



Florida Institute of Oceanography

Annual Report

FY 2012/13

July 1, 2012-June 30, 2013

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Highlights from the Director:

The success highlighted in this 2012/13 annual report exemplifies the valuable resources FIO provides to the State of Florida. This year was a year of recognition, growth and reengineering our level of services. We have accomplished a great deal and this report vividly illustrates FIO's commitment to providing the highest quality service and recognition as an outstanding AISO, by supporting member institutions, student success, research, and leadership throughout Florida.

The actions we took in 2012/13 were designed to advance us further in our role as an AISO, supporting Florida's university system challenges. We have embraced these challenges, made the required investments and to-date have shown significant positive results.

FIO was fortunate to have received additional legislative funding support in the 12/13 fiscal year. The additional funding has allowed FIO to reinstate critical programs that support not only STEM emphasis, but Florida's education, research and economic areas:

- 1) Subsidized Shiptime (primarily on the R/V Bellows)
- 2) Address workforce shortages,
- 3) Invest in advanced equipment and technology for both vessels-- to provide the platforms necessary for our researchers and students to remain competitive,
- 4) Promote funding opportunities for professional development initiatives,
- 5) Build a reserve to support larger expenditures such as the shipyard (to take place January 2014).

It has been a challenge to support these financial obligations. Like many, the economic challenge as well as natural storm events and maintenance challenges did not provide an abundance of revenue for FIO in this fiscal year. R/V Bellows was only able to sail 108.5 days including (35) SUS days and the R/V Weatherbird II sailed 79 days this fiscal year. We hope the chartered days will increase as we enter a new fiscal year. We continue to monitor FIO's financial condition and I am pleased to report, ending this fiscal year FIO's overall ledger is moving in a positive direction.

The Deepwater Horizon incident in 2010 will continue to have expansive and long-lasting ecological and economic impacts on the Gulf of Mexico's natural capital and result in many billions of dollars in penalties. Under the legislative Resources and Ecosystem Sustainability, Tourist Opportunity and Revived Economies (RESTORE Act), the FIO was designated as the State of Florida's *Center of Excellence*. As a *Center of Excellence*, FIO will receive pursuant to the RESTORE Act, a percentage of the funds from the BP settlement to finance research grants through a competitive process, focusing on science, technology, and monitoring related to long

term effects in the Gulf. In January, Transocean Ltd. agreed to pay a \$1 billion civil penalty subject to the RESTORE Act, 80% of this amount will be directed toward Gulf activities and FIO will receive approximately \$4 million dollars. Last February, the Achievement Rewards for College Scientists (ARCS) Foundation presented FIO with the STEM Catalyst Awards for our work and dedication supporting the BP Deepwater Horizon incident and our other roles in protecting our ocean resources.

FIO has been hosting the Gulf of Mexico University Research Collaborative (GOMURC) program. Working with academic organizations in the other Gulf States, GOMURC has a membership of 80 institutions and is advocating for science-based implementation of the RESTORE Act. As part of this, GOMURC has been coordinating and promoting communication amongst the entities involved in the RESTORE Act. In synergy with our Gulf-wide activities, FIO has also recently become the lead entity for Florida in the Governor's Gulf of Mexico Alliance (GOMA).

FIO continues to pursue and successfully meet our strategic goals that align with those of our host institution, the University of South Florida (USF) and of our member institutions. The R/V Weatherbird II crew assists in providing an unparalleled experience for teachers in the *Teachers at Sea* program. Engaging and providing certified teachers with marine science teaching techniques that engages them in current and emerging ocean research and technologies. The experience is as an ideal model for teaching integrated scientific concepts and processes, examining environmental issues, and problem solving that can be passed on to students.

Partnering with the College of Marine Science's Oceanography Camp, FIO provides "a day at sea" experience to inspire and motivate young women entering high school to consider career opportunities in the STEM field. In addition, for the first time this summer, FIO in collaboration with its members institutions, Florida Atlantic University (held at FIO's Keys Marine Lab), Florida Gulf Coast University, University of North Florida, and University of South Florida-St. Petersburg, developed and launched a new 5-week, field intensive course designed to expand undergraduate student knowledge of the biodiversity, geochemistry, and human impact of Florida's coastal and offshore ecosystems through a round-robin trip around Florida to explore marine ecosystems. FIO's "Field Studies in Marine Science" course took students from the reefs of the Florida Keys to the open Gulf of Mexico aboard R/V Weatherbird II, as well as the shallow tropical estuaries of the western Everglades and the temperate Estuarine and Coastal environments of Northeast Florida. Other states have expressed an interest in developing a similar multi-institutional course and will discuss the process with FIO later this year.

At the Keys Marine Lab (KML) we are continuing to work with Florida Wildlife Research Institute (FWC) to assess the structural needs resulting from Hurricane Wilma. Some areas of enhancement include the saltwater system and remodeling space for additional classrooms and laboratories upgrade. Although KML hosts visiting professors, postdoctoral researchers and students throughout the year, the first on-site Keys Marine Lab postdoctoral research scholar is expected to begin September 2013. The postdoctoral research scholar will be part of an integral team at KML, assisting with various research projects and interacting with a diverse group of students and researchers who flock to KML to teach and study the only dynamic tropical marine ecosystem in the continental U.S.

This was the first year of the implementation of FIO's Memorandum of Understanding with the US Coast Guard. In addition to connecting academic experts from around the state with their local emergency management teams, the FIO hosted a workshop in October 2012 at the U. Miami to discuss advanced computer models for tracking oil in the oceans. This was a success with 9 FIO member institutions, plus federal and state representation. Federal agencies not only included the US Coast Guard and NOAA, but also Customs and Border Patrol. A workshop report is in development.

The FIO is actively involved in marketing the research vessels and the KML for education and research locally, nationally and internationally. In addition to the current listserves and databases that FIO manages, we most recently produced numerous print materials for distribution, revamped the FIO website, developed the FIO Facebook Fan Page (over 180 *Likes*) and established a Twitter feed (100 tweets, 21 followers). We expect these numbers to grow as we connect with our audience through social media and advanced technologies.

I am proud of what we have achieved in the last several years. We have clear plans to continue to reshape FIO's marine and business involvement while continuing to deliver world-class results. Our key initiatives have not changed, we will strive to achieve our mission to support our members to obtain funds to conduct research, teach students, train the next generation of scientists, increase the visibility of FIO by sponsoring regional workshops/seminars on current topics, play a vital role as the *Center of Excellence* under the RESTORE Act, coordinate collaborations within GOMURC, support consortia awarded by the Gulf Of Mexico Research Initiative (GOMRI) Research Board, an agreement between BP and GOMA to effectively communicate and protect Florida's multi-billion dollar marine ecosystems.

These are just highlights of what FIO has been doing this year. For additional information, please see the appendices in this report.

Summary of Accomplished Activities for fiscal year (FY 2012/13)

A. Administration and Planning

FIO completed the following administrative actions in fiscal year 2012/13:

- A Legislative Budget Request (LBR) was approved for FY 2012/13. Funding allowed FIO to: 1) Enhance state-wide services and responsibilities, in particular the Research Vessels--Weatherbird II and Bellows; 2) Stabilize FIO's administration, shared use resources, and member support; 3) Place all crew members on recurring funds and free up funds in Auxiliary accounts to hire relief crew members 4) Reinstate subsidized days at sea for teaching and research purposes and maintain the vessels in a safe operating condition. 5) Start a reserve to support large maintenance expenses (i.e. Shipyard, engine replacements etc.)
- Under the MOU with the USCG, FIO organized the first workshop with the USCG in Miami to discuss advanced computer modeling to track oil spills. FIO (Associate Director and representatives from Member institutions) also attended numerous meetings with the USCG to further discuss academic participation in the response to future oil spills and other marine incidents. FIO will organize another workshop in the next fiscal year on marine ecosystem baseline information.
- FIO Advisory Council meetings will continue to be held at different member institutions, to allow all FIO members first-hand knowledge of activities and resources across Florida. However, as the summer 2012 meeting was held on June 29, 2012 and the summer 2013 meeting will be on August 1, 2013, there was only one in-person meeting of the full FIO Advisory Council during this fiscal year, held at the new student center at USF-St. Petersburg, November 2012. In addition, numerous Executive Committee and the FIO Council meetings were held by phone.
- Review of FIO's vessels and business operations was completed by Admiral Rich Behn, retired NOAA Fleet. The report was discussed with FIO members and we have begun implementation of those recommendations we felt would improve operations. This process is still ongoing.
- Continue to establish FIO as the SUS coordinating body for ships, equipment, marine laboratories and other shared-use facilities and equipment. We continue to be involved in the ongoing research associated with the long-term monitoring of the BP Deepwater Horizon incident. Three FIO members, University of Miami-RSMAS, Florida State University-COAPS and University of South Florida-College of Marine Science were selected as 3 of the 8 consortia funded by the GOMRI. FIO is working closely with the consortia on vessel needs.

- In FY 2012/13 FIO administered 12 on-going and new grants totaling \$3,334,896 and \$450,000 in Research Foundation and Foundation funds, respectively.
- Postdoctoral Research Associate was hired at the Keys Marine Lab to work on research projects and assist with visiting scientific groups. Dr. Lewis Gramer was selected from a pool of qualified individuals and is expected to start September 1, 2013.
- Established and implemented new outreach and marketing tools to include social media presence: Facebook page (currently over 180 *Likes*); Twitter account (100 tweets, 21 followers). This presence is expected to grow. Released first issue of FIO Monthly Newsletter (March 2013), continued release of monthly Opportunities Newsletter (on-going since 2011), and developed new FIO Brochure with new Florida map FIO member graphic.
- FIO shares a webmaster with the College of Marine Science. The webmaster has been upgrading and revamping FIO's website. Phase 1 of the upgrade plan is complete. Phase 2 is in progress. This will be an ongoing process.
- Results indicate preparations for replacing the R/V Bellows should be undertaken. A survey shows that replacement of R/V Bellows should have similar capabilities. Options are being developed for moving forward to replace current R/V Bellows with a vessel of comparable capabilities.
- Adopted relevant UNOLS Research Vessels Safety Standards policy. As a result funds were set aside this fiscal year 12/13 to encourage professional development among the crew members. Courses include: Basic Safety Training, Advance Firefighting, Radar Observer certifications, licenses upgrades, Food Manager Certifications, Supervisor's Apprenticeship and joint NOAA/UNOLS Marine Technician training. Eight (8) out of the 10 crew members took advantage of this professional development opportunity.
- Maintenance processes has been established. Engineers on both research vessels have developed a maintenance log for all systems on board both vessels. This has helped with the scheduling process and preparing for future maintenance future needs.
- FIO is supporting various member activities. FIO has assisted the new consortia funded by GOMRI as requested, particularly in the scheduling of the R/V Bellows and Weatherbird II. Assisted USF-CMS in conducting fish disease surveys and development of a new underwater camera for fisheries sampling for stock assessment. FIO's business office is assisting FSU's personnel office with their business and personnel setup of the R/V Apalachee and FIO's ship operations team has assisted FSU in establishing operations of the R/V Apalachee.
- FIO contributed data and assisted in the draft report on the "Economics of Florida's Assets" in collaborations with the Florida Ocean Alliance and others.
- All final reports of the 27 BP initial \$10 million block grant projects have been received. These reports have been compiled into one document with a summary of each project and

the contact information for each principal investigator. Data are being entered into a GOMA database. Distributions of these reports have been made available on the FIO website and will be distributed via a “paperless process.”

B. Legislative Initiatives

As a state-wide organization, FIO:

- FIO continues to serve as advisor to the Governor, State Legislators, State University System Board of Governors, and others as requested, to provide science-based advice on natural resources management, mitigation, regulations, programs and policies.
- In July 2012 (FY12/13), the RESTORE Act was signed into law by President Obama, and Senator Nelson recognized FIO as the entity that will establish the Center of Excellence for Florida in a statement in the Congressional Record. As such, we FIO will receive 0.05% of the awards funds under the RESTORE Act. We are working closely with the other states through GOMURC, GOMA, GOMRI and federal agencies to coordinate the activities so the State of Florida gets the best possible research, monitoring and restoration projects. FIO co-sponsored the GOMA All-Hands in June 2013.
- FIO Organized and co-sponsored Ocean Day activities at The Capitol in Tallahassee to highlight marine activities around Florida for Legislators.

C. Academic Support

As an Academic Infrastructure Support Organization (AISO), FIO’s primary supporting structure includes operating the research vessels, the Keys Marine Lab (with FWRI), contributing to the Science, Technology, Engineering, and Mathematics (STEM) degrees and supporting other performance metrics that are imperative to all SUS institutions. As a result FIO was able to achieve its mission:

- The first multi-institutional FIO “Study Abroad in Florida” summer course was developed and launched in summer 2013. This collaboration is between FIO, UNF, FAU, USF-St. Petersburg, FGCU and the Keys Marine Lab. This is a 5-week, field intensive course designed to expand student knowledge of the biodiversity, geochemistry, and human impact of Florida’s coastal and offshore ecosystems through a round-robin trip around Florida to explore marine eco-systems. Dr. Courtney Hackney (UNF) deserves acknowledgment for his effort to assist in the development and launching of this course.
- KML served 123 user groups, 31 education, 49 research, and 44 both education/research based. Their facility uses totaled 2561 dorm nights, 139 boat trips, 234 specimens collected and numerous hours of staff support in fiscal year 12/13.

- FY12/13: R/V Bellows sailed total of 108.5 days including (35) SUS days; R/V Weatherbird II sailed 79 days. Due to maintenance, unpredictable weather and economic issues, both the Bellows and Weatherbird could not avoid cancelled cruises.
- FIO is continuously compiling an inventory of large marine equipment in Florida. This will improve collaborations and make FIO members more competitive in grant applications.
- Through a competitive process, FIO awarded 35 subsidized ship days for research and teaching to 10 different institutions.

The institutions that were awarded were:

| Institution | Days Awarded |
|--------------------------------------|---------------------|
| Eckerd College | 2 |
| Florida Atlantic University | 4 |
| Florida Gulf Coast University | 3 |
| Florida Institute of Technology | 6 |
| University of Central Florida | 1 |
| University of Florida | 3 |
| University of North Florida | 5 |
| University of South Florida-St. Pete | 3 |
| University of South Florida-Tampa | 4 |
| University of West Florida | 4 |
| Total | 35 |

D. External Activities

Dr. Hogarth and Dr. Virmani have/are involved in many external activities that provides exposure of FIO.

Even though Dr. Hogarth's appointment as Interim Regional Chancellor of USF-St. Petersburg occupied majority of his time in 2012, Dr. Hogarth was still very much involved with FIO's daily activities and educating the general public about FIO.

In 2012-13, Dr. Hogarth:

- Serves on the Board of the Florida Ocean Alliance
- Member of the City of St. Petersburg Ocean Team
- Represents FIO on Science Festival Steering Committee.

- Participated in NOAA Fisheries Managing Our Nations Fisheries Conference. Director was asked to provide critique on possible changes to the Magnuson Fisheries Management Act reauthorization.
- Co-sponsored the first Fisheries Symposium with Guy Harvey Ocean Foundation that brought fishery stakeholders together to discuss current fisheries issues such as recreational catch data, aquaculture and stock assessments. Over 200 people attended and the event was so successful that FIO has been asked to sponsor the 2nd Symposium in September 2013.
- Presented to the Pinellas County Commissioners on FIO and the role in the RESTORE Act
- Lectured on International Whaling Commission for USF-CMS Policy graduate course
- Gave a presentation to Eckerd College on FIO and Deepwater Horizon incident
- Served on Environmental Defense Fund workgroup and develop National Fisheries Program-Collaborations and Cooperation in U.S. Fisheries Management
- Presentation to Gulf and Southeastern Fisheries Development Foundation on FIO, Deepwater Horizon incident and fisheries issues.
- Met with Commissioner Putnam's staff to discuss RESTORE Act and Aquaculture in Florida.
- Board member for GOMURC (Gulf of Mexico University Research Collaborative) involved in meetings with NOAA to discuss RESTORE Act.
- Involved with Ocean Conservancy to conduct workshop to identify innovative approaches for improving fisheries management policies and practices Nov. 2013.

Dr. Virmani's involvement in 2012-13 includes:

- US Coast Guard:
 - Gave two presentations to Sector St. Petersburg Area Committee meetings involving local emergency managers, local emergency county personnel, and state and federal emergency personnel.
 - Held Modeling workshop at the University of Miami in October included at the workshop were FIO members, state (FWC) and federal representatives (from NOAA), USCG, Customs and Border Patrol, SECOORA and others.

- Interacted with Sector Key West, Sector Miami, Sector Jacksonville (in Jacksonville and also in Cape Canaveral). FIO members gave presentations at some of these meetings.
 - Provided information on subject experts from FIO member institutions to USCG.
- Gave information on FIO to Florida Commission on Oil Spill Response Coordination.
- Presented at Regional Response Team IV Winter Meeting – USCG, Federal agencies, state representatives, emergency managers from a number of sectors from Texas to Virginia were present.
- Participated in the National Association of Marine Laboratories meeting in March in DC. Represent FIO on the Public Policy Committee.
- Participated in the Southern Association of Marine Labs – meeting in May in Jacksonville. FIO is the lead for organizing the next SAML meeting in the Keys.
- Serves on the Board of Directors for the South-East Coastal Ocean Observing System Regional Association (SECOORA).
- Member of the Gulf of Mexico Coastal Ocean Observing System Regional Association (GCOOS-RA).
- Serves on the Steering Committee for Ocean Sciences 2014 – the largest international ocean science conference, held every two years.
- Serves on the Executive Committee Board for the Pier Aquarium/Secrets of the Sea.
- By invitation, participated in the first Integrated Ocean Observing System (IOOS) Summit to discuss ocean observing around the United States in the next decade.
- Paper published in a peer-review journal in 2013:
 - Weisberg, R. H., Y. Liu, C. Merz, J. I. Virmani, and L. Zheng, A Critique of Alternative Power Generation for Florida by Mechanical and Solar Means, *IEEE/MTS Journal*, 46(5), 12-23, 2012.
- Wrote white papers for publication in Summit Report:
 - Virmani, J. I., J. Dorton, A. Jochens, L. Leonard, J. R. Morrison, J. O'Donnell, J. Quintrell, and R. H. Weisberg, Fixed Platforms in an Integrated and Interdisciplinary Ocean Observing System. IOOS Summit 2012, July 2012.
 - Leonard, L., J. Dorton, D. Porter, and J. I. Virmani, Identifying Stakeholder Driven User Needs: Lessons Learned in the Southeast. IOOS Summit 2012, July 2012.
 - Weisberg, R. H., W. Boicourt, A. E. Jochens, and J. I. Virmani, A Vision for Coastal Ocean IOOS for the Next Decade. IOOS Summit 2012, July 2012.

- Guest lecturer at the College of Marine Science, USF

E. Areas of Needed Improvements

Although FIO strives to achieve workplan set forth, this fiscal year, FIO faced some challenges and will look to improve in the new fiscal year:

- Increase number of days chartered to 155 days for the R/V Weatherbird II and 145 days for R/V Bellows.
- Continue negotiations to control costs (i.e. food, fuel, maintenance, etc....)
- Continue to explore opportunities for establishment of an east coast FIO satellite office.
- Increase outreach and educational opportunities;
- Funding opportunities for vessel upgrades, R/V Bellows replacement and KML infrastructure and operations.

F. Anticipated New Workplan for 2013/14

- I. Conduct at least two (2) regional workshop/seminars on current topics related to Florida's marine resources.
- II. Participate in ongoing discussions and decisions on RESTORE Act funding, coordinate projects with other Gulf states and Federal agencies to obtain maximum benefits for FIO members and State of Florida.
- III. Continue to work with USCG to realize maximum potential from MOU to be better prepared for future disasters.
- IV. Complete plan for replacement of R/V Bellows including options for financing.
- V. Build on first year summer courses to increase number of students and involve more FIO members.
- VI. Hold at least two (2) face to face council meetings per year, rotate among member institutions.
- VII. Improve outreach and education efforts, utilizing various marketing tools.
- VIII. Enhance KML infrastructure to attract additional research project inside and outside of FIO membership.

- IX. Continue to review costs and make every effort to minimize so that we can maintain reasonable and competitive costs for members
- X. Establish Business Advisory Committee and hold initial meeting as we continue to evaluate and improve FIO status in marine research
- XI. Continue to support Florida's three (3) GOMRI's consortia and provide resources as requested to help maintain consortia in the future. Vessels and equipment are extremely valuable to help ensure these consortia remain competitive.
- XII. Continue active participation and oversight of the Gulf of Mexico University Research Collaborative (GOMURC) program at FIO. Funding have been provided by USF Academic Affairs, Walton Foundation and the Harte Institute in Texas.
- XIII. Utilize funds from Guy Harvey Ocean Foundation to increase broadband and cast back to shore to classrooms and various educational units from research vessels.

G. Ongoing Initiatives for Fiscal Year 2013/14

- I. Provide, promote, and support a collaborative statewide forum for addressing opportunities to advance the understanding and management of Florida's coastal oceans; *to be completed by FIO Team.*
 - a. Future meetings will continue to be held at different member institutions, to allow all FIO members first-hand knowledge of activities and resources across Florida. *Handled by Associate Director*
- II. Leverage and integrate existing physical and intellectual resources within the SUS and throughout the State of Florida; *to be completed by FIO Team.*
 - a. Continue to establish FIO as the SUS coordinating body for ships, equipment, marine laboratories and other shared-use facilities and equipment. *Handled by Program Planner/Analyst and KML Office Manager*
 - b. Support, lead, participate and coordinate state-wide collaboration to continue to support the newly formed marine science summer course conferences and other opportunities to provide educational and research opportunities related to the FIO mission and for the marine science community and the general public. *Handled by Director and Associate Director*
 - c. Explore opportunities for establishment of an east coast FIO satellite office. *Handled by Director and Associate Director*
 - d. Continue to promote the use of FIO vessels and other facilities by private enterprise. *To be completed by FIO Team.*

- e. Continue to encourage professional development of essential personnel, marine technical experts and support positions for both research vessels and the Keys Marine Lab. *Handled by FIO Administrative Team*
 - f. Provide support, as needed, to each FIO member. For example, participate in member strategic planning activities (Dr. Hogarth) and serve on member Advisory Board (Dr. Virmani). *Participation by Director and Associate Director*
- III. Anticipate and plan for future shared use infrastructure needs;
- a. Conduct needs-assessment of education and research capability enhancements for RV/Weatherbird II, RV/Bellows, and KML and the need for additional shared-use resources. *Handled by Fiscal & Business Administrator and Program Planner/Analyst*
 - b. Provide vessels to member institutions as reasonably priced as possible to keep FIO competitive and thus provide opportunities for faculty and students. *Handled by FIO Administrative Team*
- IV. Develop and strengthen networks that enable timely identification of research opportunities and distribution of results; *Handled by FIO Administrative Team*
- a. Actively participate in appropriate State-wide and Regional alliances, including the development of a Coastal Ocean Observing System for Florida, the Gulf and the SE Atlantic. *Handled by Director and Associate Director*
 - b. Explore and implement innovative ways of communicating results of shared-use research platforms, equipment, and facilities. *Handled by FIO Administrative Team*
 - c. Seek recognition by, and participation with, national and international leaders in establishing priorities in coastal oceanographic research. *Handled by FIO Administrative Team*
 - d. Serve on the Science Steering Committee for biennial Ocean Sciences Meeting, 2014, the largest meeting for the international ocean science community. *Handled by the Associate Director*
- V. State of Florida designated oceanographic research organization. *Handled by FIO Administrative Team*
- a. Serve as advisor to the Governor, State University System Board of Governors, State Legislature, and others as requested, providing science-based advice on mitigation, regulation, programs and policy. *Handled by Director and Associate Director*
 - b. Participate in planning a coordinated rapid response of FIO members to assess and understand impacts on the Gulf of Mexico and Atlantic ecosystems – and including atmosphere, coast, estuaries, and rivers - of events such as hurricanes, oil spills, red tide and other harmful algal blooms. *Handled by Director and Associate Director*

- c. Administer resources provided to address impacts of disaster events as *Florida's Center of Excellence*.
 - d. *Gulf Research Initiative (GRI)* FIO Director, Dr. William Hogarth currently serves as one of the two State of Florida representatives to the Board. The other, Dr. Richard Dodge, is also a member of the FIO Advisory Council.
 - e. Ensure peer-reviewed documentation, widespread dissemination and interpretation of findings and recommendations to policy-makers, educators, and the general public. *Handled by Director and Associate Director*
- VI. Continue participation in the Gulf of Mexico University Research Collaborative (GOMURC). The GOMURC is comprised of a team of five university-based collaborative representing the many marine-oriented research organizations within the five Gulf States (Alabama, Florida, Louisiana, Mississippi, and Texas). *Handled by Director*
 - VII. Work closely with legislature to maintain funding as necessary to operate and maintain research vessels and provide subsidized days for researchers and students to FIO membership through a competitive process. *Handled by Director and Associate Director*
 - VIII. Provide shiptime and support to 3 BP Consortia within the State of Florida. *Handled by FIO Administrative Team*
 - IX. FIO was awarded \$60,000 for 2 years from the Guy Harvey Ocean Foundation to subsidize costs to provide live broadcasting feeds from both research vessels back to classrooms and other educational venues. Pilot program *Teacher at Sea* has successfully skyped back to classrooms, initial attempt connected over 300 students to the *Teachers at Sea* program. Utilizing face-time application, we transmitted from ship to shore to the USF Board of Trustee and the Florida System Board of Governors on June 20, 2013. Plans are under discussions to identify various areas where live broadcasting can take place. *Program Planner/Analyst, Marine Captains and Principal Investigators*
 - X. As FIO's budget is being monitored for stabilization, FIO is hopeful to steadily increase subsidized days for full FIO members through a competitive process. *Director in consultation with Fiscal & Business Administrator*
 - XI. Develop best possible plans for the utilization of funds received from RESTORE Act Legislation. *Director and Associate Director in consultation with Fiscal & Business Administrator and FIO Council*
 - XII. Continuously review FIO's business and marine processes to effectively better service our constituents not limited only to coordinating vessel maintenance and scheduling to optimize days at sea and safety. *Marine Captains, Program Planner/Analyst in consultation with Director and Fiscal & Business Administrator*

XIII. Continue to foster the relationship between the USCG and implementing the MOU by involving FIO members. *Handled by Associate Director*

Appendices

Appendix A. FIO Financial Summary-All Sources

**FY 2012/13
Financial Summary**

| Fund # | Auxiliary Fund | 7/1/12 FY Beginning Cash | Revenue | Expenditures | Ending Cash Balance |
|---|-----------------|-----------------------------|-----------|--------------|------------------------|
| 10000 | *E&G | \$2,045,645 | - | \$1,916,000 | \$129,465 |
| 1419 | Weatherbird II | \$(629,678) | \$774,800 | \$144,197 | \$925 |
| 3001 | Bellows | \$(283,331) | \$533,016 | \$142,867 | \$106,818 |
| 3003 | Keys Marine Lab | \$108,416 | \$252,719 | \$185,225 | \$175,910 |
| Total Ending Balance for All Source: | | | | | \$413,118 |

R/V Weatherbird II Auxiliary
Expenditures Summary
FY 12/13

| Expenditures | FY12/13 | FY11/12 | FY10/11 |
|------------------------------------|------------------|--------------------|--------------------|
| Salaries | \$0 | \$303,237 | \$280,690 |
| Bonuses | \$0 | \$12,988 | \$16,500 |
| OPS Salaries | \$92,844 | \$100,545 | \$144,876 |
| Fringes | \$1,610 | \$90,584 | \$96,527 |
| Travel | \$4,776 | \$3,413 | \$0 |
| Communications | \$686 | \$27,401 | \$22,250 |
| Contractual Services | \$1,420 | \$8,141 | \$6,734 |
| Computer Related Materials | \$2,837 | \$1,120 | \$898 |
| Materials, supplies, and equipment | \$5,856 | \$286,743 | \$85,215 |
| Repairs, Maintenance | \$5,467 | \$26,468 | \$78,747 |
| Food | \$850 | \$44,929 | \$43,604 |
| Fuel | \$542 | \$184,366 | \$146,791 |
| Risk Management | \$0 | \$30,794 | \$16,265 |
| Other Operating Expenses | \$27,308 | \$81,985 | \$139,164 |
| OCO Purchases | \$0 | \$5,500 | \$9,610 |
| Total Operating Expenses | \$144,197 | \$1,208,214 | \$1,087,871 |

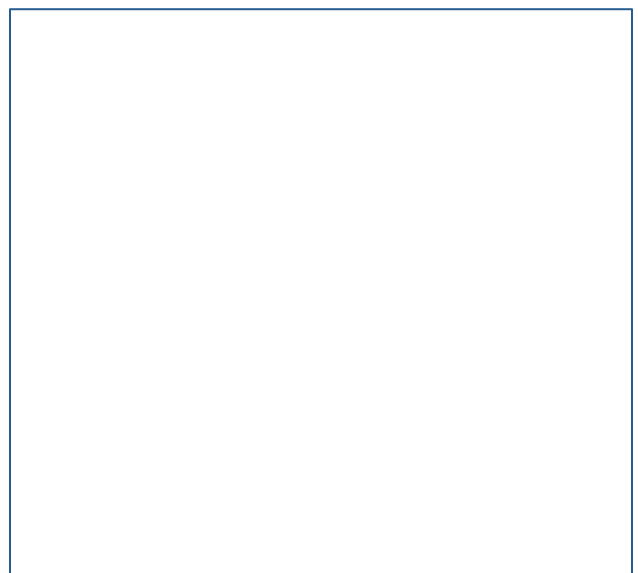
R/V Bellows Auxiliary
Expenditures Summary
FY 12/13

| Expenditures | FY12/13 | FY11/12 | FY10/11 |
|------------------------------------|------------------|------------------|------------------|
| Salaries | \$23,874 | \$62,011 | \$103,584 |
| Bonuses | \$13,658 | \$5,460 | \$0 |
| OPS Salaries | \$6,829 | \$17,893 | \$4,107 |
| Fringes | \$6,031 | \$21,269 | \$37,673 |
| Travel | \$178 | \$0 | \$0 |
| Communications | \$686 | \$30,671 | \$10,237 |
| Contractual Services | \$1,085 | \$6,180 | \$9,889 |
| Computer Related Materials | \$1,900 | \$62 | \$0 |
| Materials, supplies, and equipment | \$18,453 | \$36,108 | \$44,778 |
| Repairs, Maintenance | \$6,430 | \$161,051 | \$28,003 |
| Food | \$15,586 | \$21,673 | \$24,086 |
| Fuel | \$30,924 | \$65,527 | \$75,179 |
| Risk Management | \$0 | \$8,357 | \$6,215 |
| Other Operating Expenses | \$17,232 | \$30,600 | \$68,546 |
| OCO Purchases | \$0 | \$0 | \$0 |
| Total Operating Expenses | \$142,867 | \$466,862 | \$412,297 |

Keys Marine Lab Auxiliary
Expenditures Summary
FY 12/13

| Expenditures | FY12/13 | FY11/12 | FY10/11 |
|------------------------------------|------------------|------------------|------------------|
| Salaries | \$0 | \$0 | \$0 |
| Bonuses | \$0 | \$981 | \$0 |
| OPS Salaries | \$13,598 | \$14,552 | \$14,225 |
| Fringes | \$233 | \$282 | \$300 |
| Travel | \$9,206 | \$7,987 | \$590 |
| Communications | \$6,156 | \$7,578 | \$8,381 |
| Contractual Services | \$20,721 | \$18,349 | \$21,413 |
| Computer Related Materials | \$1,072 | \$2,902 | \$988 |
| Materials, supplies, and equipment | \$46,391 | \$115,863 | \$45,565 |
| Utilities | \$29,718 | \$32,127 | \$23,814 |
| Repairs, Maintenance, Renovations | \$27,445 | \$24,878 | \$27,092 |
| Other Operating Expenses | \$25,201 | \$25,609 | \$9,394 |
| OCO Purchases | \$5,750 | \$19,124 | \$3,347 |
| Total Operating Expenses | \$185,490 | \$270,232 | \$155,109 |

Appendix B. FIO Organizational Chart



Appendix C: FIO Marine Operations External Review Report

Executive Summary

For over four decades the Florida Institute of Oceanography (FIO) has unified marine science interests across Florida in the cause of understanding and stewardship of its coastal oceans. For years the consortium did great work for the local environment and community. Over those 40 years FIO was not aware of the change that was happening around them. It had lost its edge and was struggling; the organization had become stagnant. Through all this FIO's administrative functionality broke down while fiscally the organization was operating in the red. FIO was tasked to take the lead in the scientific assessment of the impact of the Deepwater Horizon Oil Spill. Unfortunately the organization was not ready to deal with the full responsibility needed to assess the oil spill.

The University of South Florida (USF) leadership realized that change and poor management had overtaken FIO. To get FIO back on course USF put into place a new FIO Director, Dr. William T. Hogarth. Dr. Hogarth was tasked with restoring FIO. I know you would rather hear that Dr. Hogarth grabbed the bull by the horns, but being this is a maritime organization, I will use nautical terminology. Dr. Hogarth grabbed the helm of the organization and is getting FIO back on course. After a year at the helm, Dr. Hogarth thought it would be prudent to bring in an outside expert to review FIO's Marine Operations. He wanted to ensure the marine side of FIO was on its proper course.

As any new leader in a broken organization knows, the existing personnel rarely admit that there is a problem. Dr. Hogarth began to institute the changes needed to get FIO pointed in the right direction. To accomplish this he had to communicate this new direction. He had to make every effort to ensure everyone, inside and outside FIO, understood why the changes were needed. If those that were needed to make the change don't understand why the change is needed, then they see change happening just for the sake of change.

The burden of understanding what change is needed is upon the new FIO Director. From my discussions with the employees and the scientists I will conclude that the Director did a great job of explaining what was about to happen. Unfortunately the message of change did not resonate with all the FIO employees; there were some who did want to accept this change. This is the hurdle that Dr. Hogarth had to clear.

The FIO employee did not believe FIO was broken; but they are the ones who had to accept and execute the change. In this instance the employees should have listened more intently and been more engaged with the new Director while he was trying to communicate the needed change; they did not do that.

This communication breakdown, which occurred both up and down the chain of command within the FIO organization led to some rough days for anyone in or associated with FIO. There are a few FIO employees who still do not want to accept the change that FIO is undertaking which is why today there is still some friction between the components. That

friction appears to have diminished from what it was a year ago. The correct change is happening and becoming an integral part of FIO's daily operations.

While FIO was engaged in the ebbing and flowing of trying to execute the change, guess who was over the side requesting a life ring; the scientist. The scientist's projects depend on the FIO vessels to be fully staffed, the equipment aboard to be working properly, logistics are met, and morale to be positive. The scientist is dependent on every aspect of the FIO research vessel to be perfect so they can collect every bit of data needed to satisfy the project's requirements. This is the person who actually pays for FIO's services. Did the scientist suffer because of this change? Yes. In my interviews with the scientists a majority of them agree with the change occurring at FIO and look forward to the improvements forecasted.

The new direction of FIO was the most discussed topic with all the personnel I spoke with and which is why I have given it this attention in the Executive Summary.

Remember, my task was to review FIO's Marine Operations. Throughout this report I provide FIO with 24 recommendations. Those recommendations are based on discussion with FOI personnel and the scientists who use the FIO vessels. The top 5 recommendations FIO needs to institute now are:

1. Conduct an evaluation of the Bellows to decide if the vessel should continue operations with a major rehabilitation or be replaced.
2. Both vessel Captains received very poor marks by our customers.
3. Adopt the UNOLS Research Vessel Safety Standards for the operations of FIO vessels.
4. Establish and hire a Port Captain and a Port Engineer (both must be U.S. Coast Guard licensed) while terminating the existing Port Engineer position (it is not licensed).
5. Conduct a workshop with the scientists, which you now call customers, to assess what capabilities are needed aboard the FIO vessels.

The next section of this report provides a consolidated list of all the recommendations made in the report. I hope this report and its recommendations serve as the catalyst to finalize the change and to make FIO a world class organization in the future.

STRATEGIC PLAN 2010-2015
For the
FLORIDA INSTITUTE OF OCEANOGRAPHY

(Approved by FIO Council January 7, 2011)

The Florida Institute of Oceanography (FIO) was established in 2009 as an Academic Infrastructure Support Organization (AISO) by the State University System (SUS) Council of Academic Vice Presidents, ratified by the presidents and chairs of the Board of Trustees of the member organizations and approved by the Florida Board of Governors. Under a Memorandum of Understanding (MOU) ratified by the member organizations and approved by the Board of Governors, the University of South Florida (USF) is the designated host institution. Operations and administrative offices of the FIO are housed on the campus of the College of Marine Science in St Petersburg. The **Vision** of the FIO founders was that a statewide consortium of universities and research laboratories would allow development of both human assets and physical infrastructure that would elevate Florida into a leadership position in oceanographic and coastal education and research. Exploration, solving problems, and development of new knowledge is the very definition of education and FIO should facilitate the functional integration of education and research by involving students in every facet of FIO activities. The **Mission** of the FIO is to facilitate and support Florida's emergence as the pre-eminent state in the nation for coastal ocean education through the development of educational and research infrastructure, which will support faculty and scientists who can advance our understanding of coastal ocean processes and communicate that understanding to Florida's residents, educators, policy makers and resource managers.

Goals and Strategies

1. Provide, promote and support a collaborative statewide organization that can support the education of students in state and private colleges and universities by:
 - a. Supporting existing marine education programs and member institution research projects with FIO maintained facilities, research vessels and other infrastructure.
 - b. Developing a statewide coastal and ocean network that can organize the coastal and oceanographic intellectual assets of Florida to provide high quality educational opportunities for students interested in coastal and ocean science and related disciplines.
 - c. Supporting and leading conferences, seminars, and workshops for students, teachers, public officials, and residents of Florida.
2. Maintain a state-of-the-art infrastructure for coastal ocean education and research with centrally maintained assets including research vessels, marine laboratories, and shared-use facilities and equipment that will:

- a. Establish and support FIO as Florida's coordinating body for coastal ocean research. This may include reduced cost for ship time and laboratory use for FIO members that can provide a competitive advantage to FIO member institutions.
 - b. Arrange and coordinate vessel and equipment leasing opportunities for FIO member institutions when FIO infrastructure is not sufficient to support member needs.
 - c. Develop and promote research initiatives for FIO member institutions within coastal waters of Florida as well as within the Gulf of Mexico and Caribbean.
 - d. Prepare a long-range plan to support FIO members in the future through the maintenance and purchase of research vessels and equipment.
 - e. Hire vessel crews, marine technical experts and support positions.
3. Develop and strengthen networks that enable timely identification of needs of member institutions, state agencies, and local governments by:
- a. Actively participating in state-wide and regional alliances, including ocean-observing alliances.
 - b. Participating in national and regional forums that will assist in establishing priorities for the FIO.
 - c. Exploring and implementing innovative ways of communicating research results with scientists, agencies, policy makers and citizens of the state.
 - d. Assisting the state in communicating technical and scientific concerns with FEMA, Coast Guard and relevant state or federal agencies in emergency situations, e.g. the Deepwater Horizon oil spill.
 - e. Providing science-based advice to the state's leaders on coastal and ocean issues whenever requested.
 - f. Visiting constituent FIO institutions to understand needs and opportunities for both teaching and research.
 - g. Partnering to develop plans for rapid technical response to environmental and natural disasters that impact the state.

Appendix E: FIO Council Members



FIO Advisory Council Membership List 2012

The Institute is governed by the FIO Advisory Council. Council members are appointed by the head of their respective institutions and serve two-year terms.

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Florida Institute of Oceanography Council Bylaws

(Approved by FIO Council June 29, 2012)

I. Creation and Administrative Assignment of the Florida Institute of Oceanography

The Florida Institute of Oceanography (FIO) is an Academic Infrastructure Support Organization (AISO) of the State of Florida approved by the State University System (SUS¹) Council of Academic Vice Presidents (CAVP), ratified by the presidents and chairs of the boards of trustees of the member organizations and approved by the Florida Board of Governors (BOG). Under a Memorandum of Understanding (MOU) ratified by the member organizations and approved by the BOG, the University of South Florida (USF) assumes the role of host university, with the support of participating universities, for the operation of FIO. FIO administrative offices are housed on the campus of the College of Marine Science in St Petersburg, Florida and fiscal accounting functions are administered by USF and will be overseen by the USF Board of Trustees (BOT).

II. Purpose and Duties of the FIO

The FIO will facilitate and support Florida's emergence as the pre-eminent state in the nation for research and education in understanding ocean processes and how they impact economically essential natural resources and contribute to natural and man-made hazards. The FIO will have within its scope all aspects (research and education) of oceanography that affect the State of Florida. FIO will direct its focus on the entire coastal ocean, from the coast to the deep ocean, thereby positioning itself to facilitate and support systems-wide scientific leadership within the SUS for the environmental stewardship of the State of Florida. The FIO mission, as defined in the MOU, is to: (1) provide a diverse and collaborative statewide forum addressing problems of concern in coastal oceanographic research and education; (2) leverage and integrate existing physical and intellectual resources within the SUS and throughout Florida; (3) anticipate and plan for future infrastructure needs; (4) facilitate, promote and support collaborative ocean-related research and education statewide; and (5) develop and strengthen networks that enable timely identification of oceanographic research opportunities and distribution of research results and other information to the general public, natural resource management agencies and local, state and national policymakers.

¹ The State University System Consists of the following institutions: Florida Agricultural and Mechanical University, Florida Atlantic University, Florida Gulf Coast University, Florida International University, Florida State University, New College of Florida, University of Central Florida, University of Florida, University of North Florida, University of South Florida, and University of West Florida

As an AISO, the FIO provides technology, equipment, facilities, services, and resources for academic programs and research in Florida. The FIO facilitates access to major marine research and educational capabilities and facilities throughout the State, including the operation of sea-going vessels for coastal ocean research, and promotes research, education, economic development, and environmental sustainability of Florida's coastal ocean. FIO enables Florida to provide a virtual intellectual and physical hub for the mature and diverse marine science enterprise that exists in the state. Established entities across academia, government, and the private sector will collaborate to:

- a. Promote research, education, and project management;
- b. Enhance awareness of ocean science issues affecting all Floridians;
- c. Maximize the efficient use of supporting infrastructure;
- d. Produce scientific solutions;
- e. Leverage public and private sector investments to increase capacity; and
- f. Inform public policy development and decision-making.

III. Membership and Governance

The FIO shall consist of the Membership, the FIO Council, the FIO Director and staff, standing and ad hoc committees of the Membership, and a Board of Visitors.

A. Membership. The FIO consists of the state universities as defined by the Florida Statue Title XLVIII 1000.21 sec (6) and fifteen (15) other entities which include faculty, staff, and scientists conducting research and teaching and who may wish to utilize ships, facilities, and other services provided by FIO. All state universities are full members of FIO. The non-state university full members of FIO by ratification of the MOU are: Eckerd College, Florida Sea Grant College; University of Miami, Rosenstiel School of Marine and Atmospheric Science; Florida Department of Environmental Protection; Florida Fish & Wildlife Conservation Commission, Fish and Wildlife Research Institute; Florida Institute of Technology; Mote Marine Laboratory; Nova Southeastern University; and the Smithsonian Marine Station at Fort Pierce. The associate members are Hubbs-Seaworld Research Institute, Jacksonville University, SRI St. Petersburg, St. Petersburg College, and University of South Florida St. Petersburg. The affiliate member is Roffer's Ocean Fishing Forecasting Service, Inc.

1. Full Members: All SUS members (as defined by the membership of the CAVP) who wish to become members of FIO can do so as a Full Member. As an AISO, FIO serves the needs of the SUS. To retain integrity as an AISO, the majority of Full Members needs to be from the SUS, therefore, at least 51% of the Full Membership needs to be SUS institutions.

If there is a vacancy on the Council for a new non-SUS Full Member, acceptance of the new non-SUS Full Member to the Council will be by a vote of the entire FIO Advisory Council at an in-person Council meeting. A 3/4 majority vote is required to accept a non-SUS member as a Full Member.

2. Associate Members: Associate Membership is established for non-profit non-SUS organizations with a marine science focus. These include all non-profit entities, such as, but not limited to, colleges, museums, aquariums, and other organizations that fit the Criteria for New Member Applications. Associate Members will promote FIO and provide FIO and its members with access to ships, laboratory facilities, and other ocean and coastal research and education assets (for a fee, if appropriate). Other branch campuses of existing SUS Council Members may become Associate Members, but there can only be one voting (Full) member from any one SUS institution other than the Host University, which has two voting members. All SUS faculty, regardless of whether on a main campus or on a branch campus, remain eligible to apply for SUS-subsidized ship time.
3. Affiliate Members: Affiliate Membership is established for for-profit non-SUS organizations with a marine science focus. Affiliate Members will provide FIO and its members financial or in-kind support, use or access to ships, laboratory facilities, and other ocean and coastal research and education assets (at a fee, if appropriate).

Election of New Members. The FIO Council may elect to membership other institutions in the Florida ocean science education and research community that meet the criteria for membership approved by the FIO Council (“New Members”). Criteria for membership will address commitment to the support of shared use facilities; agreement to support legislative budget requests of the FIO as required to maintain and operate these facilities in a safe, efficient and cost-effective manner; commitment to attend all scheduled meetings of the FIO Council and FIO Executive Committee, if appropriate; and completion of assignments in a timely manner as agreed to by the FIO Council or FIO Executive Committee. The FIO Council will evaluate each New Member request individually. All SUS (as defined by the membership of the CAVP) New Members are eligible to be Full Members and will automatically be awarded a seat at the FIO Advisory Council. A simple majority vote will be required to accept any non-SUS Members as a New Associate or Affiliate Member onto the FIO Advisory Council.

Criteria for New Member Applications:

1. Significant presence in Florida, such as an operating facility in the State of Florida.
2. Primary focus is marine science education and research.
3. Ratify a modified FIO MOU specific to the Associate or Affiliate Membership.
4. Provide a proposal (written), including documentation of the extent of presence in the State of Florida. Orally present to the FIO Advisory Council how the institution will support FIO Council activities.
5. Demonstrate ability to bring tangible support to FIO.

Privileges of FIO Membership

| | Full Members | Associate Members | Affiliate Members |
|---|--------------|-------------------|-------------------|
| Attendance and participation at FIO Advisory Council Meetings | Yes | Yes | Yes |
| Voting privileges on the FIO Advisory Council | Yes | No | No |
| Participate in specific FIO project funding opportunities | Yes | Yes | Yes |
| Access to subsidized ship time on FIO vessels. | Yes | No | No |
| Access to at-cost ship time on FIO vessels. | Yes | Yes | No |
| Access to commercial rates of ship time on FIO vessels. | No | No | Yes |

B. FIO Council. The primary function of the FIO Council is advisory to the FIO leadership, including the FIO Director and the Provost of the host institution. The FIO Council will consist of one (1) representative from each member organization and two (2) from the host institution who are active members of the Florida coastal ocean research and education community and who are appointed for a two (2) year term by its president or CEO or his/her designee. The president or CEO (or his/her designee) of each member organization may also appoint one (1) alternate who may serve in the representative's stead at meetings of the Council, but each institutional member may be represented by only one (1) individual in the deliberations of the Council. Member representatives may be reappointed, but shall not serve more than three (3) consecutive terms. The foregoing notwithstanding, the second member appointed by the host institution may serve unlimited terms. The FIO Council shall elect a Chair biennially from the membership. The FIO Director together with a representative of the BOG will serve as non-voting, *ex-officio* members. Council members shall have the authority to participate in all activities on behalf of the member organization and cast its vote as required. Each institutional member can change a delegate at any time by notifying the FIO Director by written communication. The Director is required to notify the affected organization member if an appointed representative misses two consecutive meetings of the FIO Council.

C. FIO Director and staff. The FIO Director shall be appointed by the Provost of the host institution in consultation with the FIO Executive Committee. The FIO Director reports to the Provost of the host institution. The FIO Director will maintain active contact with FIO member institutions by visiting campuses, scheduling and conducting workshops, conducting needs assessments and providing advance knowledge of FIO activities to achieve the goals of the AISO. The FIO Director shall complete an annual report no later than September 1 of each year covering the previous fiscal year (July 1-June 30). The report shall include a summary of activities and accomplishments, provide actual expenditure and position data, and include a workplan for the current fiscal year. Prior to its submission to the Chancellor, no later than October 31 of each year, the report will be distributed to members of the FIO Council for review and comment and will be approved by the Provost of the host institution. Under the FIO Director's guidance, the FIO staff has the primary responsibility for operation and maintenance of the vessels, implementation of the ship schedule, and support for PIs to achieve the research goals; coordination of the education components to achieve the education goals; maintenance of

the FIO website; and support for grants and other services provided to member institutions. In the event of a vacancy in the FIO Director position, a search committee will be appointed by the Provost and will follow the customary search process of the host institution.

IV. FIO Council Meetings

The FIO Council will meet at least once in person each year and by telephone conference as needed. Agendas for the meetings will be set by the Chair of the FIO Council in consultation with the FIO Director and approved by the Provost of the host institution. A quorum must be present for the Council to take action. A quorum shall consist of no less than half of the full member institutions plus one. All meetings will be conducted according to Roberts Rules of Order.

Voting. Each member of the FIO Council has one vote. Voting will be decided by a simple majority of full member representatives (or designated alternates) present in person, by phone, or by e-mail unless otherwise specified in these by-laws. New full member institutions elected to the FIO secure voting privileges upon the appointment of an FIO Council representative as specified in the bylaws, but not before adjournment of the meeting at which they were elected.

Meetings of the FIO Council are open to the public. A Council member may designate an individual to attend the meetings as an observer and to comment on agenda items but the observer will not have voting privileges.

Minutes of the Meetings. Minutes shall be kept for all regular meetings of the Council and shall be made available by email to the membership within two weeks of each regularly scheduled meeting. Following a period of two weeks for comment and amendment, the minutes shall be approved by email vote of the members and posted on the Council web site.

Staffing of the Council. Members of the staff of the FIO will act as staff for the Council, organizing meeting logistics, taking minutes and handling communications with the members.

V. Standing Committees and Workgroups

Executive Committee. The FIO Executive Committee will consist of five (5) full Council members including the Council Chair and four elected members. At least one member of the FIO Executive Committee shall be from the host institution. The FIO Executive Committee will meet at least three times per year and provide administrative oversight of the FIO in cooperation with the FIO Council and the Provost of the host institution. The FIO Director will serve as a non-voting, *ex officio* member. The past Chair will serve as a non-voting, *ex officio* member for one year following the election of the new Chair of the Council. The Board of Governor's representative on the FIO Advisory Council will serve as a non-voting, *ex officio* member. Written reports of the items discussed and actions taken at meetings will be sent to the FIO Council via email and posted on the FIO website for the benefit of the FIO Council and interested parties. Membership on the Executive Committee will be evaluated biennially. In the

event of a vacancy on the Executive Committee, the FIO Council will elect a member to fill the vacancy.

Ship Advisory Committee. The Ship Advisory Committee (SAC) will be elected by the FIO Council and will consist of at least three (3) Council members (with at least one from the host institution) reflecting the geographical diversity of Florida. The SAC will provide oversight and advice to assure the efficient deployment of FIO research vessels in all of Florida's coastal ocean and surrounding waters (Straits of Florida, coastal Atlantic, Bahamas, Caribbean, northern Gulf of Mexico). The SAC will assist the FIO Marine Superintendent with efficient long-term planning to ensure that FIO members will have equitable access to these vessels from Jacksonville to Pensacola. The SAC will meet at least once annually, in conjunction with the FIO Council meeting.

Nominating Committee. A Nominating Committee will consist of three (3) members appointed by the Executive Committee. The Nominating Committee will recommend candidates to the FIO Council to serve on the standing and ad hoc committees. The Nominating Committee will meet on an as-needed basis to fill vacancies on the standing and ad hoc committees.

Board of Visitors. The FIO Board of Visitors will have five (5) to nine (9) members appointed by the host institution President, in consultation with the FIO Council and the Council of Academic Vice Presidents (CAVP), for a three (3) year term, to provide broad oversight to the FIO. Members may be reappointed, but shall serve no more than three (3) consecutive terms. Members will represent the overarching oceanographic research and education interests of global, national and Florida-focused entities. The FIO Board of Visitors shall include representatives from the private sector, higher education, government scientific laboratories and agencies, and others as deemed appropriate by the host institution President. The Board of Visitors will report to the Provost of the host institution and the FIO Executive Committee, and will serve as a valued resource to FIO by providing advice on best practices for optimizing the resources of the FIO and member institutions; identifying strategic directions for potential cooperative programming; interfacing with potential funding sources; and representing FIO and the vital importance of oceanographic research to the broader community.

Additional *ad hoc* or special committees may be formed by the Executive Committee with the cooperation of the Council to address particular issues.

VI. By-Law Revisions

The bylaws and any proposed revisions shall be reviewed yearly. Council members shall submit any proposed revisions to the Chair at least 30 days in advance of the FIO Advisory Council meeting. The Executive Committee and the Provost of the host institution shall review the proposed revisions prior to a full vote of the Council. Amendment of the bylaws requires a two-thirds vote of the Council.

Appendix F: Strategic Plan for Ship Operations

Florida Institute of Oceanography (FIO)

Strategic Plan for Ship Operations

(Approved by FIO Council June 29, 2012)

The acquisition and maintenance of research and teaching platforms for offshore coastal and oceanographic research is critical for Florida coastal and oceanographic educators and scientists and one of the most important assets of the FIO. Maintaining a research fleet with state-of-the-art, on-board equipment currently consumes a large portion of the FIO budget. Doing so requires maintaining research vessel designation from the U.S. Coast Guard and operating the vessel where relevant, in compliance with UNOLS practices and policies. The strategic use of these assets will be important if FIO is to continue to support state and private universities and research institutions.

While future plans may include a FIO research vessel located on the East Coast of Florida, the current ocean-going, research fleet is based at the Host Institution, University of South Florida's St. Petersburg Campus in the Gulf of Mexico. This presents difficulty for FIO scientists and marine educators working on the Atlantic Coast or even those working off the western Florida panhandle. Transit time for FIO vessels can consume a large proportion of operational days per year if vessel use efficiency is not a priority in scheduling. Priority use of vessels should always consider overall cost (including transit time), but also assign priority as follows.

- 1) Applications for paid ship-time by member institutions (in order of priority: Full, Associate, Affiliate) shall have priority over paid ship-time applications from non-member institutions.
- 2) Member institutions and cruises subsidized by government agencies shall be charged at the standard published day rate for that member category (Full, Associate, Affiliate). Non-member institutions without government affiliated funding may be charged a higher day rate. Additional costs for shore side logistical support may also be charged for non-member or non-government subsidized cruises.
- 3) As per the By-Laws, FIO SUS-subsidized ship-time shall be provided to Full member institutions. All SUS faculty, regardless of whether on a main campus or on a branch campus, remain eligible to apply for SUS-subsidized ship time. Priority shall be granted to eligible FIO institution proposals that effectively integrate student education and training into their requests including, but not limited to incorporating students registered in a class at an FIO institution. Secondary priority shall be provided to proposals that utilize students while assisting faculty in their research projects. Students gain important experience when assisting faculty research and this practice is encouraged. However, when adequate FIO subsidized days are not available for all proposals, priority should be given to those classes where ship-time experience is most valuable. Exceptions can be made where the proposed student activity involves time during vessel transit that would otherwise be wasted. Following student training, submitted proposals that demonstrate and support faculty 'seed' research shall also be given priority. 10% of the daily ship rate will be charged to each proposal awardee.

- 4) FIO subsidized ship-time will vary each year and is set by the FIO Director based on budget considerations and in consultation with FIO scheduling personnel. The goal of the subsidized days is to provide the maximum number of students experience on a vessel with available funds. Typically, this will require the use of the least expensive vessel. In cases where more students might be able to gain experience for less cost, FIO personnel may schedule the more expensive vessel for FIO subsidized days.
- 5) A Call for Proposals for subsidized educational ship-time shall be made each year and a time frame for submission, review and award set by the FIO Director in consultation with the FIO Ship Advisory Committee. .
- 6) Proposals submitted for FIO subsidized educational ship-time shall be reviewed by the Ship Advisory Committee and Prioritized based on the general guidelines set by the FIO Council. Current levels of support from the State University System (SUS) to the FIO are not adequate to assign vessels to research and education programs without external funding from individual research scientists and marine educators. FIO scientists and marine educators enjoy lower ship-time rates, which makes proposals by FIO scientists more cost effective. Future budget requests for FIO should endeavor to provide additional funds so that rates to FIO scientists can provide a financial advantage for grant and contract competition.

Even when operating at peak efficiency, vessels and crews cannot operate 365 days a year. FIO staff, including Captains, will determine how many days FIO vessels can safely operate. FIO staff, including Captains, will determine when normal maintenance is needed or when a vessel needs to be removed from service for repair or maintenance. Safety of the crew and research party shall always be a priority, even if there is a substantial fiscal cost associated with a schedule change due to a safety issue. The FIO Program Planner/Analyst shall notify the appropriate research scientists when a schedule change has occurred and shall attempt to reschedule.

The FIO Program Planner/Analyst, in consultation with the FIO Director, shall set schedules for all FIO vessels. The scheduling goal shall be to maximizing income from vessel use, while maximizing research platform availability for FIO educators and research scientists. Requests for paid ship-time will vary each year depending on funding to member faculty. It will be necessary to maintain scheduling flexibility. While priority shall be for FIO institutions, there may be cases where costs may be less if non-FIO vessels are leased to allow non-FIO research scientists use of vessels. Such flexibility is allowed providing such decisions are cost effective for all parties.

Scheduling can be altered by the FIO Program Planner/Analyst with approval from the FIO Director, and in consultation with the Chief Scientist, based on inclement weather, necessary ship repairs, requests to change ship days, etc..

A report on vessel use and scheduling shall be submitted by the FIO Director to the FIO Ship Advisory Committee, which will review the document and provide it to the FIO Council. The annual report will include:

1. Number of operational days, transit days, maintenance days, and in port days,
2. An account of income generated by vessels through rental to FIO and non-FIO scientists,

3. Number of scientists and students who participated in FIO subsidized research cruises,
4. Number of courses supported by FIO vessels and laboratory facilities,
5. Summary of changes in safety policies, inspections, certifications, and any other aspect of ship operations that has or may affect safety of the crew or research party,
6. Projected improvements to the equipment base of the vessels.

A goal of the FIO should be to provide research and education platform opportunities to all research scientists and marine educators along Florida's coasts. Ultimately, this will include the availability of platforms along the Florida Atlantic Coast. Issues arising from this need may include purchasing or renting vessel time, location(s) of berthing facilities, vessel size, etc. This issue should be revisited by the FIO Council on an annual basis. A decision to expand the FIO research platform capability is dependent on funding. Any proposal to expand these capabilities must include a strategic budgeting plan along with justification for purchase or rental. Such a plan must be approved by the Executive Committee and the FIO Council before being presented to the Provost of the University of South Florida. If approved by the Provost, this will be incorporated into the annual budget

