

MBCORC Meeting
Wednesday, October 23, 2002
1-4 p.m.

Attendees: Marcia McNutt, MBARI; Geoff Wheat, NURP; Bill Douros, MBNMS; Mike Shulters, USGS; Greg Cailliet, MLML; Bill Head, CSUMB; Mary Batteen, NPS; Chris Harrold, MBA; Mike Field, USGS; Gary Griggs, IMS-UCSC; Joe Swaykos, FNMOC; Bruce Gritton, FNMOC; Warren Blier, NWS; Lora Martin, MBEST; Dave Jessup, CDFG; Nicole Crane, MPC; Mike Clancy, FNMOC; Andrew De Vogelaere, MBNMS; Jeanne Frew, FNMOC; Capt. Christopher Gunderson, FNMOC; Dave Jessup, MWVCR; Marsha Moroh, CSUMB; Rich Muller, MLML; Charles Wahle, NOAA; C. Cermak, NPS(? Was on the sign in sheet); Dawn Nicole Johnson, MBARI.

Approval of Minutes from June 13 minutes: Approved. (?)

Host Presentation

Captain Christopher Gunderson replaced Joe Swaykos as the MBCORC representative for FNMOC as Joe left to become Chair of the Naval Academy's Oceanography Department. Capt. Gunderson gave a presentation giving an overview of the perspective of the Oceanographer of the Navy and FNMOC in general. As a new representative to MBCORC, he also discussed MBCORC in terms of an organization that acts, as opposed to being a "PowerPoint Partnership."

Review of 10-year anniversary of MBNMS: Andrew de Vogelaere presented a slide show on the numerous events held over the last few months to celebrate the 10th Anniversary of the Sanctuary which truly showed the tremendous interest the public has in the various areas of marine research and science. The events were held up and down the central coast, from San Simeon to San Francisco. They included an event at the Hearst Castle, Big Sur movie at the ngeo Theater, a dedication of a new state park (with 20 different groups in attendance). In Monterey, a meeting of the National Marine Sanctuary was held that included a forum with Julie Packard and the Ocean's Fair at Custom House Plaza that drew approximately 10,000 visitors. There was also an AMBAG dinner with Fred Keely and Sam Farr in attendance, which showed not only is there public interest, but the political interest as well. The Sanctuary received many resolutions from the city and even had a special birthday song written for them. Robert Lynn Nelson introduced his famous painting, Leatherbacks in the Pacific. There were a number of activities for the children at each event. They even had a number of religious organizations come out for a special blessing of the water. The last event was at the Santa Cruz Wharf, and the Sanctuary was told it was one of the biggest events ever held there. Other events included a number of presentations at Long Marine Laboratory by Bill Douros. All in all, it was a very active time. Lots of events that were certainly deemed successful and they showed what an impact the Sanctuary has in our area.

Brochure Update: Lora brought the new MBCORC brochures to the meeting for those who had not yet picked them up. Anyone who still needs to either pay or pick them up

can contact Shelley Kadota at skadota@ucmbest.org or at UC-MBEST at (831) 582-1020.

Full-time MBCORC Coordinator

There was a discussion on the needs, duties, and costs for such a position and how each of the 26 institutions would contribute to associated costs. At the last meeting, it was asked if each institution could come up with two objectives that a coordinator could take on that could justify to those institutions Board of Directors the expense for the hire, and if each institution would send to MBCORC their thoughts on what the director would do to support your and MBCORC's mission, and how much they would be willing to contribute to make that happen. As very little response was sent in, those in attendance decided that they would discuss the matter at length during the meeting and come up with some definite items for everyone to take back to their respective institutions. The general agreement among the MBCORC directors is that there is enough money available from federal, state, and private sources for any number of good initiatives. The problem rather is to find someone with the time, energy, and expertise to pull together teams from the various MBCORC partners to make us competitive with larger institutions and other consortia for those funding programs. For example, there was an overall belief that Monterey Bay would have been the ideal venue for an ocean education project involving a research institution, a school system, and a public outreach institution, as was being sought for NSF's new COSEE initiative. However, no one had the time to pull a proposal together, and instead the center went to a consortium involving Scripps and Berkeley. The first task of the MBCORC Coordinator would be to meet with the marine directors of each of the MBCORC institutions to become familiar with any large initiatives, projects, or problems that might benefit from some regional coordination. The coordinator would then prepare a position paper for MBCORC identifying areas of synergy, overlap, and gaps for presentation to the member institutions. The paper will include recommendations on how to more efficiently use resources regionally, and opportunities to increase funding by combining strengths. For example, can Sea Camp serve as one mechanism for educational outreach for the MARS cabled observatory? If so, who needs to be involved and what programs are available to fund the effort? Are there certain aspects of the design of the *Point Sur* replacement that could greatly enhance the use of the ship for observatory science and outreach? Etc.

Point Sur Retirement and Replacement Rich Muller of MLML gave a presentation regarding the report that has been put together by NSF on the plan for fleet renewal. According to the plan (p. 21), the *Pt. Sur* comes up for retirement in 2011. His focus was on what the plan is, who the players are, why MBCORC should be concerned, and what the next steps should be. A number of important topics were brought up. It was agreed that there is a need to make sure that there is good support for maintaining a UNOLS ship in this area. (At this point, there is no guarantee that if the ship is replaced, that it will automatically go to MLML nor will it definitely be berthed in Moss Landing.) This is a very time sensitive issue. Decisions that need to be made include:

1. Which of the 3 present Cape-class ships (the *Cape Hatteras*, the *Point Sur*, and the *Gyre*) will be replaced? NSF might choose to replace only 2 of the 3.

2. If the *Point Sur* is replaced, who on the West Coast will be the operator? MLML would very much like to remain the ship operator, but they will have to compete for the honor.
3. What will be the specifications for the new Cape-class ships? NSF wants them all to be identical or nearly so to save costs. Although the *Point Sur* is not due to be retired until 2011, the *Gyre* will be retired far sooner. All MBCORC users should provide input on requirements for the ship. This is very important. Unless the west-coast users get their preferences in soon, the design will be driven by the needs from the users on the Gulf coast, who are already dealing with a looming deadline.
4. Where will the new ship be berthed? There is a limit to the size vessel that MBARI's pier can handle – probably 160 feet or less is acceptable. It is conceivable that MLML could be chosen to operate the ship, but it would need to be berthed in Tiburon, or someplace like that. From the perspective of MLML and MBARI, this would be very unfortunate. However, needs of the users and the availability of NSF funds must drive the decision. So far, there seems to be much demand for more science berths than currently found on the *Point Sur*. Ability to continue science operations in rough weather is also a major consideration driving the design. During a recent *Point Sur* expedition, about 1/3rd of the days were lost to weather.
5. How will it be funded? The money is not in the pocket, but NSF feels it will be available. NSF has no legal mechanics to invest every year so they can set money aside. Their budget for this project is \$25M per ship.
6. Who else on the west coast is coming out with interest? The impression is that the larger institutions would not be competing for this vessel. The competition is basically the Tiburon Center, Santa Barbara and San Francisco, though Scripps is not likely to be involved.

In six to twelve months, NSF will ask for a “Call for Concepts” proposal. This will request funds for a preliminary design study. By late Fall 2003, NSF will select the preliminary design. By mid 2004, they will select the contract design and prepare the bid. Construction will begin in 2005 for the Gulf Coast vessel.

Rich reported that a committee had been formed and that a draft report could be reviewed at http://www.unols.org/fic/regional/regional_class.html, and recommended that everyone read the details as this replacement will affect all institutions in some way. (On the website it states that they request all interested ocean scientists, research vessel operators and technical support personnel review the draft Regional Class SMR and provide comments and suggestions that will help them produce a final version by early December.) Guidelines haven't been sent out, but it is up to each institution to write a proposal for what they believe are the needs for our area. Rich stated that MBCORC should be a part of a broad advisory committee, that would include other groups such as UNOLS, FIC, SJSU, etc. He then proposed a list of 15 organizations that he sees as major players on the committee, that would act as a smaller working committee. He also stated that NSF encourages cost-sharing, including one-time contributions and design and construction, and feels that NSF would view this advisory committee as a good thing. He

also proposed, upon reviewing the SMR's for the West Coast region, possibly partnering with an institution from the Gulf and East Coasts which, made clear during the NSF proposal process, might enhance the possibility of being selected as the NSF Regional ship design. He asked that anyone that would like to have input to contact him or Kenneth Coale, along with the dean/president of the school, Marcia, or NPS. The stronger we are united, the better chance we have to keep it here.

Scenarios for Utilizing Available NPS Waterfront Property: Captain Chris Gunderson, Commanding Officer of Fleet Numerical Meteorological and Oceanographic Center, reported that Rear Admiral David Ellison at the Naval Postgraduate School is eager to find a good use for the waterfront property on the west side of Del Monte Avenue in front of NPS. At one point it was being considered for a test tank facility, but there did not seem to be enough regional interest in such a facility to raise the funding required. Monterey Bay Aquarium considered the site ideal for relocating its Sea Otter Rescue and Conservation facility, but apparently the Navy was too slow to respond. MBA has now selected a site near Long Marine Lab. Capt. Gunderson presented one suggestion as a youth outreach/visitor's center and asked for other suggestions for use of the property. Currently there is interest from Sea Camp – Monterey Bay in building a camp there. However, it was clear in the meeting that one reason for the Navy's slow response time whenever any group shows interest in the property is that there are groups within NPS, such as the Oceanography Department, that still have requirements for using that property. There are a number of issues in getting any plans underway. These include environmental issues, the sewer plants, items that are currently stored there, the warehouse that will be demolished, etc and most importantly, money. Capt. Gunderson needs to have a demonstration of the capabilities in time for a meeting next quarter. Many felt that they need to start small and with an established program (such as Sea Camp) and build it from there. It is a great opportunity for a collaboration among schools, businesses, institutions and the community. The decision made at the meeting is that interested parties need to get together with Capt. Gunderson and form a sub-committee to discuss the details.

MBARI Equipment for Sale: MBARI has a real-time scan converter that converts high-resolution computer graphics to broadcast video for sale. This list price when purchased was \$26K, and it comes with software for Windows and some rack slides. The equipment is in good condition and is only being sold as MBARI is upgrading to a newer system.

MARS Update: Marcia made a presentation on the MARS (Monterey Accelerated Research System) project. This is a plan to provide a remote, continuous, long-term, high-power, large-bandwidth infrastructure for multidisciplinary, *in situ* exploration, observation, and experimentation in the deep sea. Plans are to install 62km of fiber optic submarine cable in Monterey Bay, with the proposed route of the initial cable lay coming out of Moss Landing, down across the shelf and out on to smoothridge in the bay. At the end of the cable it will have a node at 1.2 km depth to connect scientific instruments. The node will provide four science ports, and each port will have a 100Mbit/sec bi-directional telemetry channel data rate back to shore. The node will have the ability to deliver a total of 10kW of power to the four instrument ports with capabilities of instruments on

extension cords that could go out from the ports, up to 100km away from the original node. The depth is such that it can be serviced by the ROV Ventana. It is meant to be a testbed for the NSF's larger cable observatory initiative, the NEPTUNE project, which will wire an entire tectonic plate. This is currently part of NSF's Ocean Observatory Initiative (OOI) which is approved by the National Science Board for a new MRE funding in the approximate amount of 250M. The priorities for MARS include having a year round weather window for testing (which is possible in Monterey Bay), where those that develop instruments can come and test those instruments before investing time in projects such as NEPTUNE where there is a smaller weather window. Currently, operations protocol is being tested for both NEPTUNE and MARS as they will both be maintained and installed by ROV's and this has not been done on this large of a scale before. Those involved are also looking at management plans, how can the whole oceanographic community be trained to use these facilities, etc. NSF will be paying for the cable to go out to smoothridge, but hopes are to have the extension cords, instrument stations, ROV docking stations, etc and MBARI has already initiated a number of efforts to have the technology ready to allow MARS to go beyond what NSF is supporting. Marcia also explained the Instrumentation Software Infrastructure project that is developing plug-and-work instrument interface electronics ("pucks") that will allow the network and the shoreside data system will understand when new devices and instruments are connected and installs the appropriate drivers without the need for additional programming or special engineering. Another project being tested at MBARI is the use of cameras with automated vision that use artificial intelligence to look through the video data to detect events. This will replace a first scan of data and cut down on the current human workload. The first test showed a 94% level of success. This project will also be a great way to learn about the Monterey Canyon in general. Current status: \$7M funding from NSF, finalizing contracts with Maripro who will be installing the cable, have had first meeting with the Sanctuary to discuss the permit details, and are scheduling presentations to encourage participation. (Do you want more details on MARS? I have them, but don't know how much you want added.)

There is considerable interest in MARS from many MBCORC members, for technology development, experiments/monitoring, and educational outreach, and Marcia volunteered to make presentations in the MBCORC institutions for any group that is interested in hearing more. This is a big opportunity for Monterey to step out ahead of everyone else and she is very sincere in engaging MBCORC since they will be the ones that will want to try out the program. It will be of interest to many science, engineering, and educational groups.

Federal Initiatives: At the last meeting, there was considerable discussion on how best to coordinate the numerous regional initiatives that involve ocean observing and monitoring in the Monterey region, such as CCEPI (Central Coast Environmental Planning Initiative), ACT (Alliance for Coastal Technologies), SIMoN (Sanctuary Integrated Monitoring Network), MARS (Monterey Advanced Research System), etc. The general agreement is that without some attempt at coordination, these projects could interfere with each other as they compete for funding, as opposed to reinforcing each

other. No official meeting discussing this was held since June, as stated in the the notes, but this issue merged with the above discussion on the full-time Coordinator position. Plans were discussed regarding having a retreat to come up with a specific plan, and it was suggested that it would be good if the proposed Coordinator could be there at the retreat. Timing though is a concern in filling the coordinator position. The idea was suggested of bringing someone in on a short-term, part-time basis, possibly someone who works in a leadership position for one of the MBCORC institutions that is looking to go part-time or has gone into retirement, but would still like to be involved. Someone knows someone. **Action Items:** Marcia asked if Lora could start researching how long MBCORC needs to meet and what venue they will meet at, with January as a possible time to hold the retreat. (MBARI can help with the logistics). Marcia will be coordinating the funding details on the Coordinator position.

Review and Update of MBCORC Profiles: Many of the profiles on the MBCORC website need to be updated with current information. Dawn Nicole handed out copies of each institutions section to the representatives at the meeting. **Action Item:** Please review your information, update and return to Andrea Sanico at MBARI. If you did not receive a print out at the meeting, please refer to your institutions page on the MBCORC website. <http://www.mbari.org/~andrea/MBCORC/NewMBCORC.htm>

Next Meeting

? (The retreat in January?)