

Approved by FIO Advisory Council Feb. 10, 2014

Minutes of August 1st FIO Advisory Council Meeting

Location: Florida Institute of Technology, Melbourne, Florida

Chair: Shirley Pomponi (on behalf of Wade Jeffrey)

Attending Council Members:

In person: Jennifer Cherrier, Kevin Claridge, Jackie Dixon, Sandra Gilchrist, Courtney Hackney, Bill Hogarth, Don Kent, Kumar Mahadevan, George Maul (morning only), Eric Milbrandt, Mitch Roffer, Dick Snyder, Tim Short, Quinton White.

By Phone: Mike Heithaus, Valeria Paul, Peter Ortner, Richard Stevens

Also Attending: Jyotika Virmani (FIO), Cam Ngo (FIO), Tristan Fielder (FIT), Junda Lin (FIT), Chris Coombes (FIT), Duane DeFreese (FOA), Dan McCarthy (JU)

1. Welcome to FIO Meeting and Council Introductions, and 2. Welcome to FIT

Shirley started by welcoming everyone to the Council meeting and introducing President Catanese and thanked Tristan, George and FIT for hosting the Council. The President had a short window of time, so Council Introductions were held until after he spoke.

President Catanese welcomed the Council to FIT. The Council meeting is taking place on the main campus, but FIT also has 3.5 acres on Melbourne Harbor and 4 acres in Vero Beach, site of the Vero Beach Marine Lab (VBML). VBML is on the Atlantic Ocean. He is interested in aquaculture and believes it to be the next cash crop in Florida and creating jobs is important. It is amazing how much aquaculture is going on in Europe. FIT likes to use vessels when they can. The Gulf work during the oil spill was amazing and he congratulates FIO and the Council on that. He is very supportive of cooperation and consortia. He started in coastal zone management in Hawaii and then went to Alaska. Anything he can do, he would be delighted to help out.

The Council Members and Alternates and FIO staff introduced themselves. Others in the room introduced themselves: Dr. Junda Lin - Director of Institute of Marine Research at FIT; Dr. Chris Coombes – Adjunct Faculty at FIT and former Brevard County Sea Grant extension agent. He worked with SUSIO (now FIO) in the 1960s. Dr. Duane DeFreese – VP of Science and Business Development at Aquafibre, co-chair of FOA, and appointed by the Governor to serve on the Workforce Florida Inc. Board. He appreciated the back-to-back FOA/FIO meetings (FOA Board meeting was the day before) because there is a lot of synergy.

Tristan went over logistics (email access etc.) and welcomed the Council to the FIT campus. Shirley thanked Tristan, President Catanese, George, and all those from FIT for their welcome and hospitality.

Shirley recognized Walter McCracken (former SRI Council representative) and Norine Noonan (USFSP) for their service. They have stepped off the Council and are being replaced by Tim Short (SRI) and Heather Judkins (USFSP).

3. Action Items:

a. Approval of Agenda

Shirley asked for approval of agenda. Sandra said that Agenda Item number 6 was not an Education Committee item, so a better title would be "Report from the Education Committee Chair and Summer Course Report". Shirley asked if there was a motion to approve. Courtney approved. Peter seconded. All ayes.

b. Approval of Minutes from November 2012 meeting

Shirley asked for motion to approve minutes. Courtney moved, Jennifer seconded. Courtney said they were very detailed. All ayes.

c. Approval of Annual Report for FY 2012/2013

Shirley asked for approval of the Annual Report. Jennifer noted one error on page 8: the course was 2013, not 2012. Bill said we could fix that easily. We had sent it to the Council for review but didn't get any comments back. The Council requested that Bill go through the Annual Report.

Shirley went through the steps the Annual Report will take: after Council review and approval, submit to Provost, then Board of Trustees and then Board of Governors office.

Bill said the Council needs to approve it today because the process has started to submit it. He went over the Annual Report: We try to improve the report every year. We decided to add highlights at the front, which are the first 2.5 pages. Some highlights included: We were able to initiate SUS time on Bellows this year so that has been added. We have implemented a lot of things from the review of the FIO. All the crew members got additional training last year as per the review. We started off with a real deficit in the vessels, but at end of June 2013 we were no longer in the red. FIO was overall in the positive. We finally implemented the LBR of \$1.2M. Bill thanked every member for helping us and this funding helped us start some things back up again. He thanked Jennifer and her group for going through proposals this year as well. We want to make sure we have good proposals and have as many members as possible involved. We worked with Oceanography Camp for Girls – a lot of them have ended up back in marine science. We wish we could start one for boys too! We will talk about GOMURC and KML later.

The next section of the report is admin and planning. We did adopt UNOLS safety standards. We went in with the College of Marine Science to jointly get a webmaster. Jyotika will report on outreach and marketing tools later. We have been improving the maintenance processes and records. He wanted to see a manual for every piece of equipment and a good record of when it was maintained so we aren't under maintenance for weeks during our busy season. One of our engineers resigned. We are looking to hire another one. We finished the \$10M block reports to GoMRI and those are available on our website. We will talk about Legislative initiatives later. We participated in Oceans Day. We will hear more about the summer program later. KML had about 143 users. Nancy is still with us as IPA and we are working to keep her there beyond that.

Areas for improvements include the number of days at sea. Last year we did have some cancellations and there were some concerns expressed about the captains but we are on track to improve. We have

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developed a brochure to advertise the vessels and KML facilities. We are getting great comments on vessels now. People love the Bellows. We are going to work very hard on getting the number of days up. Everyone talks about how great food is on the vessels. We are also trying to control costs on that as well, without compromising the service, so for example, SAMS won't take USF's credit card so Restaurant Depot is where we are going. We are still looking at what we should be doing on east coast. We coordinated so reduced transit days. We are going to continue to push Outreach and Education. We got a grant from Guy Harvey to transmit video from vessels to classrooms. Funding for vessel upgrades and replacement for Bellows will be discussed later.

Next year we would like to have two workshops on relevant issues. We want to go to places to have meetings regarding the Restore Act so we can listen to various viewpoints. Aquaculture was also discussed at the FOA meeting but another meeting may be on aquaculture - need to get it coordinated.

Don asked if it would be worthwhile for FIO to function as an internal (to Florida) peer-review. A lot of us are doing aquaculture in Florida and should form a subcommittee and write a white paper on the state of the art of aquaculture and present to the FIO Council for review and endorsement, and then send it to the Governor. Shirley would like a discussion on that because it's a good idea. We want to be more proactive sooner rather than later so we can have impact on decisions made this year and elections next year. Let's get through this agenda and discuss that as action of new business. Jennifer said that we should also be leaders in addressing storm water and irrigation run off as it is also important to all parts of Florida, so we should have that as a workshop as well and include that in the new business discussion.

Bill went back to going through the Annual Report. The next section is the Workplan. We need to increase the SUS subsidized days – the goal is 60. This we had 48 days, last year 35. We have a new LBR, including SUS days on the Weatherbird II, because people want to go into deeper water. The budget in the report in front of the Council was outdated – this was because we had to submit that as a draft before the end of the year and we didn't have final numbers. Cam will go over the updated budget numbers later, but overall we are \$414k in the black.

On p. 19, our organizational plan has been edited too; the smaller grouping who are with FIO but are wholly on contracts. The rest of the report is appendices which are standard that we have to attach every year. There are some member changes we need to make in one of the appendices. Overall, we feel good about this year, not happy because don't have the number of days we wanted though. Also, this is your FIO, not mine or Jyotika's or USF's. It is yours as 27 members.

That is a review of our Annual Report. This year there was a lot of hard work by Jyotika and Cam, and Rob has been doing an outstanding job, even though his mother passed away last month and his father is having issues. We have great crews on the vessels who are also working hard and working well together.

Shirley thanked Bill for the report. Regarding the Workplan, two workshops on Florida's marine resources have already been identified – aquaculture and storm run-off/pollution. She thanked the staff for making it easy to be members of FIO. As members on committees, she said the Council should take charge on what the next step is. The committees should not wait for Bill or Jyotika to remind

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committees to meet and move forward. We, as the FIO Advisory Council and committee members should contribute to FIO.

Shirley called for a motion to approve the Annual Report, reflecting date change. Jennifer and Don moved, Jackie seconded. No discussions, no objections, all approved.

4. Informational Items

a. General Update

Bill talked about the Board of Governors (BOG), FIO Board of Visitors, Facility Use, Academic Support, Admin, GOMRI Consortia, and RESTORE Act/Center of Excellence.

On June 18-20 the BOG met at USF Tampa. Shortly before this meeting, Rob and others said the FIO van needed replacing. We asked for an opportunity for FIO to broadcast back to the BOG from the Weatherbird II and to give them a short presentation. At the BOG, we had new FIO banners we put up and the van was unveiled. Larry Robinson (Provost at FAMU) really supported FIO for its work during BP at the BOG meeting. The BOG meeting was a good opportunity for us to showcase what FIO could do, the only problem was we had a storm at sea so the presentation from the Weatherbird II broke up, but we reconnected and finished it. The BOG did seem very supportive of FIO.

FIO Board of Visitors: Having a difficult time finding 5-7 people. Have 3 who have agreed: Evelyn Fields, Larry McKinney, and Dennis Nixon. Ralph and Bill decided to have a meeting in Sept/Oct with the Board of Visitors and ask these three who else they think should be involved. Shirley asked Bill if he asked the others people that the Council suggested. Bill said he had but they weren't available. These three are good to get this started.

Facilities Usage: WBII had 79 days, and users included FWRI, FSU, USF and Mercyhurst. Bellows had 108.5 days and was used by more groups but included SUS days. KML had a very good year with 123 groups. We raised our rates at KML to make them more competitive. It is now operating \$170k in the black and last year bookings included: 2561 dorm room nights, 139 boat trips, and 234 specimens were collected. Last week Bill went down there and met with a construction company to see what changes could be made to dorm rooms. We are also trying to get another multi-purpose building there. He also met with people down there. A lot of people have interests down there, Mote is there. We need to all get together and discuss what is best for the Keys, how can we work together so we can all make it. The Mayor of Key West is taking an interest in this idea - let's not duplicate everything. My opinion is FIO should provide that space to all of you. We have a post-doc coming into KML now. We want you to recognize that this is your KML and you can use it. Maybe make a Keys Marine Consortium. Kumar has talked to me for years about collaboration.

Shirley said one of the FIO Workplan items was to enhance the KML infrastructure. The corollary to that is to explore options for member use/action/integration. Is there some opportunity to partner up with Mote.

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Bill said that Nancy has been working with FAU/HBOI. FIU has interest there. We are upgrading the saltwater system down there and it is no secret that Gil and I have been talking about KML becoming FIO, not state.

Kumar said that part of the problem is the perception. It almost seems that FIO had a facility that is directly competing with other facilities that are doing the same thing. Michael's {Crosby} point is that FIO should be in the business of promoting all of the facilities that we have, like you have done on boats on the webpage. It doesn't seem to happen on paper or the webpage. We have a big presence in the Keys George Nugent is on the Mote advisory board. At times it seems like we are working at cross-purpose – it's a perception more than anything else. It can be changed if material that FIO puts out promotes others as well. I know FIU just took over the Aquarius facility. They also have a marine presence. NOAA has a marine presence. Broader than just FIO has facilities and we are putting money in there, but this doesn't solve the problem of field facilities. In the bigger picture, if we have a vision of FIO being a really good partnership of marine consortiums, we need to look at all the marine facilities and pull it all together and avoid competition. Then I think NSF and others would be happier to support Florida. FIO is viewed more as a competitor for other partners than as someone who is pulling everything together. I know you are trying very hard not to do that, but it is a perception. When you talk about aquaculture I'll bring this up again. Don's point is very good regarding the white paper. I don't know if there is solution for this misperception yet.

Bill said that he thought there was. First time we had a larger meeting was last week. We need to work on what is best for the Keys. Not everyone can have a marine lab down there. If we develop a course, we can lean on our expertise. For example, Dick Dodge has a coral reef center so they should be consulted.

Mike H. (on the phone) said I think that when you think about the Keys, you need to think about Keys and not what is best for the people who want to work in the Keys. The kinds of things that FIU is trying to do down there is complementary to what FIO is doing. FIU has facilities for permanent research. We have been discussing with people in the Keys as well. Kumar is spot on because there are other things that are challenging about the Keys because it is a big place. Another thing we have to recognize is that some private groups want to make money out of scientists visiting down there. Mote, KML and FIU have a different interest.

Courtney said that the experience this summer in terms of class showed that everything we wanted to do we could do from KML or from Mote facilities. The two of them represent 90% of what we need for students. Both labs were very accommodating. The hardest part was paperwork and coordinating. That will be bigger challenge rather than a competition between the two. He can't see needing another lab down there unless it's to accommodate more people. The hospitality at both places was great. Everything worked really well in terms of the staffing. Paperwork was the problem. Some centralized contact at each lab would have been helpful. Took a large time to get that all set up.

Shirley said that the membership needs to be aware of all member facilities.

Mike H. said that everything at Aquarius was as a specialized research and education tool.

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Jackie said that several of the vacations we take lately we find that there's a bed and breakfast central website for this region. You can call one number or go online and you can get rates, availability. This can be on the website: Here are the member institution assets. Though this website if you want to run a class you can go here and find what you need. We should be sending this to every biology dept. east of Mississippi.

Jyotika said we have a list of addresses of those places. Chris Sharp spent about a week getting a list of all of those. Also, on the FIO website we have a list of all the vessels around Florida and beyond and want to expand that for all member facilities. Shirley said we want to market and expand for all FIO members.

Kumar said that the rub really comes when you go for resources. What ideally from a vision we'd like to see in the Keys is those Florida institutions come under an umbrella, under one LBR from FIO. One question legislators ask is if we are giving money to FIO to support KML, why should we give Mote money to do work there because Mote is a FIO member. They should get money from FIO.

Bill said the only thing that FIO spends money on at KML is for Lisa's salary. The rest is operated by the state of Florida. That's why Gil and Bill have been talking. There is a question on whether KML is a FIO asset. Nancy is there for free. Lisa is on our E&G. The rest of the operations are funded by contracts and revenue.

Shirley said that as you put together the LBR for this year, it goes in as a consortium LBR so it's clearly identified as a consortium LBR. X amount for KML, Y for Tropical Research Lab and so on. I would challenge the membership to step up to the plate to work with Bill and FIO staff to put together the LBR. Bill will talk about that in a few minutes. There are some other things that we might want to do to enhance that LBR. We could be part of the group that is going to advocate in Tallahassee. The LBR should include FIO assets in the narrow sense and broader sense.

Bill continued to discuss the general update with Academic Support. SUS-subsidized days: 10 member institutions received days for FY 12/13. There will be an increase in number of days for this year to 45-48. We will make sure you get this year's RFP as well. It costs members 10%/day. We want to get it to 60 days eventually. Jennifer and her group do a good job. Jennifer said they do get a lot of good proposals. We do try to make sure all institutions are awarded days, even if it is scaled down number of days. It is a challenge to make sure that everyone is getting funded. Sandra said that under academic support, you should also include the number of days you broadcast from the ship and where.

Bill continued with a discussion on the pilot summer course – Field Studies. He thanked Courtney for getting this off the ground. I was at USFSP and I went to talk to the students. They were very enthused about the course. They said FGCU really make you work hard. We want to thank everyone for working on this course - it was fantastic. The students thought it was great. Nothing negative in the course reviews.

Bill talked about the Teacher at Sea. We are mostly working with CIMAGE on this. This program is very costly and not working as well as we like. We went to Guy Harvey because he has to spend some of the

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money on outreach and education. One teacher was being asked questions up to 6 weeks after the teacher went to sea. I have been working with USF Tampa to see if we can use their satellite broadcast to see if we can do it cheaper and better. Let us know if you want to broadcast from sea – let us know and we can make it happen.

Bill talked about Administration. The organizational chart is part of our annual report. Everything is basically the same as you see in the report. The deckhand has been approved. The Engineer search is ongoing. We have changed captains on both vessels. Everything is working very well. We changed the wiring for mono-filament for long-lining because a lot of fish work is going on. We plan to put an osmosis system on board if we get the LBR so we can stay out for longer. Jennifer said that FIO is doing a fabulous job with ship ops. I would like to offer shop ops committee services to help facilitate needs of the vessels instead of just reviewing proposals. Dick asked where does FIO advertise for Crew positions. Cam replied with UNOLS, various listserv that Tampa HR has and other HR institutions. Dick asked if we could send the job ads to members. Jyotika said we usually do. It hadn't gone out this time because she was out of the country and had just returned and it was still in her inbox. She usually sends it to the FIO general listserv and posts on FB. Dick said a lot of entry level jobs are hard to find – like deckhands, we can advertise in local areas. Bill said that we had adopted UNOLS safety standards as per the review. We changed Captains. Tom left in a very good frame of mind. He did a lot before he left. Part of that review led to professional development opportunities for training and 8/10 crew members took advantage of it. It was recommended from review. Third item that was recommended was also implemented – when the vessels are out for extended time, they should have leave. President Genshaft was fully supportive of this. We were notified last night from our attorney that we are going to initiate that for them in August. An administrative policy has been drafted for ship crews. Have to be gone at least 7 days then you get a day off. You can't get paid for them, but do get it off. Peter Ortner said he had been a big proponent of UNOLS safety standards. One of the things Randy did that UNOLS appreciated was that he came to the UNOLS meeting so we had a good mechanism in place so the latest and greatest was being fed into FIO. Hope you designate someone to continue this. Bill said we will. I'll talk to you and we'll get that done.

Bill continued with his presentation. KML: as of Sept. 1, we will be hiring post-doc (Lew Grammer) from U. Miami. I want to thank everyone for all final BP block grant reports - 27 PIs, \$10M block grant. All final reports are in and are available on the FIO website. Jennifer asked if the data will be shared with GOMRI as well. Not all the data made it into there as we would like. Is there a mechanism to alter that? Bill said yes, there is a data process.

Bill continued. Yesterday we met with FOA. We have been working with them because they do some great things, like assessing the Economic value. We found some money in our overhead to help with the report. Jyotika, I told the FOA that you did a one-pager of information that we use that we should send to FOA. I think the FOA economic analysis report is really outstanding. Another one on oceans and jobs that is also outstanding. These can be found on the FOA website. Jyotika said that the big unknown is what is the value of marine education and research in Florida. We want to get jobs and dollars. Something I will try and work on because it will be good to add to the report. It will need input from all of you and I will get in touch.

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Bill said the Guy Harvey symposium was on Sept. 14-15, 2012. It went very well. Guy came to FIO, looked at vessels, and gave \$60K for satellite transmission. He is also giving us some support to look for lionfish. We would like another symposium on 12 and 13th of this year (in Sept.). I have been at the NOAA fisheries management conference in May for 7 years...same people, same issues. There is a lot of controversy on the Magnuson Act. Industry feels like there is another way of collecting data for these. Mitch said some of these vessels are sophisticated.

Bill said that Jyotika was invited to attend the IOOS summit. Jyotika and Mitch gave a brief overview of the IOOS summit and key outcomes. Peter said that he agreed with the summary. What was claimed to as accomplishments was not all done by the IOOS office, it was part of GOOS, it was part of IOOS as a broader group (not only NOAA). They were including them all under the IOOS banner.

Bill gave a quick overview of the 13/14 FIO goals: Advocate for LBR – increase SUS days. Continue support for summer course. Jennifer said that as a representative from the northern coast (and for Felicia and Wade), we would like the northern coast to be represented in the summer course next year. Courtney said we would talk about that later.

Shirley said there are other consortia within state of Florida – three Cooperative Institutes – more than any other in nation. It can be of mutual benefit to all of us. We need to talk about broadcasting ship-to-shore to public entities. In CIs, talking about ship-to-shore satellite communications, which are very expensive so the extent to which we can talk about that across the state would be good. Peter said that the UNOLS techie group is getting funding to look at pilot efforts. They are looking at revisiting satellite communications at higher bandwidths. Jennifer said we also have CI at FAMU.

Bill went over the GoMRI timeline: Nov 15, 2013 RFP for consortia will be released. Jan 15, pre-proposal deadline. Jan 16 -Mar 14 – review and feedback. June 2 full proposal deadline. Nov 14 award announcement. Jan 1, 2015 award start date.

Bill discussed the RESTORE Act and went over the different pots of funding. Treasury Regulations are not out, not sure when they are out. Those who have seen them in the Gulf from what I hear are irritated. They are already overdue. He showed a chart that NOAA shows of all the component pieces of RESTORE. This shows so many people involved and want money. We have tried to work with all of them to keep lines of communication open. Bill talked about GOMURC and the ocean observing for the Gulf. Jyotika has been leading this exercise. Trying to get observing people together to get something that everyone can sign off on. Difficult order, but would like to get signatures from all five states and environmental groups and submit to portal for restoration. A second GOMURC effort is one on the ecosystem. Larry McKinney is the current Chair.

Kevin said that across the 5 state projects are good for bucket 2 (Restore Council). Over past 6-7 months, they have been soliciting projects from everyone. FDEP is a clearinghouse and they have ~\$15bn of proposed projects. These projects would be applicable across all sources of funding. FL will get \$350m over the next 5 years. NFWS encouraged at looking for 5-state projects. We have been soliciting and organizing these projects. Working with County Consortium. This is all very complex and there are a lot of moving parts. Funding is on the near-horizon. We are getting to the point of a plan being done, and a

strategy being outlined. Dick Snyder asked if any of this money was going to be allowed into endowments. Kevin said that was not clear. Shirley said she knew there was a lot of discussion on hill on this. Kevin said that the Restore Council is still trying to work this one out. Dick asked if the Treasury rules would stipulate that. Kevin said we are still waiting for those. Mitch asked how does one see the DEP announcements on projects. Kevin said go to FDEP website and look through there. There is a RESTORE button which takes you to forms and spreadsheets. Also an NFWF link there. Jennifer said she had been talking to Lee Edmisten about this. From what I can tell, there is money being set aside for non-oil related storm water irrigation/runoff. Is that the County bucket? Kevin said it could be. I could find out for you. I would be happy to assist in the efforts. One of big challenges is to tie it all together – lot of players and money. Bill said that it was probably the county level. Mitch asked if this was set in stone or could any of the pots be moved? Bill said that the distribution of the funds was in the law. The problem with the regulations is Florida's sunshine laws so they can't review the regulations. AL and MS are not happy with the drafts they have seen. Jackie said to make sure all those pots of money are not being wasted, the metrics need to be very clear, we need to know how can they work together, how can the sum be greater than the parts, and what is the needle for the health of the gulf we are trying to move and how can that be measured and validated. Will some of that be used for observation and monitoring? Make sure that the science is incorporated into those pots of money. Dick said this needs to be true, especially at the county level. The Panhandle counties are getting 35% of this money, and they will need objective review and assessment. If there is a mechanism for FIO to put itself out there as an expert clearing house that would be good. The tricky part is that some of us are involved in submitting and reviewing so we can't have a conflict of interest. There is a critical need for help. Jackie said: so you (from the Panhandle) could evaluate projects in SW FL, whereas we could be called on to evaluate panhandle projects. Bill said he met with Vice-Chair on County Commissioners Consortium. She wants me to meet with entire Council on 22nd.

Don asked if anyone understand the geographic distribution of the funding. Jyotika explained pots 1 and 3. Don asked about NFWF? Is that the same? Kevin said no, not part of RESTORE. Geographically the projects are decided by NFWF through the state. He really wanted to come to this FIO meeting to listen to everyone. Putting yourself in my spot, if you guys have the number one or two big things to take back to make sure it is included in these projects, catch me on the side or drop me an email and I'll add them to the mix. Bill said he met with Kevin and Mimi and Gil. They are working extremely hard and they are listening.

Peter O. added a final note regarding politics: there is a major issue between the House and Senate with regard to NOAA, where the House has NOAA out of the climate business and gives it all to weather, and the Senate has money related to climate. That is something that will play itself out over the next few months.

b. Budget Update

Shirley said Cam is going to give us a budget update. Financial summary in annual report begins on p. 15, although it is a bit outdated now. Cam will update us.

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Cam gave a presentation on the budget. At the end of June 30, across all of its resources, FIO was about \$413k in the black. WBII ended \$925 in the black. Bellows ended \$106k in the black. KML ended \$175 in the black. E&G ended \$129k in the black. We started the year at: WBII (\$629k), Bellows (\$283k), KML was \$108k in black, E&G \$2M in black. We are more efficient in running the vessels, for example, we are going to Restaurant Depot for some food items.

Jackie said that the expectation was the FIO would be in the black next year, so you have exceeded expectations. Bill said yes we have. Cam is working hard to keep us in the black. Both of those cooks clip coupons, plan meals out with coupons. Captains and everyone working hard to keep costs low.

Cam continued with her presentation. Jyotika manages 12 active grants – about \$3.3 M. We have \$450k in USF Research Foundation and USF Foundation. We also have grants from the Walton Family Foundation, Harte Institute, Guy Harvey Ocean Foundation for GOMURC. Vessels to broadcast can be \$5k per month for both vessels. Anyone who wants to take advantage of that, contact Rob and he can get it turned back on.

Shirley asked what type of grants did Jyotika manage. Jyotika replied they proposals that were awarded e.g. from the Centers for shiptime, NOAA and others to support people at FIO on contracts etc.

Cam said that in total, FIO has about \$3.7M in grants and foundation funds.

c. Outreach: Brochure, Website, Newsletter, Social Media

Jyotika went over communications and marketing. Showcased the new brochure, social media outlets, went over FB and twitter stats, the banners, the van etc. A lot was done this year and couldn't have been done without Chris and the new webmaster, Jay. She went over the website during lunch, showcasing all the features and pages, what it has been added to the website etc. It is now more user-friendly and more broadly focused so it better meets the needs of the entire FIO community.

d. Dashboard

Jyotika went over the FIO Dashboard which is on the FIO website. This was extracted in part from the document that Jyotika was working on (Use of FIO). The dashboard has still to be fully populated with all the data from the past few years, but Chris was going through the logs and extracting information like number of students, faculty use of vessels etc. It is a long process that requires time, but we have made a start here.

e. Legislative Initiatives: Legislative Budget Request (FY 14/15)

Bill said we operate on a shoestring and we don't provide everything we could for the members. We are looking for \$500k for recurring funds. \$300k for 30 WBII SUS days. Increasing the overall SUS days. Asking for money for the summer course: Universities who participated would get \$15-20k and \$40k for off-shore course portion. We are asking for some non-recurring funds – upgrade cranes, emergency systems, facility needs in KML. We know what we want to do on vessels. The dorms are in terrible shape. On WBII, the fish camera got stuck and it costs \$20k to rent a mini ROV. WBII may need a small ROV – we want to get people's opinion on whether we need those. It's \$100k to buy one. Shirley said that's a situation where members have those assets that are underutilized. They don't have the funding

to keep them in operations for the entire year. These are assets already available. We should share resources that are available. \$100k would buy one, but then you need staff and maintenance costs.

Bill said there is also a Capital Improvement Project request for the replacement of the Bellows. It is 47 years old. In shipyard this year, it will need new plates. We rebuilt engines, they can't be rebuilt again. It has about 3-5 years left. It is a boat for coastal work. Price estimate \$2.85M. People like the Bellows. We will replace it with a very similar vessel. Whether we get this from legislature will be interesting. If this seems like it will get through the first step, we will talk to you all about whether it would be good for you and what you would like to see. Need new hydraulics etc. Provosts will have a chance to see this first. This has been submitted to USF and their BOT. Shirley proposed an Executive Committee meeting to talk about this before it gets too far along in the process so we can get more input to this. Thinking about east coast needs as well. Need for shallow water boat. Can the process for acquisition of this also help other new boats e.g. FSU. Do we want to buy someone's new boat or do we want a new vessel. We talked earlier about how we integrate this. LBR include facilities needs in the Keys as well. Leverage this with other LBRs in the process. Bill said very little of this LBR is for KML. Dick asked if there had been any consideration of subsidizing SUS-type days at the Keys. Jennifer said we get very few requests for it but people don't usually request it. Even though the RFP says that you can put vessel time at Keys. Dick said it could be subsidized days to go to Mote and other places. Shirley said that would be a new and innovative model to develop.

Bill said Cam worked hard on getting the LBR into USF. Shirley asked if it go separately or with USF's request. Bill said that the other provosts have to agree so I think it goes separately. Courtney said last year he met with his Provost and President and explained why it was important to them. They made it known to our lobbyist. If everyone did that and all Provosts said this was a priority then it would have more weight and carry on. Jennifer said once this is finalized, can we get this LBR slide? Bill said once I hear back from the Provost, I can send it.

5. Lunch

6. FIO Education Committee Update – Summer Course Report

Courtney thanked everyone who was involved. Most of the issues were not with the students or faculty, but with the institutions in doing anything that was not normal. The KML was the easiest to work with. Initially envisioned 80 students that we could accommodate (20 because that was the number on the Bellows plus 1 faculty). 4 universities participated. UNF, USFSP, FGCU, FAU. Although we are all part of the State University System, we each had our own rules to follow. FAU sponsored KML. Universities had students that registered for their courses. Instead of four cohorts, we had one cohort made up from three universities. Most were from UNF. Several students thought it was interesting to learn from students from other universities and the course gave them broader insight on grad studies in other places. There was a debate on transportation. Students wanted to take their own vehicles. After the first couple of weeks, more students traveled together. A senior grad student traveled with the class. It was necessary! We used her as the person in charge of everything from making sure they cleaned the dorm room, to first aid for students for stubbed toes. Whoever the student was with, they need to have good

experience in field situations e.g. how to live in dorm, cooking their own meals. That was a real bonding experience. Team building is something we would incorporate in first week. Idea was all four cohorts would have same background in first week. It was too fast for students to absorb it all so we also had team work in the first week – canoeing for example. We were concerned about the students in evenings but it turned out they were so tired they couldn't stay awake. Having a few upper level students was a benefit. They all learned a lot from each other. Students loved the class. Even when they couldn't keep their eyes open, they loved it. One facet was a number of students come up to me at the end and told me that they never would have thought about doing e.g. coral reefs, but the personal contact they had from getting to know a faculty member personally helped them to figure out their future. The conversation between the grad student and students also helped. They came out of this with some idea of what they could do beyond what they usually get access to. We had set up a blog site and I got an email from the BoG in the first week so we know they were following. Kelly Smith checked every morning what students had put up. We told them that people were going to be looking at their blog. There wasn't a site they didn't enjoy. They even got to experience a Tropical Storm. One person who wanted to be an oceanographer realized she got seasick and would work closer to shore.

It wasn't the parts we were worried about that caused problems. It was the logistics. It was an act of the President to get dorm space for a week. Same thing in organizing meals. I went and stood in the cafeteria to make sure lunches got made. Universities are not set up to accommodate outside the norm. A cohort of 20 is too big – even students thought so. 16 would be ok. Week 5 was estuaries. Each week had themes. Most of us don't remember what it was like the first time we went into the field so it was great to see this through the students' eyes. We had a 28 hour study in the marsh. For the ones that were awake they got to see an amazing thing – a mass migration of shrimp and a mass feeding. The water just boiled. That was at 1.30am and the students just stood there and didn't know what to say. Students had a really great time. A grad student with the class is imperative. She has a BSc in Science Education. Female grad student is probably best because of issues that come up and most students are women anyway.

We probably need to look at how we did reading assignments. Next time we would not use the text. Have reading assignments on Friday for the next week, instead of doing it all in one week. We did have some on certain days. One complaint was at FGCU we had 5 faculty, and each had full day of activities and then gave a full set of reading in the evenings. The students found this a bit much. They had an exam every Friday. Lots of group discussions. Interactions were valuable.

Biggest thing we need to do this coming year is to realize how long it takes to get this off the ground, even with what we know, and to get started on planning for next year. For example, it took 8 months to get an account established for students' money for meals. The idea is for students to have this as part of the plan before the Fall semester. It is more important to get to faculty and advisors, not just the students. A student from UF said he wished he had access to this class... he did, he just wasn't told. University curricula have to have this course in it so they can use it for bright futures scholarships. Have to work with advisors to show how it fits their program. In ours it was in a biology elective. All of it needs to be explained to students because they are oblivious. Ideally we would like to get it to everyone by October.

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Shirley asked how it was marketed? Courtney said we sent out the notices and fliers by email, FIO sent it out to their entire mailing list, and I also saw it on various society websites – presumably through FIO. Shirley asked how it was listed on university course curricula? Courtney said it was listed as a summer class. Shirley said that only four universities were involved in teaching, so it was not in the UF curricula because it was not offered by UF. However students from UF could take it, but if they didn't see the ad, they wouldn't know it would be an option for them. Jennifer said we discussed this on the organizing call. Ideally this would be a state-wide course. This was also suggested by Richard (on the phone).

Courtney said an example of how to do it this year. I only had 2 students from UNF signed up close to deadline, despite the fliers everywhere so I went to each class and talked to them. Students don't look at emails or read emails. At that time I didn't have photos and student testimonials. This time I won't have to do this because 8 students have started to spread the word at UNF. A number of students had no concept on how intensive the class was. They were surprised to be on the boat by 8 and not ending until 9. So I will pledge I will come to your university and talk to you and your students if you want me to. Even at FAU, Denis (Hanisak) said we need to get more of our students in this class. We can still do all the advertising but I believe word of mouth will also drive this going forward.

Jackie said there were a couple of issues at USF: credits were offered through USFSP so USF Tampa didn't want to advertise. Second issue, CMS doesn't have a summer teaching budget. I couldn't pay for a grad student. It costs a lot of money to do these things right. If the FIO LBR can get funds for it, that would be great. But the funding is a balancing act that needs to be finalized. Courtney agreed that this wasn't a cheap course. A lot of faculty volunteered their time. Now Bill has funds in proposed the budget so that will help if they come through. Jennifer said that was one of our issues as well. We were trying to think how we would fund the teaching. We also had concerns about the liability issues about students driving themselves. But I think this is so cool! Do you think you will try and have 4 cohorts from different institutions next year? Courtney said that in an ideal world we would have four cohorts. Because only 4 universities were involved in running the course, I thought we would get students from other universities as well. One of the students wanted to take it at FAU, so if FAU had a cohort, they would be there. Jennifer said for our students at FAMU, it is cost prohibitive. Maybe that is also the case at UWF. Not all in same socio-economic tax break. Maybe it would be good for some of the LBR to be for scholarships for students who would not be able to afford it. We definitely want in next year, but just couldn't pull it together. Courtney said all those concerns are still with us. The liability issue is with every lab. Lab starts in a field site. The cost issue is always going to be there. This is a study abroad for all practical purposes. With my foundation support funding, I gave scholarships. If you give them money directly, it cuts back on their bright futures funding and goes to universities. I gave it towards their accommodation, so instead of paying full board, it was much less. It was about \$1800.

Shirley asked whether Courtney had been invited to make presentation to CAVP and BOG. Can we push that interactively? Keeping it a general presentation with overall barriers but present a real success story on the part of one of their AISO's to show how we are trying to take advantage of the expertise and resources collectively. This would also bring it to the attention of Provosts in other universities. Bill said the FIO Annual Report presentation to the CAVP and BOG would be a good time. It is in the fall. Courtney said he would be happy to present. There are all sorts of opportunities to do something like

this, e.g. Winter course, teacher course. I thought I'd have to beg faculty, but they were willing to help. It was the administrations that were the hurdle. Jennifer said that at least UNF wanted to do this. I had difficulty with FAMU, I'm sure it was the same for FSU and UWF. Shirley said this is a really good thing to build upon to utilize our resources, and other unique out of the box ideas. This was a good model to start with and I hope it will continue. I have heard nothing but positive feedback from it. We have opportunities to share this as a success story and this is something different for our organization of FIO. This is beyond just ships and marine labs. This is how FIO should be as a Consortium. Bill said it was easy for him to support this as he was chancellor of USFSP at the time. But it was obvious to put it into the LBR for the future.

Sandy said we might consider recruiting science teachers. There is now stem money from the legislators to do that. We could have a cohort of science teachers. Courtney agreed that there were a lot of initiatives that could do that. He had thought about a separate course for teachers for the summer. We couldn't get them at this time (May) because they were still in class. Maybe we could run that in July for those who need extra credit or want to learn more. There are probably five ideas that would not only fly but that would have education tied to FIO facilities. We have proved the concept so hoping to get more money through FIO for students. Shirley said it would be good to follow up with other education initiatives, prioritize them and move them forward with the entire Education Committee. Dick said they have a bioscopes program which has science teachers and they do field trips with them. Bill said also the GoMRI Consortia have outreach programs. The only thing FIO can do is issue certificates of Course completion.

Courtney said that if it is the Council's wish we proceed with this, and I gather it is, I'm going to start on putting the next year course together. We want something in the panhandle as well. Jennifer asked if that was doable given the distance. Courtney said some of the students had no problem driving around in between weeks.

Bill said that the USF PR people went down to the Keys and made a video of the students taking the course. The USF BOT came over to USFSP and we were broadcasting from WBII to them and the class was on board. They were very supportive and asked a lot of questions so USF BOT have seen the Course in action.

Jyotika said that from an FIO perspective, we want to keep track of the students that take this course. Where do they go? Do they go on to grad school? Do they work in STEM fields? Etc. Usually these things are put together after a few years, but we have an opportunity to build that database from the beginning. We also want them to stay in touch and form an 'alumni' group. We would need the emails of all the students. We could set up a listserv for them. Courtney said that the students were already going to stay in touch with each other and that and were meeting up over the next weekend.

7. USCG/FIO MOU Update

Jyotika gave an update on Area Committee meetings and how many they had. She is now on the mailing list for all the USCG Area Committees and has been trying to connect them with their local FIO member institutions. When she receives a notice, she contacts all the local FIO Council members and asks if

anyone from their institution would be able to attend on behalf of the FIO Consortium. Recently there was one in Jacksonville and one in Cape Canaveral. Quint went to the one in Jacksonville and Jyotika gave him a powerpoint to present, to which he added information about what Jacksonville University was doing. Someone from HSWRI went to the Area Committee meeting in Cape Canaveral. The response both from the USCG and AC meeting attendees as well as those who go from the FIO community has been great. The Area Committee meetings are not just USCG, but a meeting of ALL local emergency management entities so Jyotika encouraged the Council to get involved. The idea is to build the local connections before there is an emergency instead of during or after. Another example, Jyotika went to two in Tampa. In the first one she gave an overview of the FIO/USCG MOU and in the second one she gave an overview of the sort of science going on around Florida. The Area Committee meeting said they would like to hear more about the satellite ability to detect oil, so she will get in touch with Dr. Hu at USF CMS and see if he could present at the next one. Quint gave an update on his experience with the Area Committee in Jacksonville. He said they were not academic so it was a very different group, but he had a great experience and he got to talk to the local USCG Commander, who he had been trying to meet anyway. He would be happy to do it again. Bill talked about the hard time we had after the oil spill. The MOU is very good and it makes the connections before something happens. We are supposed to be the oceanographic expertise in Florida so it is to our advantage to do this. We will be facing an oil spill or another disaster eventually.

Don asked if FIO was making a list of the number of times the FIO personnel does a service in the name of the entire state and a list of these interactions with other agencies. That is part of what FIO does and it shows another aspect of having FIO. Bill said that we didn't, but it is a good idea. Shirley said we should add that into the annual report.

8. Gulf of Mexico Alliance

Jyotika talked about how GOMA had moved to FIO and the MOU that FIO had with FDEP. The issue was that FDEP was not in a position to continue to have an external program like GOMA on their books, so they asked FIO if we could house the program so it would not get chopped. We agreed, with the caveat that we had nothing in the budget for this so it would have to be supported from elsewhere. FIO already had a couple of grants for Steve's salary so it was really a question of housing the program. Kevin said that it would be good to have the South Atlantic Alliance in FIO as well. Bill said he would be happy to talk about it. Shirley asked how would FIO as a consortium get more involved in GOMA and SAA. Jyotika said that so far it was just administrative, but that is something we could work on. Kevin said this was a chance for creative thinking. Shirley said that maybe at our next meeting we would invite Steve and Becky to talk about GOMA and SAA – the vision, mission and how we can contribute. Kevin said that was a great idea.

9. Updates on Initiative of Interest to Florida:

a. Gulf of Mexico University Research Collaborative

Bill discussed GOMURC. Andy Shepard is on payroll. It is housed at FIO, run through FIO and USF. GOMURC got started because USF gave the initial money and because we felt strongly that the gulf

needs to be coordinated. Historically, the Gulf never got its fair share of funding – I can say that coming from feds. After the initial USF funding for GOMURC, we got funding from the Harte Institute and the Walton Foundation to keep it operating. GOMURC runs monthly calls with NOAA, NFWF and others to coordinate the science activities in the Gulf. Two items that everyone recognizes is needed is a Gulf Observing System that we all buy into and the other one is ecosystem monitoring. Do we have the baseline data that we really need? We don't have the data we need on blue water and large pelagics. Those are the types of things we talk about. Recently we talked about aquaculture. We talked to National Academy who have \$500M to spend over 30 years. There needs to be a coordinated effort on these things. Hoping that through FIO and GOMURC we have a lot of expertise and we need to do a white paper and put all of this together. Next chair after Larry McKinney will be Monty Graham, who takes over in September. The idea of GOMURC was to get everyone together to push for things that we thought would be needed across Gulf. Sept. 9th we have a meeting with the Gulf delegation in DC. On the 10th we have an all-day meeting with the academy. GOMURC is operated by one person right now – Andy Shepard. He's a workaholic. It's a good organization.

b. Florida Oceans Alliance

Bill said that the Florida Ocean Alliance had a meeting yesterday at FIT and FIO has a lot in common. Bill sits on the FOA Board. He invited Duane, co-Chair of FOA, to participate in the FIO Council meeting and talk about the FOA meeting.

Duane said that the FOA was in a period of introspection. We have had a decade of 6-7 documents that we developed looking at marine spatial planning, ocean economics, ocean jobs in Florida etc. What we haven't done well is we give this to legislators in Oceans Day and then we move onto next year. In the next three weeks, we are going to repackage our message that looks at economic risks and opportunities (nutrients, HABs, aquaculture etc. – i.e. asset issues for Florida). FLCOOS and MSP become the tools to move policy and understanding forward. We are going to brief the congressional delegation as broadly as we can, Florida legislators, and go county to county to brief local govt. We'll look to you for information and help and where we can help you best. We can do things in the lobbying world where you may not have access. I see a closer relationship and a more pro-active organization this next year. It would be nice to have at least one back-to-back FOA/FIO meetings every year.

c. Southern Association of Marine Labs/National Association of Marine Labs

Shirley spoke about NAML and SAML and encouraged all Council members to consider membership into these organizations. In NAML where we get good advocacy on the Hill. The Oldaker Group do a lot of advocacy on behalf of marine labs and science and education, the observing network, creating jobs etc. Part of lobbying that went on through NAML played heavily on NSF's budgeting of the FSMLs program. I think we have made a strong impact through advocacy efforts. We have monthly public policy meetings. Jo-Ann Leong is President and her term ends this year. Nancy Rabalais will be the next President and is responsible for public policy meetings. Usually our annual meeting is in March in DC and we have congressional staffers come to us. Dave Conovor comes and talks to us every year. This year he talked to us about new programs, challenges he's been facing, and the national decadal survey they will be undertaking. David is interested in having ocean sciences community better prioritized for future – infrastructure funding versus other funding. That's going to be a really important thing for us to keep

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track of. As an organization, FIO may want to provide input. Biannual meeting for NAML is in Oct 27-29 in Hawaii. The next annual meeting will be next March 3-4 (2014) in DC.

The SAML Annual meeting this year was hosted in May by Quint White in Jacksonville University. SAML is concerned about how we communicate within ourselves and how we represent ourselves. Building a better website has been a high priority – Lou Burnett will take over as President in January. He and Nancy are taking over developing a website. I will send them to take them to look at the new FIO website as well. We had elections in SAML and Aswani Volety will be the new President-Elect for SAML. He will serve two years as president elect, two years as president, and two years as past president. Sandy Gilchrist was also elected onto Board. The next SAML meeting next May in the Keys.

Jyotika spoke about the next SAML meeting in May in the Keys. It was discussed at the last SAML meeting and will be hosted by FIO, FWC, and Mote. We haven't really started working on planning, but we will be looking at dates and have those pinpointed before the October NAML meeting. Michael H. said that FIU has a presence in the Keys and would also like to participate.

10. Next FIO Council Meeting

Jyotika said that the next meeting would be the winter meeting. One suggestion was to have this in Pensacola as Wade is the Chair. Dick said having a meeting at UWF is fine with that but it's a long way for people to travel. Bill said he would like to see it there with a back-to-back public listening meeting. Council thought this was ok. Jyotika will follow up with Wade and Dick on this.

11. New Business

Shirley went over the action items from the meeting before opening the floor for new business. One action item was the Annual report – Workplan. What role can our committees can play in implementing those activities and in FIO in general. We should have an Executive Committee call to follow up.

Shirley talked about action items on the two workshops. Don had suggested a workshop on aquaculture in Florida and what we can do as an integrated group. Don said he was thinking of pulling together a synopsis on what is going on in the state – recirculation, new species, range of aquaculture. There are 4 different members of FIO that he could think off of the top of his head, in addition to FWC and DACS folks. They could easily come up with an outline for a white paper. Shirley asked Don if he would you be willing to spearhead that. Don said he would. It's a report that FIO can use and circulate. Bill said that the State (DACs) is looking for someone to pull this together and it's could be one of our services to the state. Kevin said that a lot of new things are being proposed for aquatic preserves.

Richard said one action item would be to get a report out to the Academic Student Affairs Committee in the Sept meeting about the summer course. But if anyone is following the news, one aspect of sturgeon farms are their environment impact. Don said that a recent study is a synopsis from NAS that isn't out yet, but looks at impacts of aquaculture. Duane said that we shouldn't overlook microalgae. It is interesting that you have aquaculture and bioenergy under one roof. Don't overlook that segment as it relates. Don said there was a huge interest in biofuels because of fracking etc. That is part of the

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upstream economic value of aquaculture. Not sure it can all be in one white paper, but it can be touched upon.

Quint asked if the Council would be polled for participation because we have faculty who may be interested in helping to develop this white paper. Bill said he would send out an email tomorrow asking for people.

Shirley said that the other topic for a workshop/white paper is storm water runoff. Jennifer wanted to know if other people in room had an interest in this. Quint said that again, this should be sent out to the Council and we can find faculty in our institutions. Jennifer said she didn't mind being the point of contact. Eric said we are experiencing big impacts from Lake Okeechobee as is the Indian River Lagoon, so it would be good to talk about what the needs are. Jackie said this topic gets into the observing plan and what are the metrics important to measure.

Another action item was for the Council to send Jyotika numbers on faculty etc. Courtney asked if we could do something we talked about before and get faculty lists on FIO website. Jyotika said she would need help from the Council to get that in place but it should be possible. The website is now versatile enough to accommodate that.

An action item for FIO was to talk to Peter about ship-to-shore communications and FIO attendance at UNOLS meetings. Bill said that Peter was going to send info about the UNOLS meetings to him.

Shirley said that the Council should send Kevin ideas for proposals for the RESTORE Act or submit them through the FDEP portal.

Bill was going to send the LBR to the Council so they can talk to our CAVPs and Provosts.

FIO may invite Steve and Becky to next meeting to talk about the Governors Alliances.

Shirley then opened the floor for new business.

Bill said we have been working with Blue Ocean. They have had a film festival in Monterey every year. We think they will be moving that to St. Pete and have a festival there in November 2014. We need participation from the Council for that as we would also have a science festival. Bus-loads of students come in for science festival. This would be a week of science – it would be great for Florida and science. We will be calling all of you to help. The Head Quarters will be the Hilton and Vinoy in St. Pete, the Mahaffey, USFSP Ballroom, Dali Museum. SRI is also involved.

Dick asked regarding the GoMRI Research Consortia data base, is the hydrographic data being collected on the vessels automatically being fed into that? Jyotika said no, not yet. She is meeting with the GoMRI data manager for Florida and connect him with the FIO vessels.

There was no new business so Shirley thanked those on the phone and also thanked FIT for hosting this. She thanked the FIO staff for their work.

Shirley called for motion to adjourn, Courtney adjourned, Jackie seconded.