	18/38	TBN	TAMU: J. Miller LDEO: TBN

Notes:

[1] Dates for expeditions may be adjusted pending final vessel delivery date from shipyard.

[2] The start date reflects the initial port call day. The vessel will sail when ready.

[3] The expedition will consist of operations in both the Equatorial Pacific (30 days) and Juan de Fuca (5 days). Following PEAT operations, scientists will disembark in San Diego, California, on or about 7 July 2008 prior to Juan de Fuca Remedial Cementing operations.

[4] The port of call is tentative. Note that the port call is split between San Diego, California (2 days), and Astoria, Oregon (3 days).

[5] Wilkes Land activities include completion of the Adelie Drift project.

[6] Although the Mariana Convergent Margin expedition is currently shown, the actual implementation of this expedition is awaiting final FY09 budget guidance.

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

EXPEDITION PLANNING AND IMPLEMENTATION ACTIVITIES

IODP-USIO PACIFIC EQUATORIAL AGE TRANSECT EXPEDITIONS

Expedition Planning: Based on schedule changes, operational plans were revised to fit the available time for each expedition. The PEAT *Scientific Prospectus* was revised accordingly and will be published at the beginning of the next quarter. Planning communication with the science party was initiated.

Expedition Staffing: Science staffing is almost complete, with the last invitation issued near the end of the quarter (pending acceptance).

NANTROSEIZE PROJECT STAGE 1 EXPEDITION

Expedition Planning: With the removal of Nankai Trough Seismogenic Zone Experiment (NanTroSEIZE) expeditions from the USIO schedule, deinvitation letters were sent to the Co-Chief Scientists and all invited scientists. A joint USIO/Center for Deep Earth Exploration (CDEX) rejection letter was sent to all noninvited scientists who applied to NanTroSEIZE Stage 1 expeditions.

IODP-USIO JUAN DE FUCA HYDROGEOLOGY (REMEDIAL CEMENTING)

Expedition Planning: Plans were made for Expedition 317 remedial cementing operations clearance documents to be submitted in the first quarter of FY08.

IODP-USIO BERING SEA EXPEDITION

Expedition Planning: Changes were made to the Bering Sea *Scientific Prospectus* to reflect the schedule revision. Clearance documents to occupy sites in Russian waters were submitted, followed by receipt of a request that they be resubmitted in Russian. USIO staff translated the *Scientific Prospectus* and clearance request into Russian for submission next quarter.

Expedition Staffing: The call for applications was released on 7 July 2007. Nominations from the Program Management Offices will be submitted to the USIO at the beginning of next quarter.

ENGINEERING AND TECHNOLOGY DEVELOPMENT

PROJECTS AND OTHER ACTIVITIES

USIO-TAMU ENGINEERING SERVICES

Simulated Borehole Test Facility: Data acquisition hardware was purchased and software was written to record data from the array of sensors in the Simulated Borehole Test Facility (SBTF) (thermistors, pressure transducers, and a linear encoder). Preliminary testing found that the data acquisition system was responsible for excessive signal noise on the temperature measurements. Additional data acquisition equipment was purchased that improved the temperature signal quality significantly. The acquisition software for the thermistor sensors is 90% complete.

A demonstration of the SBTF was performed on 23 July 2007. A hydraulic fitting failed during the test, which resulted in a review of the piping design. The hydraulic tubing used for diverting water around the firing chamber was replaced with hydraulic hoses.

Common Downhole Data Logger: Four populated prototype boards were received and evaluated. Schematic design changes were implemented and a new layout design completed. Fourteen production boards were manufactured and will be populated with components. The packaging design of the common downhole data logger (CDAQ)/battery module for the Davis-

Villinger Temperature Probe (DVTP), Davis-Villinger Temperature Pressure Probe (DVTPP), and instrumented water sampler was completed and parts were ordered. Eight microcontrollers with customized flash memory cards were ordered for the advanced piston corer methane (APCM) tool board and four additional microcontrollers were ordered. Firmware was completed for the DVTP analog-to-digital converter data collection initial release. Raw data can be collected at 1 Hz rate and data files stored in the memory cards. Arrangements were made for Oceanographic Embedded Systems to provide CDAQ software routines for the accelerometer, Paroscientific pressure transducer, and DVTPP.

Metrology Laboratory (Calibration Laboratory): In-house calibration procedures for the Advance Piston Corer Temperature Model 3 (APCT3) tools based on calibration instructions included in the APCT3 tool manual provided by A. Fisher (University of California Santa Cruz) were developed, tested, and documented. The first prototype of the APCT3 was tested and three new CDEX-owned APCT3 tools were calibrated. The new 10K ohm resistance standard was delivered.

Downhole Sensor Sub: The spare printed circuit board was received from APS Technology with firmware corrections to solve the downhole sensor sub/retrievable memory module (DSS/RMM) communications issue. APS sent a tare procedure to correct variations in weight on bit as a function of pressure. This procedure is not a real-time fix, but involves postprocessing of the data retrieved from the DSS. If the tool is coupled with a real-time telemetry system, the corrections could be made during coring.

Colleted Delivery System: The colleted delivery system was broken down into its component parts, bead blasted to remove rust buildup, and then powder coated.

Test Derrick/Hangar Facility: A crane was rented to help with installation of the refurbished three-ton hoist. The hoist was reinstalled in the test derrick and is working properly.

Texas A&M University Physical Plant contracted the removal of the dilapidated wooden office structure inside the hanger to make room for laboratory space. Tests were performed on materials inside the structure to determine asbestos presence. Destruction of the structure was scheduled for the first quarter of FY08.

Instrumented Water Sampler: The design of the CDAQ/battery module was completed and parts were ordered. These parts will also be used in the DVTP/DVTP-P and the APCM. The new motor drive circuit to provide automatic torque control was designed and development of the mounting hardware began. The design of the mounting hardware will affect the design of the shortened instrumented water sampler for testing in the SBTF.

Heave Compensator Stroke and Load Pin Hook Measurement: Ocean Drilling Limited (ODL) accepted the task of providing power to the load pins and providing the capability of transmitting data to the rig floor. USIO-TAMU Engineering Services acquired the electronics for transmitting both the stroke position and load pin hook load data to the new Epoch rig instrumentation system.

Advanced Piston Corer Temperature Tool 3 Implementation: The joint USIO/CDEX order of APCT-3 data logger electronic units was received from Antares Datensysteme GmbH in Bremen, Germany. The three CDEX-owned APCT-3 loggers that were calibrated in the Metrology Laboratory are being prepared for shipment to CDEX for deployment on Expeditions 315 and 316.

USIO-TAMU Analytical Services

X-Ray Diffractometer: An order was placed with Brüker AXS, Inc., for a D4 Endeavor X-ray diffractometer (XRD) to replace the aging Philips XRD. This system includes a large-capacity, random-access autosampler, a Vantec solid-state detector, and advanced diffractogram analysis software and libraries. The system will be installed at USIO-TAMU for evaluation, training, and methods development before it is sent to the ship.

Sample and Data Request Management: USIO staff traveled to Kochi, Japan, and provided advanced training to CDEX staff in use of the Sample and Data Request Management system, gathered responses from CDEX on their experience with the system for the NanTroSEIZE project, and discussed request management protocols.

USIO-LDEO Engineering and Technical Services

Logging-While-Coring Project: Quotes for custom fixed-cutter bits were solicited from eight vendors, and two bits were commissioned from Varel: a polycrystalline diamond compact (PDC) bit for softer formations and a natural diamond bit for hard rock. A logging-while-coring test using the new PDC bit, along with a "Chinese finger" core catcher, was conducted at the Schlumberger Genesis rig in Houston, Texas, on 17 September 2007. The system worked well and recovered clean-cut core.

INFORMATION TECHNOLOGY

Projects and Other Activities

USIO-TAMU Information Technology and Data Services

Storage Area Network: A seven Terabyte storage area network (SAN) expansion and forty Terabyte near-line storage were purchased and received. All purchased servers were placed in powered computer cabinets. Power enhancements to the computer room began that will enable installation of additional SAN hardware. Software and firmware updates to the existing Enterprise Virtual Array, necessary before the additional hardware can be installed, began and will be completed next quarter. All near-line storage units were placed in unpowered cabinets. Data migration of NetWare mounted disk volumes began.

CommVault Server: Additional licenses and agents necessitated by year-end purchases were procured. All licenses were installed, but agents will be installed at a later date.

Web Services: Critical personnel attended Apache training in preparation for facilitating the migration project from the SUN IPlanet Web server to Apache and Tomcat.

Operational Support: Installation planning for replacement of an uninterruptible power supply (UPS) and power distribution unit (PDU) for the computer room began. A plan is being developed to maintain critical services during the power outage that will be required during the installation of the PDU and UPS.

Cumulus Digital Asset Management Installation: The shore component of the Cumulus digital asset management (DAM) system was installed and configured. User, administrator, and developer training were completed, and the DAM entered the operational stage.

Network Infrastructure: A new network appliance was purchased with year-end funds after the old unit was abruptly brought to end-of-life by the vendor. The new network appliance was configured and testing began, and installation was planned for next quarter.

USIO-LDEO Information Services

Log Database Upgrade: Prepending of expedition number and site name to all data files began in order to provide unique names for all logging data files. The database directory structure was reorganized to provide shorter and more descriptive path names to data files. Three types of Web services were completed and are available for beta testing, including a Representational State Transfer (REST) interface for basic queries, the Open Archives Initiative (OAI) service for serving data to the Scientific Earth Drilling Information Service (SEDIS), and a Web feature service to provide georeferenced data for use in mapping systems. The Web feature server was linked to the GeoMapApp application, through which logged holes may now be plotted on maps.

Operations Database: Data files were imported into the operations database for testing, including as much historic data from Ocean Drilling Program (ODP) and Deep Sea Drilling Project (DSDP) as could be gleaned from hard copy operations reports. Refinement of the database will continue in preparation for renewed USIO operations, and additional historic data will be entered as the need arises and time is available.

HEALTH, SAFETY, AND ENVIRONMENT

Projects and Other Activities

Programmatic Environmental Impact Statement

The USIO worked with Metcalf & Eddy to develop a draft IODP-USIO Programmatic Environmental Impact Statement (PEIS), which provides an evaluation of the potential impacts of proposed U.S. Scientific Ocean Drilling Vessel (SODV) operations and USIO research activities on the human or natural environment and informs decision makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the environment. The draft PEIS was submitted to NSF in August 2007.

The USIO, on behalf of NSF, also coordinated activities for two public meetings that allowed the community to comment on the draft PEIS. The first public meeting was held in Silver Spring, Maryland, on 21 September 2007. The second public meeting was held in Washington, D.C., on 28 September 2007.

REPORTS/PUBLICATIONS

IODP-USIO Reports

FY07 IODP Quarterly Report

The IODP-USIO report for the third quarter of FY07 (April–June 2007) was submitted to the National Science Foundation (NSF) and IODP Management International, Inc. (IODP-MI), on 10 August 2007.

FY08 Annual Program Plan

On 30 July 2007, the USIO submitted to IODP-MI and NSF for review and evaluation a revised version of the IODP-USIO FY08 Annual Program Plan for science operating cost (SOC) and platform operating cost (POC) funds, which incorporated revisions to the USIO operations schedule and a requested budget reduction of ~$4 million. The Prime Contractor's name was corrected from Joint Oceanographic Institutions (JOI) to Consortium for Ocean Leadership, Inc., and additional budget adjustments were made in a revised version of the IODP-USIO FY08 Annual Program Plan that was submitted on 16 September 2007. The September 2007 draft of

the IODP-USIO FY08 Annual Program Plan budget totaled $49,540,283, with $13,786,568 requested in SOCs (from IODP-MI) and $35,753,715 requested in POCs (from NSF). This Annual Program Plan consists of requests for SOC and POC costs of non-SODV mobilization activities; IODP expeditions titled PEAT Expedition 1, PEAT Expedition 2 (with Juan de Fuca Remedial Cementing), Bering Sea Expedition, and Shatsky Rise Expedition; long–lead time items and the associated costs for expeditions proposed for FY09; and requests for continuing SOC shore-based activities during FY08.

On 10 August 2007, the USIO submitted to NSF an Appendix to the IODP-USIO FY08 Annual Program Plan. This appendix outlines requests related to the IODP-USIO U.S. Systems Integration Contract, which include costs that (a) are required to maintain a future U.S. scientific ocean drilling capability for the IODP and (b) 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). The Prime Contractor's name was corrected from JOI to Consortium for Ocean Leadership, Inc., and additional budget adjustments were made in a revised version of the FY08 Annual Program Plan Appendix that was submitted on 28 September 2007. The FY08 Annual Program Plan Appendix to NSF included a systems integration contract cost (SIC) budget totaling $1,246,285 and also provided SOC budget details divided into "Operational" SOC ($8,976,787) and other SOC ($4,449,780) costs. (Note: On 26 October 2007, "Operational" SOC was defined as that which funds SODV SOC operations at sea, and all costs in support of these operations such as planning, logistics, and engineering science support.)

IODP-USIO FY07 Annual Report

Production of the IODP-USIO FY07 Annual Report was initiated with development of a table of contents, template, and draft production schedule. Efforts began toward development of the first draft of the report's contents.

IODP Scientific Publications

Scientific Prospectus

Expedition 314 (NanTroSEIZE Stage 1: LWD Transect): Edited and formatted for CDEX and published in July 2007 (see "Appendix H").

Expedition 315 (NanTroSEIZE Stage 1: Megasplay Riser Pilot): Edited and formatted for CDEX and published in August 2007 (see "Appendix H").

Expedition 316 (NanTroSEIZE Stage 1: Shallow Megasplay and Frontal Thrusts): Edited and formatted for CDEX and published in July 2007 (see "Appendix H").

2007 Ocean Drilling Citations Database Study

The 2007 study of the Ocean Drilling Citation Database, which in February 2007 contained almost 22,500 citation records related to the DSDP, ODP, and IODP, was produced this quarter. The study is available online at www.iodp.tamu.edu/publications/citations/AGI_study.pdf. The Ocean Drilling Citation Database is produced by the American Geological Institute (AGI) in collaboration with the USIO. Compilation of this database began in 1999, and the database has been online since August 2002.

The records in the Ocean Drilling Citation Database provide information on how Program-related research is being disseminated into the scientific community through publications. 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 citation database. Each annual study is based on the data that exists in the database as of February of each calendar year. The results of these annual 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 on request (contact CitationStats@iodp.tamu.edu). IODP funding agencies, IOs, Program Member Offices, or individual member countries may request customized reports at any time.

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.

Highlights include the following:

- In support of *JOI Learning's* School of Rock 2007 workshop, the USIO implemented a series of promotional and media relations tasks designed to raise the profile of IODP and the USIO. USIO communications staff distributed a media advisory to local and regional news media in the College Station, Texas, area, inviting them to cover the workshop.
- *Nature* published a Letter to the Editor from the USIO correcting a reporting error concerning USIO Phase 1 expeditions.
- The USIO began making initial arrangements and collaborative plans for the IODP-USIO exhibit presence at the 2007 American Geophysical Union (AGU) Fall Meeting.

PUBLIC RELATIONS MATERIALS

USIO MEDIA ADVISORIES/NEWS RELEASES

The following media advisory was distributed this quarter:

- School of Rock 2007: Exploring ocean cores at the Gulf Coast Repository (17 July 2007).

The following news release was distributed this quarter:

- 17 teachers explore ocean floor core samples at the Gulf Coast Repository (13 August 2007). [Note: customized versions of this news release were distributed to news media contacts in the hometowns of each of the School of Rock 2007 teachers.]

The following Web sites ran IODP-USIO/IODP-MI/NSF news releases verbatim:

- http://www.sciencedaily.com/releases/2007/09/070920173431.htm
- http://theintermountain.com/ [Elkins, West Virginia]

ARTICLES AUTHORED BY USIO STAFF

The following article authored by USIO staff was published during this quarter. 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).

- Ildefonse, B., Blackman, D.K., John, B.E., Ohara, Y., **Miller, D.J.,** MacLeod, C.J., and Integrated Ocean Drilling Program Expeditions 304/305 Science Party, 2007. Oceanic core

complexes and crustal accretion at slow-spreading ridges. *Geology,* 35(7):623–626. doi:10.1130/G23531A.1

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.

- *Bulletin News,* 2007. Talk on the meteorite scientists say caused extinction of dinosaurs is today. *Bulletin News* [University of St. Thomas, Maine], 11 September 2007.
- Cyranoski, D., 2007. Ocean drilling: in the zone. *Nature*, 449:278–280. doi:10.1038/449278a
- *Mizzou Engineering News,* 2007. Mizzou Engineering joins international earthquake team. *Mizzou Engineering News* [University of Missouri], 3 July 2007. http://engineering.missouri.edu/news/news_archive/2007/07/mizzou-engineering-joins-international.php
- *Nature*, 2007. Drill often, drill deep—splice the mainbrace: the greatest scientific ocean-drilling vessel ever built is going to sea. *Nature,* 449:260. doi:10.1038/449260a
- Sobecky, P., 2007. Exploring the deep biosphere: probing microbial systems at Earth's extremes. *Eos, Trans. Am. Geophys. Union,* 88(34):336–336. doi:10.1029/2007EO340005
- *The Daily Cardinal,* 2007. U. Wisconsin geologist leads research team on deep-sea expedition. *The Daily Cardinal* [University of Wisconsin], 24 September 2007
- *The Daily Herald-Tribune,* 2007. Earth's mantle set to reveal its secrets. *The Daily Herald-Tribune* [Grande Prairie, Alberta], 21 September 2007
- *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
- *The Forecaster*, 2007. 'School of Rock' teacher studies sediment, sea floor. *The Forecaster* [Falmouth, Massachusetts], 23 August 2007.
- *United Press International*, 2007. Deep sea drilling explores earthquake zone. *United Press International,* 24 September 2007.

EDUCATION OUTREACH/CONFERENCES

The USIO was represented at the Earth2Class (E2C) workshop titled "Exploring Ocean Cores at the Gulf Coast Repository, Part 1: Lessons Learned at School of Rock" held 29 September 2007. J. Weinberger and G. Guerin (Logging Staff Scientists, USIO-LDEO) shared some of the data and concepts presented at the School of Rock (SOR), along with selected educational activities and materials developed by School of Rock Expedition 2005 participants and School of Rock 2007 workshop participants.

IODP-USIO WEB SITE

Main activities during this quarter included redesigning the entire USIO Web site for IODP Phase 2 and creating the School of Rock 2007 Web site, which was populated in late July and early August 2007 with teacher biographies, a daily blog, instructional activities, and

photographs (http://www.joilearning.org/schoolofrock2007/) (see "Appendix I" for new Web content and access statistics).

USIO INTERACTIONS WITH IODP-MI AND OTHER IMPLEMENTING ORGANIZATIONS

INTERACTIONS

APCT3 IMPLEMENTATION

The USIO and CDEX continued activities on the joint implementation of the APCT3. See "Projects and Other Activities, USIO-TAMU Engineering Services" in the "Engineering and Technology Development" section for more information.

SAMPLE AND DATA REQUEST MANAGEMENT SYSTEM

USIO curatorial staff provided advanced training to CDEX staff in use of the Sample and Data Request Management System (see "Projects and Other Activities, USIO-TAMU Analytical Services" in the "Engineering and Technology Development" section for more information).

USIO SERVICES ON BOARD THE *CHIKYU*

The USIO and CDEX reached an agreement under which the USIO will arrange for downhole tools specialists to provide formation temperature services on the *CHIKYU* from November 2007 to February 2008. The USIO also initiated discussions with CDEX in September 2007 for provision of USIO Publication Specialists to sail on board the *CHIKYU* for upcoming expeditions.

MEETINGS

ENGINEERING DEVELOPMENT PANEL

The Engineering Development Panel (EDP) Meeting was held 9–11 July 2007 in Tokyo, Japan (see "Appendix E" for list of USIO attendees). USIO representatives participated in discussions of the revised EDP Technology Roadmap and review of four IODP technology development proposals. K. Grigar (Staff Engineer, USIO-TAMU) presented the USIO overview, which described personnel reorganization at USIO-TAMU and noted key operational issues and engineering activities under way. Minutes from the meeting are available from the IODP Web site at www.iodp.org/edp**.**

SITE SURVEY PANEL

The Site Survey Panel (SSP) Meeting was held 18–20 July 2007 in Edinburgh, Scotland (see "Appendix E" for list of USIO attendees). SSP reviewed all active IODP proposals with recently submitted site survey data and, in response to a request from NSF to enhance interprogram development, also reviewed a drilling proposal submitted to Antarctic Geological Drilling (ANDRILL). SSP successfully implemented a redistribution of duties and discussed scenarios for panel restructuring in light of budgetary considerations. J. Miller (Staff Scientist, USIO-TAMU) gave a presentation covering USIO operational and planning activities and issues.

IODP-MI WORKSHOP: LARGE IGNEOUS PROVINCES

The IODP workshop titled "Large Igneous Provinces" was held 21–26 July 2007 in Coleraine, Northern Ireland (see "Appendix E" for list of USIO attendees). J. Miller (Staff Scientist, USIO-TAMU) gave a presentation on current USIO activities and presented a poster on his Large

Igneous Province–related scientific research titled "Sulfur degassing and nature of eruptive activity during the 934AD Eldgja Eruption."

IODP Paleontology Coordination Meeting

The IODP Paleontology Coordination Meeting was held 12 and 13 August 2007 in Berlin, Germany (see "Appendix E" for list of USIO attendees). C. Zarikian (Staff Scientist, USIO-TAMU) participated in discussions regarding the contents and implementation of taxonomic dictionaries during IODP Phase 2. Zarikian also gave a presentation on the status of the new USIO paleontological data capture and laboratory information system.

IODP Topical Symposium: North Atlantic and Arctic Climate Variability

The IODP topical symposium titled "North Atlantic and Arctic Climate Variability" was held 15 and 16 August 2007 in Bremen, Germany (see "Appendix E" for list of USIO attendees). S. Higgins (Associate Director of Ocean Drilling Programs, Ocean Leadership) presented a poster on results from recent IODP Expeditions 303, 306, and 307 and C. Zarikian (Staff Scientist, USIO-TAMU) gave a presentation on his current North Atlantic scientific research titled "Ostracod assemblage variability in the southern Gardar Drift (IODP Site U1314), North Atlantic during the last glacial cycle".

IODP Quality Assurance/Quality Control Task Force

The final IODP Quality Assurance/Quality Control (QA/QC) Task Force meeting was held 18 and 23 August 2007 in Beijing, China, in conjunction with the STP Meeting (see "Appendix E" for list of USIO attendees). The purpose of this meeting was to present to the Scientific Technology Panel (STP) the framework for QA/QC for measurements across IODP and to revise the framework document based on STP's recommendations. The QA/QC Task Force members developed a consensus final report that will be approved by IODP-MI and distributed to the IOs. The Task Force has been dissolved and oversight of QA/QC issues has been assigned to the IOs (with guidance from IODP-MI) and the Science Advisory Structure (SAS).

Scientific Technology Panel

The STP Meeting was held 20–23 August 2007 in Beijing, China (see "Appendix E" for list of USIO attendees). P. Blum (Manager of Tools and Analytical Services, USIO-TAMU), D. Houpt (Supervisor of Analytical Systems, USIO-TAMU), T. Williams (Logging Staff Scientist, USIO-LDEO) and S. Higgins presented updates on USIO activities, progress with analytical systems for the SODV, and potential impacts of the budgetary challenges on future shipboard services.

IODP-MI Operations Task Force

The IODP-MI Operations Task Force was held 26 and 29 August 2007 in Santa Cruz, California (see "Appendix E" for list of USIO attendees). These meetings focused on finalizing FY08/early FY09 platform schedules and discussions of the latter part of FY09 and beyond, including alternative scheduling strategies in light of the fact that non-IODP work may be a regular part of both *JOIDES Resolution* and *CHIKYU* operations in the future. J. Baldauf (Deputy Director of Science Services, USIO-TAMU) presented the USIO review and noted key operational issues.

IODP Workshop: Addressing Geologic Hazards Through Ocean Drilling

The IODP-sponsored workshop titled "Addressing Geologic Hazards through Ocean Drilling" was held 26–30 August 2007 in Portland, Oregon (see "Appendix E" for list of USIO attendees).

The role that ocean drilling can play in determining the recurrence interval of various geohazards was a common theme of the workshop. Ideas for how to improve the visibility of geohazards-related science in the IODP "Initial Science Plan" were discussed and several primary drilling targets were defined for each type of hazard. This workshop is likely to result in the submission of several new geohazards-related proposals to the SAS over the next few years.

SCIENCE PLANNING COMMITTEE

The Science Planning Committee (SPC) Meeting was held 27–30 August 2007 in Santa Cruz, California (see "Appendix E" for list of USIO attendees). J. Baldauf (Deputy Director of Science Services, USIO-TAMU) presented the USIO report.

APPENDIX A: CONTRACTUAL ACTIVITIES

OCEAN LEADERSHIP

NSF CONTRACT OCE-0352500 WITH OCEAN LEADERSHIP

Ocean Leadership received the following modifications during the reporting period.

- Modification 25: Changed the name of the contracting office from Joint Oceanographic Institutions to Consortium for Ocean Leadership, Inc.
- Modification 26: Established the FY08 Annual Program Plan for SIC operations and provided incremental funding of $8.7 million to support SIC operations through 25 December 2007.

OCEAN LEADERSHIP SUBCONTRACT JSC 4-03 WITH USIO-LDEO

Ocean Leadership issued the following modifications during the reporting period.

- Modification 16: Withdrew unobligated funding from FY04, FY05, and FY06 Annual Program Plan years and provided the final increment of FY07 SOC funding in the amount of $520,000.

OCEAN LEADERSHIP SUBCONTRACT JSC 4-02 WITH TAMRF

Ocean Leadership issued the following modifications during the reporting period.

- Modification 23: Recognized FY06 SOC unobligated carryforward to the FY07 Annual Program Plan; increased POCs in the amount of $276,000 for analytical and drilling equipment and transferred $30,000 of unobligated FY06 SIC funds to POCs. The estimated cost of the subcontract was adjusted accordingly.
- Modification 24: Provided a funding increment of $1,100,000 toward the SOC portion of the FY07 Annual Program Plan.
- Modification 25: Reduced the SOC portion of the FY07 Annual Program Plan by $800,000 and provided the final increment of FY07 SOC funding. The estimated cost of the subcontract was adjusted accordingly.

TAMRF

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

Purchase of:

- Roller-cone bits (11-7/16″ and 9-7/8″) and core bits (9-7/8″): $172,084.00.
- Tapered drill collars, 20′ and 30′ knobbies, 30′ outer core barrels, and seal bore outer core barrels: $469,306.00.
- Positioning beacons, lithium battery packs, rack mounted command transducers, and portable command units: $442,920.00.
- D-tubes, end caps, and liner patches: $120,476.52.
- Optiplex 745 small form FactorCore computers, flat panel monitors, other associated peripherals, and extended warranty: $124,201.20.
- X-ray diffractometer (XRD) system: $189,525.00.

- Attapulgite, barite, and cement (drilling fluids): $113,095.71.
- EVA 4000, upgrading the existing SAN network to a 6000 EVA: $128,078.80.
- Shipping services through Panalpina: $203,025.00.
- Core boxes: $111,145.35.

APPENDIX B: FINANCE REPORT

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

APPENDIX C: PERSONNEL STATUS

OCEAN LEADERSHIP

There were no positions vacated, opened, advertised, or filled during the quarter.

USIO-LDEO

Tim Brewer, Chief Scientist (Leicester, England), died on 14 July 2007.

The following positions were vacated during the quarter:

- Technical Services Specialist (Jim Murray): 11 July 2007

There were no positions opened or advertised during the quarter.

The following position was filled during the quarter:

- Interim Chief Scientist (Leicester, England) (Mike Lovell): 15 July 2007

USIO-TAMU

The following positions were vacated during the quarter:

- Research Specialist (Lester Lembke-Jene): 31 July 2007
- Data Analyst (Elizabeth Slone): 31 July 2007
- Budget Analyst (Tammy LaRue): 9 August 2007
- Human Resources Representative (Cynthia Escamilla): 10 August 2007
- Marine Laboratory Specialist (Betsy Zunk): 17 August 2007
- Property Specialist I (Teresa Salamone): 3 September 2007

The following positions were opened and advertised during the quarter:

- Marine Laboratory Specialist
- Curatorial Specialist III

The following positions were filled during the quarter:

- Systems Support Specialist (Charles Haddick): 27 August 2007

APPENDIX D: CONFERENCE AND MEETING SCHEDULE*

Conference/Meeting	Date	Location
Engineering Development Panel (EDP) Meeting	9–11 July 2007	Tokyo, Japan
Site Survey Panel (SSP) Meeting	18–20 July 2007	Edinburgh, Scotland
Integrated Ocean Drilling Program Management, Inc. (IODP-MI) Workshop: Large Igneous Province	21–26 July 2007	Coleraine, Northern Ireland
School of Rock 2007 Workshop: Exploring Ocean Cores at the IODP Gulf Coast Repository	22–28 July 2007	College Station, Texas
Industry-IODP Science Program Planning Group (IIS PPG) Meeting	23 and 24 July 2007	Sapporo, Japan
IODP Paleontology Coordination Meeting	12 and 13 August 2007	Berlin, Germany
IODP Topical Symposium: North Atlantic and Arctic Climate Variability	15 and 16 August 2007	Bremen, Germany
IODP Quality Assurance/Quality Control (QA/QC) Task Force Meeting	18 and 23 August 2007	Beijing, China
Scientific Technology Panel (STP) Meeting	20–23 August 2007	Beijing, China
IODP-MI Operations Task Force Meeting	26 and 29 August 2007	Santa Cruz, California
IODP Workshop: Addressing Geologic Hazards through Ocean Drilling	26–30 August 2007	Portland, Oregon
Science Planning Committee (SPC) Meeting	27–30 August 2007	Santa Cruz, California
Expedition 304/305 Second Postexpedition Meeting	17–21 September 2007	Hilo, Hawaii

*Implementing organization meetings, IODP-MI task force meetings, SAS panel meetings, IODP symposiums and workshops, and scientific and educational conferences at which the USIO had a booth or exhibit.

APPENDIX E: TRAVEL*

Purpose	Date	Location	Personnel	Institution
Visit to USIO-LDEO for review of DSDP/ODP Core Redistribution Project and SODV update	3–6 July 2007	Palisades, New York	J. Fox	USIO-TAMU
Engineering Development Panel (EDP) Technology Meeting	9–11 July 2007	Tokyo, Japan	E. Meissner	USIO-LDEO
EDP Meeting	9–11 July 2007	Tokyo, Japan	K. Grigar	USIO-TAMU
DGI Haz-Mat Training	8–14 July 2007	Las Vegas, Nevada	L. Obee	USIO-TAMU
U.S. Scientific Ocean Drilling Vessel (SODV) Budget Review Meeting**	9–13 July 2007	College Station, Texas	D. Divins	Ocean Leadership
Insurance and Employee Issues Training	10–15 July 2007	Lake Tahoe, Nevada	K. Johnson	USIO-TAMU
Site Survey Panel (SSP) Meeting	18–20 July 2007	Edinburgh, Scotland	J. Miller	USIO-TAMU
Essentials of Communication Seminar	16–19 July 2007	Las Vegas, Nevada	O. Berka	USIO-TAMU
Gas Hydrates Observatory Workshop	18–20 July 2007	Portland, Oregon	S. Cooper	Ocean Leadership
Gas Hydrates Observatory Workshop	18–20 July 2007	Portland, Oregon	D. Schroeder	USIO-TAMU
Integrated Ocean Drilling Management, Inc. (IODP-MI) Large Igneous Province (LIP) Workshop	21–26 July 2007	Coleraine, Northern Ireland	D. Divins	Ocean Leadership
IODP-MI LIP Workshop	21–26 July 2007	Coleraine, Northern Ireland	J. Geldmacher, J. Miller	USIO-TAMU
Haz/Mat Training	22–24 July 2007	Houston, Texas	R. Mitchell	USIO-TAMU
National Business Travel Agent Conference and Training Seminar	22–26 July 2007	Boston, Massachusetts	D. DeShetler	USIO-TAMU
School of Rock 2007 Workshop	22–27 July 2007	College Station, Texas	S. Cooper, L. Peart	Ocean Leadership

SA 225 Solaris 10 Features and RH320 Apache Web Server Administration Classes	22 July–2 August 2007	Broomfield, Colorado and Raleigh, North Carolina	M. Mefferd	USIO-TAMU
Downhole sensor sub (DSS) qualification testing	23–24 July 2007	Sugar Land, Texas	B. Aduddell	USIO-TAMU
Hewlett Packard Storage Area Network (SAN) Training	23–27 July 2007	Richardson, Texas	D. Kratz	USIO-TAMU
Trip to obtain visa for travel to Beijing, China	24 July 2007	Houston, Texas	P. Blum, D. Houpt	USIO-TAMU
Advanced Leadership Skills and Techniques Seminar	24–28 July 2007	Washington, D.C.	I. Kindt	USIO-TAMU
IODP-MI NanTroSEIZE Project Management Team Meeting	24–28 July 2007	San Francisco, California	Adam Klaus	USIO-TAMU
DSS qualification testing	27 July 2007	Sugar Land, Texas	B. Aduddell	USIO-TAMU
Implementing Organization (IO) Meeting	30 July 2007	Houston, Texas	D. Divins	Ocean Leadership
IO Meeting	30 July 2007	Houston, Texas	J. Fox	USIO-TAMU
HazMat Training	5–14 August 2007	College Station, Texas	R. Davis	USIO-TAMU
National Instruments NIWeek Conference	6–9 August 2007	Austin, Texas	E. Moortgat	USIO-TAMU
Integrated Ocean Drilling Program (IODP) Paleontogy Coordination Meeting	12 and 13 August 2006	Berlin, Germany	C. Zarikian	USIO-TAMU
IODP Topical Symposium: North Atlantic and Arctic Climate Variability	15 and 16 August 2007	Bremen, Germany	S. Higgins	Ocean Leadership
IODP Topical Symposium: North Atlantic and Arctic Climate Variability	15 and 16 August 2007	Bremen, Germany	C. Zarikian	USIO-TAMU
Quality Assurance/Quality Control (QA/QC) Meeting	18 and 23 August 2007	Beijing, China	P. Blum, D. Houpt	USIO-TAMU
Scienctific Technology Panel (STP) Meeting	20–23 August 2007	Beijing, China	S. Higgins	Ocean Leadership
STP Meeting	20–23 August 2007	Beijing, China	T. Williams	USIO-LDEO
STP Meeting	20–23 August 2007	Beijing, China	P. Blum, D. Houpt	USIO-TAMU
Mac Training	20–24 August 2007	Seattle, Washington	T. Bloxom, J. Cordray	USIO-TAMU
Radioactive Materials Transportation Training	22–25 August 2007	Las Vegas, Nevada	S. Dillard	USIO-TAMU
Science Planning Committee (SPC) Meeting	27–30 August 2007	Santa Cruz, California	D. Divins	Ocean Leadership
SPC Meeting	27–30 August 2007	Santa Cruz, California	D. Goldberg	USIO-LDEO
SPC Meeting	27–30 August 2007	Santa Cruz, California	J. Baldauf	USIO-TAMU
Diversity Award at University of South Florida	30 August 2007	Tampa, Florida	S. Bohlen	Ocean Leadership
DSS-retrievable memory module (RMM) tool testing	26–30 August 2007	College Station, Texas	T. Hussein	USIO-LDEO
IODP Workshop: Addressing Geologic Hazards through Ocean Drilling	26–30 August 2007	Portland, Oregon	J. Weinberger	USIO-LDEO
10th International Symposium on Antarctic Earth Science	26–31 August 2007	Santa Barbara, California	T. Williams	USIO-LDEO
IODP Operations Task Force Meeting	26 and 29 August 2007	Santa Cruz, California	J. Baldauf	USIO-TAMU
International Conference on Paleoceanography	1–8 September 2007	Shanghai, China	T. Williams	USIO-LDEO
Texas Radiation Regulatory Conference	5–7 September 2007	Austin, Texas	D. Johnson, B. Julson	USIO-TAMU

Geoitalia 07: 6th Italian Forum of Earth Sciences	14–19 September 2007	Rimini, Italy	A. Malinverno	USIO-LDEO
Western Continuing Professional Education Conference	8–13 September 2007	Napa, California	B. Skopik	USIO-TAMU
International Air Transport Association (IATA) Training	10–12 September 2007	Houston, Texas	R. Mitchell	USIO-TAMU
Oracle Training	10–15 September 2007	Dallas, Texas	J. Zhao	USIO-TAMU
Logging-while-coring testing	13–16 September 2007	Houston, Texas	S. Mrozewski	USIO-LDEO
Logging-while-coring testing	17–18 September 2007	Sugar Land, Texas	K. Grigar	USIO-TAMU
Expeditions 304 and 305 Second Postcruise Meeting	15–21 September 2007	Hilo, Hawaii	J. Miller	USIO-TAMU
USIO-LDEO Server Equipment and Information Technology Meeting	16–21 September 2007	College Station, Texas	D. Quoidbach	USIO-LDEO
National Purchasing Institute Conference	17–21 September 2007	Galveston, Texas	R. Watkins	USIO-TAMU
Sea Survival Helicopter Safety Egress Training	18 and 19 September 2007	Galveston, Texas	D. Partain, K. Petronotis	USIO-TAMU
Project Management Training Seminar	18–21 September 2007	Dallas, Texas	K. Gamage, J. Geldmacher, C. John, C. Zarikian	USIO-TAMU
University of London colleague visit and Insurance Representatives Meetings	21–27 September 2007	London, England	J. Fox	USIO-TAMU
Insurance Representatives Meetings	22–26 September 2007	London, England	J. Baldauf, B. Wasson	USIO-TAMU
Sample Material Curation System Training for Center for Deep Earth Exploration staff	22–28 September 2007	Kochi, Japan	J. Firth, K. Fujine	USIO-TAMU
National Geophysical Data Center (NGDC) 30th Annual Curators of Marine and Lacustrine Geological Samples Meeting	23–27 September 2007	Estes Park, Colorado	P. Rumford	USIO-TAMU
National Instruments Training	23–28 September 2007	Dallas, Texas	M. Butler	USIO-TAMU
HazMat Shipping Training	30 September 2007	Houston, Texas	L. Crowder, C. Peng	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.

APPENDIX F: DATA REQUESTS

JANUS DATABASE

Top 10 Countries Accessing Janus Web Database*		
Rank	**Country**	**Visitor Sessions**
1	United States	33,546
2	Sweden	641
3	Germany	631
4	China	266
5	United Kingdom	237
6	Japan	227
7	Australia	170
8	France	165
9	Canada	141
10	Italy	109
	All others	1,131
	Total	**37,264**

*Excluding access from USIO-TAMU.

Top 20 Janus Web Queries*		
Rank	**Query**	**Uploads**
1	Sample report	1,295
2	Point calculator	743
3	Moisture and density	731
4	Core photos	586
5	Sample requests	480
6	Site hole summary	406
7	Hole trivia	393
8	Core section summary	327
9	Chemistry: interstitial water	324
10	Hole core summary	322
11	Bulk density (GRA)	321
12	*P*-wave velocity (PWS)	281
13	Downhole temperature	273
14	Thermal conductivity	219
15	Magnetic susceptibility	205
16	Site summary	178
17	Leg summary	164
18	Prime data images	149
19	Cryomagnetometer	130
20	Chemistry: carbonates	118
	Others	2,251
	Total	**9,896**

*Excluding access from USIO-TAMU.

Other Web Statistics*		
Database query hits		
	Entire site (successful)	72,131
	Average per day	784
Visitor sessions		
	Total number of visitor sessions	37,264
	Average per day	405
	Average length of visit	00:11:52
	International visitor sessions	9.97%
	Visitor sessions of unknown origin	0.00%
	Visitor sessions from United States	90.02%
Visitors		
	Unique visitors	5,441
	Visitors who only visited once	2,780
	Visitors who visited more than once	2,661
	Average visits per visitor	6.85

*Excluding access from USIO-TAMU.

Data Requests to Data Librarian*	
Requests	**Total**
Country:	
United States	27
France	3
Germany	2
United Kingdom	2
Australia	1
Denmark	1
Japan	1
New Zealand	1
Total	**38**
Data:	
Data request	12
Photo request	9
(total photos and prints = 2,451)	
DB query problem/question	8
Data question	7
Data statistics	2
Total	**38**

*Excluding access from USIO-TAMU.

LOG DATABASE

Top 10 Countries Accessing Log Web Database*		
Rank	**Country**	**Visitor Sessions**
1	United States	1,560
2	Japan	101
3	France	85
4	Germany	66
5	United Kingdom	43
6	Brazil	28
7	Canada	22
8	The Netherlands	14
9	Australia	12
10	Italy	11
	All others	3,148
	Total	**5,090**

*Excluding access from USIO-LDEO.

Other Log Web Statistics*		
Database query hits		
	Entire site (successful)	282,596
	Average per day	1,184
Visitor sessions		
	Total number of visitor sessions	233,678
	Average per day	288
	Average length of visit	1:55
	International visitor sessions	8,03%
	Visitor sessions of unknown origin	61.66%
	Visitor sessions from United States	30.31%
Visitors		
	Unique visitors	8,057
	Visitors who only visited once	1,868
	Visitors who visited more than once	6,189
	Average visits per visitor	29.00

*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:			
		20700D, Dolby/Raymo/Costanza, USA	272
		20942C, Martin/Billups, USA	12
		21191A, Ravizza, USA	11
		21198C, Liu/Pagani/Ravelo, USA	16
		21264A, Whitaker/Flower, USA	136
		21268A, Foster, United Kingdom	20
		21285A, Stoll, Spain	6
		21298A, Shakun/Clark, USA	67
		21302A, Bohaty/Schouten/Brinkhuis, United Kingdom	46
	2	21306A, Kurnosov/Artamonov, Russia	43
		21317A, Sorkhabi, USA	12
	2	21318A, Pekar, USA	66
		21323A, Gupta/Malmgren, Sweden	60
	2	21372A, Christensen/Stackhouse/Goff, USA	7
	8	21378A, Kastens, USA (Education)	No samples
Total science	6		
Total education	8		
Total PR	0		
Total:	**14**	**14**	**774**
Gulf Coast Repository:			
		21276A, Pichevin, United Kingdom	214
		21262A, Su, China	92
		21267A, Baker, Australia	20
		21272A, Jiang, USA	19
		21282A, Gupta, Sweden	104
		20957B, Rosenthal, USA	195
		21292B, Murphy, USA	247
		21292A, Murphy, USA	1399
		21259A, Pfuhl, Germany	672
		21118B, Sexton, USA	337
	3	21317A, Sorkhabi, USA	13
		21185A, Stoll, Spain	18
		21289A, Munsel, Germany	70
		21197B, Rosenthal, USA	397
		21310A, Gray, USA	23
		21290A, Carter, New Zealand	17
		21293A, Fang, China	8
	1	21353A, Gamage, USA	5
		21336A, Browning, USA	372
		21307A, Carter, New Zealand	110
		21273A, Goldberg, USA	10
		21312A, Bassinot, France	235
		21330A, Kameo, Japan	33
		21356A, Romans, USA	1
		21161A, Clift, Germany	385
		21321A, Pahnke, USA	14
		21349A, Herbert, USA	3

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
		21316A, Anma, Japan	20
		21332A, Ehrenberg, Norway	13
	3	21246A, Ildefonse, France	28
		21137B, Hoise, France	33
		21314A, Martinez-Boti, Spain	13
		21308A, Gupta, Sweden	145
		21340A, Wan, China	687
		21309A, Bartoli, Switzerland	25
		20089I, Emeis, Germany	86
	1	21232C, Woodard, USA	45
	32	21337A, Lyle, USA	No samples
	28	21370A, Olszewski, USA	No samples
	4	21329A, Howe, USA	421
	22	213434A, Firth, USA	No samples
Total science	12		
Total education:	82		
Total PR:	0		
Total:	**94**	**38**	**6,529**
West Coast Repository:			
		20732C, Wade/Kent, USA	80
		20732D, Wade/Firth, USA [Measurements]	No samples
	2	21306A, Kurnisov, Russia	71
		21320B, Hunt, USA	24
	2	21335A, Norris/Lal, USA	8
	2	21344A, Norris/Friedrich, USA	32
		21348A, Bonefille, France	38
		21363A, Hayward, New Zealand	37
	30	Educational Tour, Norris/Peach, USA	No samples
	20	Educational Tour and Sampling Orientation, Norris, USA	No samples
Total science:	6		
Total education:	50		
Total PR:	0		
Total:	**56**	**7**	**290**

APPENDIX H: PUBLICATIONS

Publication	Release Date	Digital Object Identifier
Scientific Prospectus:		
Expedition 314 (NanTroSEIZE Stage 1: LWD Transect) (prepared by the USIO)	July 2007	doi:10.2204/iodp.sp.314.2007
Expedition 315 (NanTroSEIZE Stage 1: Megasplay Riser Pilot) (prepared by the USIO)	August 2007	doi:10.2204/iodp.sp.315.2007
Expedition 316 (NanTroSEIZE Stage 1: Shallow Megasplay and Frontal Thrusts) (prepared by the USIO)	July 2007	doi:10.2204/iodp.sp.316.2007

APPENDIX I: WEB

Comparison of Web access statistics averages between FY07 Q3 and FY07 Q4 indicates a 15% decrease in Web site traffic.

USIO

FY07 Q4 USIO Web Site (Servers: www.iodp-usio.org, iodp.ldeo.columbia.edu, iodp.tamu.edu)				
Parameter	**Ocean Leadership**	**USIO-LDEO**	**USIO-TAMU**	**Totals**
Page views	15,748	5,306	440,464	461,518
Site visits*	9,901	7,721	48,213	65,835

*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: Bering Sea expedition information	Jul 2007	http://iodp.tamu.edu/scienceops/expeditions/bering_sea.html
Curation: Sample Material Curation System	Jul 2007	http://smcs.iodp.org
Database: Data migration status	Sep 2007	http://iodp.tamu.edu/database/migration.html
Expeditions: Expedition schedule updated	Sep 2007	http://iodp.tamu.edu/scienceops/
Expeditions: Physical exams updated	Sep 2007	http://iodp.tamu.edu/participants/before_exp.html
Phase 2 redesign	Sep 2007	Banner/colors changed on all pages
USIO sponsored sites		
JOI Learning: School of Rock 2007	Jul 2007	http://www.joilearning.org/schoolofrock2007/
JOI Learning: New site	Aug 2007	http://www.oceanleadership.org/learning

APPENDIX J: DSDP/ODP CORE REDISTRIBUTION PROJECT

The East Coast Repository (ECR) shipped five core containers to the Bremen Core Repository (BCR) and one core container to the Kochi Core Center (KCC). ECR Bay 2 space is almost empty. The West Coast Repository (WCR) shipped three core containers and one residue shipment to the Gulf Coast Repository (GCR), and one core/residue container to the KCC. The GCR shipped three core containers and one residue shipment to the KCC, and received three core shipments from the WCR. The GCR began rearranging the old –15°C freezer room and building new core racks to store the first WCR DSDP cores. The KCC received and racked one residue shipment and one core container from the GCR and one core/residue container from the WCR.

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* WEB SITE

JOI Learning launched its redesigned Web site in late August 2007 and, in conjunction, celebrated its third anniversary. Running for 30 business days, the *JOI Learning* Anniversary Web site trivia contest offered a question each day to encourage visitors to return to the Web site, explore, and earn prizes. The redesigned Web site (www.oceanleadership.org/learning) includes an interactive bulletin board, an expanded and searchable activity database, and special pages facilitating outreach to scientists, students, and children.

DISTRIBUTION OF EDUCATIONAL MATERIALS

In 2005, *JOI Learning* distributed an average of 255 pieces of material through e-mail orders each month. In 2006, the average rose ~50% and in 2007, distribution of materials more than doubled again to an average of 1,590 pieces per month. This growth can be attributed to at least the following factors:

- Greater awareness of our program and materials;
- Increased numbers of volunteers conducting workshops and presentations and writing articles;
- New, improved, and targeted resources (posters, pencils, etc.); and
- Web site improvements and monthly e-mail updates.

MATERIALS DEVELOPMENT AND EDUCATION PROGRAMS

SCHOOL OF ROCK 2007

JOI Learning brought 17 middle school, high school, and college-level educators from 14 states to participate in the School of Rock 2007 workshop held 22–29 July 2007 at the IODP Gulf Coast Repository (GCR) located at USIO-TAMU. Three of these participants were selected through a partnership with the Antarctic Geological Drilling program. The workshop included new curricular activities incorporating data and cores from more than 10 expeditions. Under the guidance of a faculty of IODP scientists, participants learned about the various data and records that are considered during core interpretation and learned how to complete investigations using visual core description, sedimentation, lithology, bioturbation, disturbances, and logging data. Highlights of the workshop included an early Eocene field trip and the opportunity to use and explore the GCR under the guidance of its curator and experienced scientists.

Participants used their new knowledge to begin planning new data-rich and inquiry-based classroom activities, many of which will become part of *JOI Learning*'s new Activity of the Month Web site feature. Most of the participants also committed to making presentations at upcoming workshops and conferences about their experiences and their use of this new material with their students.

TEACHER-AT-SEA PROGRAM

JOI Learning arranged for R. Wilson (Barone Middle School Mathematics Teacher, Meeker, Colorado) sailed with W. Sager (Professor of Marine Geology and Geophysics, TAMU) as Teacher at Sea aboard the research vessel *Roger Revelle* on a site survey cruise of the Ninetyeast Ridge from 20 June through 6 August 2007. Working with the science party, Wilson developed a highly interactive Web site for the expedition (www.joilearning.org/sea90e) through which he provided insights about how we learn about the Earth and engaged in ongoing dialogues with a number of classrooms around the world. The Web site is now being adapted for publication and distribution as a poster.

TEACHER-IN-RESIDENCE PROGRAM

Through *JOI Learning*'s inaugural Teacher-in-Residence fellow program, L. Pacunas (North Bethesda Middle School Teacher, Bethesda, Maryland) will provide a current-classroom perspective and assist in development of new curricula and presentations at workshops and conferences. Though funded through the USSSP, Pacunas will work on both USSSP- and IODP-funded projects.

JOI DIVERSITY (MINORITY OUTREACH)

HISTORICALLY BLACK COLLEGES AND UNIVERSITIES FELLOWSHIP

In July 2007, the USIO released the first fellowship payment of $7,500 to D. Godfrey, an undergraduate student in education at Huston-Tillotson University in Austin, Texas. Working under the guidance of K. Ellins (Program Manager, University of Texas Institute for Geophysics [UTIG]), Godfrey has been assisting with implementation of "Earth Science Revolution Workshops," a professional development series for teachers and teacher mentors. The second portion of the fellowship will be released in December 2007 as an FY08 award.

In September 2007, the USIO committed to continuing the fellowship awarded to N. Abdul, a graduate student at Savannah State University in Savannah, Georgia. Abdul will continue working with C. Pride (Assistant Professor of Marine Science, Savannah State University) on a Benguela paleoceanography project that uses core samples from ODP Leg 175 (Site 1084). Abdul has been examining how the delivery of nutrients to the productive Benguela Current System has varied over time.

CONGRESSIONAL OUTREACH

IODP scientists W. Sager, A.C. Ravelo (Professor of Ocean Sciences, University of California), and S. Mrozewski (Drilling Services Engineer, Schlumberger) participated in the Coalition for National Science Funding 2007 Fall Hill Visits Day on 18 and 19 September 2007, during which scientists and engineers visiting congressional offices aimed to underscore the long-term importance of science, engineering, and technology to the nation.

APPENDIX L: IODP-USIO QUARTERLY REPORT DISTRIBUTION LIST

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