

Engineering Weekly Report 12/12/2024 - 12/19/2024

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

Executive Council Notes

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Individual Activities

- Michael Anderson
- Kevin Barnard
 - Out of Office
 - Monday and Wednesday mornings before 9am: physical therapy until Dec 15, 2024
 - Maldives Nov 15, 2024 – Nov 29, 2024
 - Vacation Dec 16, 2024 – Dec 27, 2024
- Francois Cazenave
 - 901221 - Midwater Time Series
 - Discussed i2map maintenance with Rob
 - 901405 - Wave-Energy Conversion for Oceanographic Applications
 - Changing seals on PTO
 - 902106 - Niobicon-Based AUV Docking Development
 - Testing new elevator fin
 - 902204 - Scalable Robotics
 - Designing bracket for laser for MOLA
- Danelle Cline
- Duane Edgington
 - Out of Office
 - Dec 8 - Dec 17, 2024. [Neurips](#) Conference. Vancouver, BC.
 - Dec 17 - 20. Out sick.
- Jon Erickson
- Kevin Gomes
 - Out of Office
 - Dec: 12: Vacation
 - Dec: 23-26: Vacation
- Andy Hamilton
- Kent Headley
 - 902405 - Precision Control Technologies
 - Working on TRN doc
 - Overhead
 - Review prep
 - Misc admin
- Rich Henthorn
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - SES deployed for 6.5 months on Dec 4
 - 902401 - Geo-Sense
 - DMO deployment review

- 902405 - Precision Control Technologies
 - TRN tests on LRAUV
 - Testing offset and dead-reckoning correction logic
- Overhead
 - NOAA-PMEL Rover transfer talks
 - NOAA-PMEL Rover transfer updates
 - NOAA-PMEL Rover transfer legal stuff
- Out of Office
 - Dec 20 - Dec 31: Vacation/Holidays
- Akshay Hinduja
 - Out of Office
 - 12/16-12/23 out for wedding
- Brett Hobson
- Irene Hu
 - 901217 - Chemical Sensors
 - Finished tuning snubber circuit for revD baseboard
 - Tested inrush current and startup times. Removing inrush circuit for revD baseboard
 - Measuring hibernation current for Tiva1290
 - 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Some modeling/visualization of LED strength and attenuation, check w/ Paul's calcs
 - Ordered LEDs
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - Weekly meeting
 - Out of Office
 - 12/23-1/1: vacation
- Scott Jensen
 - Out of Office
 - December 23 through January 1
- Brent Jones
 - 901502 - Ocean Soundscape
 - Meeting
 - Clustering workflow on a Mac
 - 902004 - Planktivore
 - Deploy LRAUV Ahi
 - Bringing up new v2 ptvr board. Wrote drivers for I2C mux and I2C batt charger
 - Overhead
 - Moving to bldg G
- Chad Keczy
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - 300083 - DMO Support - LRAUV
 - 3 vehicles deployed this week. Supporting planktivore testing and MBTS.
 - 708143 - EcoHAB
 - Backcharged 40 hrs per PM direction
 - 901513 - Targeted Sampling by AUVs
 - Supporting Yanwu's testing with frequent vehicle updates.
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Finally gonna use some of my allocated hours on this program. Assisting with a flight on Friday.
 - 902101 - LRAUV Technology Development

- Working with Elecia to test DATMMP device enable re-tries and non-latching state
 - Pontus continues its deployment until Friday doing docking, TRN, slowYo, PAM.
 - 902405 - Precision Control Technologies
 - Lots of TRN work. Ingest of “good” TRN data is still causing the vehicle to drive off to disneyland for some reason. Continuing to test and investigate the issues.
 - Apart from TRN fixes on the backseat, we’ll now fire up TRN only after arriving at depth. That test commences today.
 - 90210151 - LRAUV Tech Txr WHOI
 - Assisting testing of acommms data transfer
 - Overhead
 - Harassment training
 - Met with Oshen to discuss final deployment in Jan. Reproduced motor encoder issue observed last time offshore.
 - Met with NTNU to discuss LRAUV applications
 - Out of Office
 - 12/23-27 (MST)
 - 12/30-01/03 (PST)
- Denis Klimov
 - 901112 - Monterey Bay Time Series
 - We had a technical group meeting for IFCB West Coast users, interesting discussions focused on data QA
 - 901809 - Deep Sea Bioinspiration
 - BBC filming is completed. Interesting experience and a lot of work, but the BBC crew came out quite happy with the footage. Also, we were employing for the first time the full access controls into the Test Tank for both Laser Safety and filming in general, which was good for gaining experience and it should be quite relevant for the upcoming scanning LIDAR trials
 - 902401 - Geo-Sense
 - Working on low power disconnect electronics, we also held a review for the way of deploying and recovering the DAS instrument.
- Eric Martin
 - 901101 - Seafloor Mapping
 - RDI purchase complete
 - Scoping for Sled integration complete, reviewed with Dave
 - Strobe repair underway
 - Circuits review with Chad
 - 901911 - ROVVR
 - Updating capture cards
 - Data simulation
 - End of year HMC
 - 902204 - Scalable Robotics
 - Sled prep
 - Building OAKD1500M sn 2
 - Permit app review
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 - Out of Office
 - Part time through 12/20
 - Vacation 12/23-1/3
- Thom Maughan
 - Out of Office
 - Dr appt on 11 Dec 2024

- One to two weeks in the later part of December
- Mike McCann
 - 901009 - CANON
 - Processed Gulper mission 2024.351.00
 - 901910 - Plankton Taxonomic Groups from AUVs
 - Provided a review of the history of HS2 data processing
 - 902101 - LRAUV Technology Development
 - Chimed in on accessing processed LRAUV data for piscivore-support
 - 902403 - Expedition DB Modern
 - Working on Step 2 of new Precruise entry process
 - Overhead
 - Worked with NDBC to use sftp for uploads – for both M1 surface and OceanSITES data
 - Out of Office
 - 20 December 2024 - 3 January 2025: Vacation
- Rob McEwen
- Paul McGill
 - 701147.99 - MARS IV Node Upgrade
 - Met with UW team for update, working through final electrical issues
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - Team met for the last time this year to discuss instrument recovery and data analysis next year
 - 902401 - Geo-Sense
 - Got batteries installed into spheres, and held a sphere-sealing workshop
 - Began testing Deepsea Connect and found that some changes needed to be made
 - Attended deployment review on Dec 18—still lots of details to be worked out
 - Overhead
 - Completed sexual harassment training
- Enoch Nicholson
 - 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 4-5 Vacation
 - September 19-24 Vacation (Unavailable)
- 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
 - September 3 - September 9, 2024 - vacation
 - November 6- November 7, 2024 - vacation
 - November 26 - November 27, 2024 - vacation
 - December 30 - January 3, 2025 - vacation
- Paul Roberts
 - Out of Office
 - Nov 25-29 Vacation

- Jan 6-10 Vacation
- Brent Roman
 - 708165 - NOAA-MERHAB-UW
 - With Greg Voogds help, found suitable place on roof of Bld B to mount Iridium Antenna
 - James McClure is mounting the components of UW's "telebuoy" in weatherproof housing
 - This will connect to an ESP2 "sleepy" board in Bld B attic to allow full up testing of Iridium Next and cellular comms.
 - Overhead
 - Moving office to G-206
- Carlos Rueda
 - 701165 - OVAI P2
 - (Joost has learned lots of VueJS/Quasar while adding very cool features to the CMS UI!)
 - 901502 - Ocean Soundscape
 - Reviewing PBP PR by Michael R. (NOAA)
 - Group mtg.
 - 901513 - Targeted Sampling by AUVs
 - Looking into determining an appropriate reorganization of the tracking software toward incorporating the new patch tracking algorithm in a way that leverages all the common supporting functionality.
 - Meeting with Tim P., Terry W. (Saab) tomorrow to discuss their TethysDash setup.
 - 902101 - LRAUV Technology Development
 - WHOI upgraded their TethysDash system to the latest version. (Keeping up with the latest is always good.)
 - 902204 - Scalable Robotics
 - Reviewing Dial tickets / notion tasks in preparation for meeting with Sebastián.
 - Overhead
 - Engineering mtg; IE group mtg
 - Fixes/improvements to the [tscfg](#) tool (mainly motivated by observations in one of its main applications out there, the [Simona](#) project).
 - Out of Office
 - Dec 9–12, 23–24, 30–31: vacation
 - Jan 2–6: vacation
- Karen Salamy
 - 300057 - Mooring Maintenance
 - Spent a little time checking data download success rates.
 - Overhead
 - Working on some React tutorials
 - New Office Move! Packing up boxes. Moving to G-106.
 - Attended weekly SWE Meeting to discuss new AWS changes for MBARI.
 - Out of Office
 - Vacation December 23-Jan 3 - Holiday Vacation
 - On-campus 3 days/week (**T, W, TH**).
- Brian Schlining
 - 500055 - VARS, M3/RS, DSG
 - Addressing change requests from the video lab for the new VARS query.
 - 902002 - FathomNet
 - Working on talk for Deep-sea Biology Symposium
 - 902304 - Piscivore Cam
 - Working on a pipeline to merge ancillary data with video annotations.
 - 902404 - 5th Marine Imaging Workshop

- Meeting with Jamie Davies at University of Gibraltar to discuss hosting the 6th MIW.
- Overhead
 - Added the new VARS query to the m3-quickstart project to allow NOAA to demonstrate it to other team members.
- Out of Office
 - Dec 23-24 - Vacation
 - Jan 10-17 - [Deep-sea Biology Symposium, Hong Kong](#)
- Alana Sherman
 - 902208 - Mini ROV Operations
 - Spending out year end money
 - Troubleshoot an issue which seems to be a faulty video hub
 - 902401 - Geo-Sense
 - Catching up on where each component is at and trying to help move everything forward
 - Preparing for deployment review on 12/18/24
 - Learned the assembly of the battery spheres from Paul, all three are assembled now
 - Made schematic for deck cable
 - Dealing with money woes
 - Out of Office
 - I was at training 12/2-6 coast guard basic training
 - Worked remotely while recovering from illness 12/9-15
- George Stern
 - 902204 - Scalable Robotics
 - Triage for the failed mola light controller and repair options
 - 902304 - Piscivore Cam
 - Quotes and planning for spending remaining funds
 - 902306 - SINKER
 - Battery board external fabrication quotes
 - 300078 - Dorado AUV Thruster
 - Continued schematic entry, hoping to finish before end of the year
- Justin Tucker
 - 300078 - DMO Support - AUV
 - Released revised INS drawings to shop
 - 901101 - Seafloor Mapping
 - Print material test for thermal experiment nozzle
 - Released thermal spacer drawings for strobe can improvement
- Johann Voigtlander
 - Out of Office
 - April 16th - May 7th Germany CSEM
 - May 8th - May 12th Vacation