

Engineering Weekly Report 6/20/2024 - 6/27/2024

<https://docs.mbari.org/internal/projects/Engineering/Weeklies/2024/>

Executive Council Notes

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Individual Activities

- Michael Anderson
- Kevin Barnard
 - 500055 - VARS, M3/RS, DSG
 - Tweaked dfg-tool to allow for invalid imaged moments
 - 701165 - OVAI Phase II
 - Supported Laura Chrobak onboarding
 - 902204 - Scalable Robotics
 - Tested SLAM datasets on MOLA dive May 30, 2024
 - Tuned SLAM parameters and deployment configuration for MOLA
 - Overhead
 - Attended CVPR 2024 in Seattle
 - Out of Office
 - Vacation Jul 5, 2024
- Francois Cazenave
 - Out of Office
 - 1 day off
- Danelle Cline
 - 902111 - Carbon Flux Ecology
 - Proposal input
 - Out of Office
 - Vacation June 5-20
- Duane Edgington
 - Out of Office
 - June 10 - 21, 2024. Vacation UTC-8
 - June 24 - July 3 Covid :(
 - Sept 17 - 20, 2024. PyTorch Conference, San Francisco
 - Oct 21 - Nov 8, 2024. Vacation UTC+1
- Jon Erickson
- Kevin Gomes
 - Out of Office
 - Jun 21
- Andy Hamilton
- Kent Headley
 - Out of Office
 - Jun 20 (a.m. only, ETA ~10:30)
- Rich Henthorn

- 300078 - DMO Support - AUV
 - i2MAP section power management
 - Proposal research
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - SES and the McLane Trigger Trap deployed near MARS last week
 - Post deployment wrap
- 902306 - SINKER
 - EPOS controller code search
- 902401 - Geo-Sense
 - Meeting - proposal discussions
- 902405 - Precision Control Technologies
 - TRN and CoNav test results
 - Proposal discussions
- Overhead
 - Rec-Comm stuff
- Out of Office
 - July 3 - 11: Vacation and WFH
 - July 9: SINKER test from Carson
 - Aug 26 - Sep 11: Vacation
- Brett Hobson
- Irene Hu
 - 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Spectrometer tests with color target
 - Jbox board troubleshooting - mux behavior is unexpected but ok, troubleshooting continues
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - Deployed last Thursday
 - Out of Office
 - June 20: at sea w/ SES
- Scott Jensen
 - Out of Office
 - June 17-21 vacation
 - July 18-23 vacation
 - July 24-29 vacation
- Brent Jones
- Chad Key
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - Out of Office
 - 05/27-06/21 (GMT+1)
 - 07/08-07/12 (HST)
 - 07/16-07/22 (EDT)
- Denis Klimov
- Eric Martin
 - Out of Office
 - Vacation Friday June 7th
- Thom Maughan
 - 300083 - DMO Support - LRAUV
 - BatMan proposal discussions
 - 901805 - Coastal Biogeochemical Sensing Program

- Received MSC3 processor and baseboard from Irene on June 26th. Will spend a few more hours debugging problems on MSC2 and will then start MSC3 board bringup
 - Troubleshooting ISUS for M1. ISUS had stopped working with OASIS and had a 'Wakeup Fail' message. Power cycling fixed the wakeup problem. Mooring deployment is Jun 27.
- 902004 - Planktivore
 - Proposal
 - Aug/Sep/Oct deployment planning
- Overhead
 - ODSS proposal
- Out of Office
 - June 20 - 25. Texas
 - July 3. Vacation (maybe)
 - Aug two to three weeks vacation Colorado.
- Mike McCann
 - Out of Office
 - 20 June - 19 July: Vacation
 - 22 - 25 July: ESIP Federation Summer meeting, Asheville, NC
 - 28 July - 1 August: SIGGRAPH, Denver, CO
- Rob McEwen
- Paul McGill
 - 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Installed and tested focus motor system with Aaron S and Alana
 - Got new laser housing schematic drawn for fab by techs
 - Set up second laptop with disco account and all required apps
 - 902101 - LRAUV Technology Development
 - Ordered new power supplies for sonar payload
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - Deployed SES and Trigger Trap near MARS last Thu—all went well
 - 902401 - Geo-Sense
 - Ordered more parts for Deepsea Connect
 - Edited 2025 proposal
 - 902402 - CSEM
 - Edited 2025 proposal
- Enoch Nicholson
 - 706008 - READI-Net
 - Continued testing FIDO
 - Started passing fluid through system
 - 901007 - Benthic Biology & Ecology
 - Setup & tested BRS in chlorinated bath
 - Submitted data to Jim for review
 - 902306 - SINKER
 - Trying different sealing methods.
 - Sealed SINKER for deployment
 - Out of Office
 - April 5-10 Vacation (Available via Slack & Email)
 - April 14-18 IEEE Oceans (Available via Slack & Email)
 - April 19-23 Vacation (Unavailable)
 - September 19-24 Vacation (Available via Slack & Email)
- Tom O'Reilly
- Mike Risi

- Out of Office
 - Offsite on Tuesday and Friday
 - January 16 - January 19, 2024
 - February 22, 2024
 - March 4 - March 8, 2024 - vacation
 - April 24, 2024 - vacation
 - May 20 - May 24, 2024 - vacation
 - June 17 - June 18, 2024 - vacation
- Paul Roberts
 - 901221 - Midwater Time Series
 - Review of camera options and 4k recorder options
 - Planning for i2MAP service and upgrade to 4k recording
 - 901809 - Deep Sea Bioinspiration
 - Chiton 1500 m build
 - Scuba-EyeRIS CXP 2.0 fiber testing
 - 902004 - Planktivore
 - model training and testing on data from May 2024 deployments
 - 902204 - Scalable Robotics
 - PoE interface rebuild and testing
 - Mola camera/lens review
 - 902306 - SINKER
 - Tank testing for July 9 deployment
 - Overhead
 - Intern mentoring
 - Out of Office
 - June 28
- Brent Roman
 - Out of Office
 - June 20 - June 31 (gunkholing in the Sacramento Delta)
 - July 1 - Aug 31 (Vacation in Japan)
- Carlos Rueda
 - 901502 - Ocean Soundscape
 - Minor PBP repo maintenance
 - 902101 - LRAUV Technology Development
 - TethysDash/dash4 adjustments
 - 902204 - Scalable Robotics
 - Integrating/advancing a server component in Dial.
 - Preps to use [rerun blueprints](#).
 - Overhead
 - Proposal discussions/input
 - Out of Office
 - July 2–3, 22–25: vacation
- Karen Salamy
 - Out of Office
 - Back in the office following a flu virus.
 - On-campus 3 days/week (**T**, **W**, **TH**).
- Brian Schlining
 - 500055 - VARS, M3/RS, DSG
 - Wrapping up development of the VARS knowledgebase service at <https://github.com/mbari-org/oni>. Integration tests for SQL Server are done and beginning

postgres tests. Hopefully, in the next few days we can hand it off to external contractors for the development of a web interface.

- 902404 - 5th Marine Imaging Workshop
 - Wrangling late abstract submissions.
- Out of Office
 - Jul 8-11 - Updating video lab at DARC
 - Jul 15-24 - Vacation
 - Aug 19-22 Vacation
 - Sep 5-9 - Vacation
 - Oct 7-10 - 5th Marine Imaging Workshop in Monterey
- Alana Sherman
 - 901023 - Continental Margins
 - We have held meetings to discuss the Arctic cruise logistics
 - 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Spent a lot of time with Paul and Aaron exploring the potential of the focus stage motor
 - Also explored using the remote software control of the focus, but this puts the camera in a state that might not be reliably repeatable enough to use during deployment
 - 902208 - Mini ROV Operations
 - Wrote the proposal for 2025, working on budget now
 - 902401 - Geo-Sense
 - Aaron and I spoke with Don Muth at ISE and I think they have a cable assembly that will allow us to go from our oil-filled j-box to the 1-atm housing, which hopefully we can get on order soon
 - Reviewing proposal and budget
 - 901205 - ESP/Readinet
 - Added high-side switch for diaphragm pump, linear regulator for flow sensor, and current monitor
- George Stern
 - 902204 - Scalable Robotics
 - Identified new higher temp led optical potting compound for lights
 - Completed preliminary mechanical and electrical concept diagram for lights
 - Scoped the CTD
 - 902306 - SINKER
 - Began integrating linear motor and seal on sinker in preparation for tank tests
 - Troubleshoot and fixed a partially dead IC
- Justin Tucker
 - 300078 - DMO Support - AUV
 - INS Housing, minor updates to metric fastener specs
 - 901101 - Seafloor Mapping
 - LASS sled orientation brackets released for manufacturing
 - Overhead
 - Ansys Mechanical and Fluids single floating seat purchased and available for all users.
 - Out of Office
 - July 15th -18th Vacation
- Johann Voigtlander
 - 902204 - Scalable Robotics
 - Wrote a labVIEW program to interface with VN100/VN300 AHRS
 - 902208 - Mini ROV Operations
 - Built up mapping sled and tested the system
 - Got a quote for Ranger Mini 2 system
 - Put Modbus code on Github

- Out of Office
 - April 16th - May 7th Germany CSEM
 - May 8th - May 12th Vacation