

Engineering Weekly Report 9/3/2026 - 9/10/2026

<https://docs.mbari.org/internal/projects/Engineering/Weeklies/2026/>

Executive Council Notes

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Individual Activities

- Michael Anderson
- Kevin Barnard
- Francois Cazenave
- Laura Chrobak
- Danelle Cline
 - Out of Office
 - September 21-24 Oceans Conference, Monterey
 - October 18th, SMM 2026 pre-conference Workshop: Evolving AI Applications in Modern Marine Mammal Science: From Computer Vision to Generic and Agentic AI, Puerto Rico
- Duane Edgington
 - 901103 - Biodiversity and Biooptics of Zooplankton
 - Touched base with Steve H. Plan to meet to discuss 2026 work and 2027 plans next week.
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - No activity. I am out of time on this project.
 - 901502 - Ocean Soundscape
 - Great progress marching through the 11 year archive with orca vocalization detectors. I can do 3 months per day if I am not distracted; I can process 6 months per day, but agile review takes human effort. All on the spark systems, plus thalassa and local storage disks.
 - Github page released supporting [PyTorch Conference Poster session](#)
 - Github page released supporting [IEEE Oceans 2026 Poster](#). Check out the [sample annotation viewer](#)!
 - FAIR dataset release supporting IEEE Oceans 2026 Poster on [Zenodo](#) (Zenodo has been really flaky over the last few days, but the release is there and solid). 16 views and 2 downloads already, and the conference has not even happened yet.
 - IEEE poster completed; Melissa and Mariah are printing this week.
 - Tim Kelp poster draft completed. Melissa is working on final this week.
 - PyTorch Conference poster draft completed, reviewed. After IEEE Oceans it will go to Melissa to make it beautiful.
 - Out of Office
 - ~~September 8-13 ECGV conference. Present UAVS Yolo26/RFDETR model performance. Have reservations. Registered. Cancelled~~ Virtual attendance only
 - September 21-24 IEEE Oceans Conference, Monterey. Present poster on Perch-hoplite. Registered.
 - October 19-24 Pytorch Conference, San Jose. Present poster on Perch2.0 port to pytorch. Registered. Have reservations.

- Kevin Gomes
 - Out of Office
 - Aug 25-27: Monterey Data Conference
 - Sep 21-24: Oceans conference
- Andy Hamilton
- Kent Headley
 - 902204 - Scalable Robotics
 - Wrote up notes re Cerulean blue boat exercise
 - Updated Cerulean driver and config on blue boat
 - Attended project meeting
 - Overhead
 - Prototyped labor spreadsheet diff tool
 - Phase 2 resource meeting, feedback review, prep
 - Setup for Ocean Soundscape demo for Packard Foundation
 - Misc admin
 - Out of Office
 - Sep 21-24: Oceans conference
- Rich Henthorn
 - Out of Office
 - August 28 - Dr appt, WFH
 - August 31 to Sept 3 - Vacation
 - Sept 14 to 18 - Durkin Cruise
- Akshay Hinduja
 - 901809 - Deep Sea Bioinspiration
 - Minor changes to triton-deployable-ai to suppress adaptive behaviour slate messages running in shadow mode so it still logs.
 - SOTA review on open set object detection models and plenoptic image to depth image models.
 - 902101 - LRAUV Technology Development
 - Wiring up sen_imagenex on galene, using sample data from BlueBoat to setup bridge to work with lrauv_terrain_awareness module.
 - Setup dropout simulation of fls picks to harden algo and test.
 - Prepare galene for deployment by Oct
 - 902204 - Scalable Robotics
 - Live op ready mbes_localization stack ready, usable with localization and fusion modes
 - Fixes to upstream point_cloud_accumulator and point_cloud_manager stacks
 - Reviewed and merged mbes_localization dev branch to main.
 - Out of Office
 - Sep 24, 2026 - Oct 2, 2026 - IROS 2026
 - Sep 21, 2026 and Sep 23, 2026 - Oceans 2026
- Brett Hobson
- Irene Hu
 - 901101 - Seafloor Mapping
 - ORP board: continued tests for common mode sensitivity were inconclusive. Updated circuit diagram and sent results to Erik for another opinion. Chemistry tests are next; previously came up with a plan involving ferrous sulfate, just need to run it.
 - 901805 - Coastal Biogeochemical Sensing Program

- Made an abstracted circuit diagram of leakage current to show Lionix. Discussed leakage with Claude and came up with a set of experiments to get more information, waiting for more stems (reference/counter pellets) to run it.
 - Alkalinity: SEM session is today
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Meeting to scope out our next efforts
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Random support for upcoming cruise where SES and TT will be turned around on boat, eg obtaining O-rings, compiling checklist and battery change instructions, etc
- Scott Jensen
 - 901205 - ESP SURF Center
 - Working toward a dev release of system for testing
 - 901405 - Wave-Energy Conversion for Oceanographic Application
 - Preparing system for deployment
 - Meeting about next revision of HDS battery
 - 902106 - Niobicon-Based AUV Docking Development
 - Recalculated the unique transfer function from degrees celsius to ohms of insulation resistance.
 - 902609 - TIDE Omics
 - Supported development of first bench top system using cots parts
 - Out of Office
 - September 23-28 (Vacation)
- Brent Jones
 - 901112 - Monterey Bay Time Series
 - Filtering water on the Packard BOG cruise. Fixed FIDO
 - Rebuilding SIPPER for NOWRDC now that we know what went wrong with the last deployment
- Chad Keycy
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - Out of Office
 - 07/17-07/22 (GMT -4)
 - 07/26-08/07 (GMT +9)
 - 08/26-08/28 (GMT -4)
 - 08/29-09/02 (GMT -5)
- Denis Klimov
- Eric Martin
 - Out of Office
 - Sick 8/24-8/26
- Thom Maughan
 - Out of Office
 - Vacation Sep 8,9,10
- Mike McCann
 - 901101 - Seafloor Mapping
 - Working on poster for Oceans
 - Out of Office
 - Half time schedule: Generally away Mondays, Fridays, and alternate Thursdays
 - 8-9 September: Vacation

- 21-24 September: Oceans Conference
 - 12-16 October: Web3D Conference
- Enoch Nicholson
 - 901205 - ESP SURF Center
 - Supporting FIDO Packard deployment
 - 902111 - Carbon Flux Ecology
 - Snocam development
 - Overhead
 - OCEANS Poster
 - Out of Office
 - June 26 to July 6th
 - July 30 to Aug 10
- Tom O'Reilly
- Mike Risi
 - Out of Office
 - Offsite on Tuesday and Friday
 - January 2, 2026 - vacation
 - January 19, 2026 - January 30, 2026 - vacation
 - March 4-5, 2026 - vacation
 - March 16, 2026 - vacation
 - March 30, 2026 - vacation
 - May 18, 2026 - vacation
 - June 22, 2026 - vacation
 - June 29, 2026 - July 1, 2026 - vacation
 - August 17, 2026 - vacation
 - September 8, 2026 - September 10, 2026 - vacation
- Paul Roberts
- Brent Roman
 - Out of Office
 - Sept 8 - Oct 16 (vacation)
- Carlos Rueda
 - 901502 - Ocean Soundscape
 - Preparing poster for OCEANS
 - 902101 - LRAUV Technology Development
 - TethysDash: Versions 4.99.121 to [4.99.126](#) with more enhancements.
 - Dash4 [4.99.50](#), reflecting backend enhancements.
 - Various doc updates including [this](#), [this](#), and [this](#).
 - Exchanges with Emme/Karen re various dash aspects.
 - Overhead
 - TethysDash MBARI SSO: With Andrew, changed configuration on Firebase console to use Entra ID instead of Duo. Note posted in [#lrauv-operations](#).
 - Out of Office
 - ~~Sept 8-11: vacation~~
 - Sept 22-24: IEEE Oceans Conference
 - End of Oct–Beg of Nov: vacation (dates TBD)
 - Nov 12: vacation
 - Dec 9-10: vacation
- Karen Salamy
 - 300057 - Mooring Maintenance

- Weekly maintenance and data download quality verification for MBARI moorings.
- 902101 - LRAUV Technology Development
 - Bug Fixes
 - Restore short aria-label in SbdChunkBoxes — opened for review ([#845](#))
 - Science charts reload on scroll due to virtualizer unmounting — opened for review ([#848](#))
 - Issues Filed
 - feat: support uploading external files (documents, images) to Docs tab ([#838](#)) (Sep 2)
 - bug: SbdChunkBoxes aria-label change breaks ScheduleEventDetailsModal test ([#844](#)) (Sep 3)
 - feat: handle signedOutAllDevices and token-expired WebSocket events ([#846](#)) (Sep 3)
 - fix: science charts re-show 2s spinner when accordion is collapsed and reopened ([#847](#)) (Sep 8)
 - Drafts -> Ready for Review
 - Schedule "Unknown" operator fix — converted draft → ready ([#825](#))
 - Restore depth sparkline for dives >8h — converted draft → ready ([#810](#))
 - Display mission ID in pending Schedule rows — converted draft → ready ([#805](#))
 - In Review - awaiting human review
 - Science charts reload on scroll fix ([#848](#))
 - Restore short aria-label in SbdChunkBoxes ([#845](#))
 - Schedule "Unknown" operator fix ([#825](#))
 - Mission modal & Schedule log polish ([#814](#))
 - Restore depth sparkline for dives >8h ([#810](#))
 - Display mission ID in pending Schedule rows ([#805](#))
 - Gate map marker edits behind login ([#790](#))
 - Discussions
 - Discussions/exchanges with carlos and emme regarding Dash backend and Dash4 functionality
- 902111 - Carbon Flux Ecology
 - Features
 - FluxCAM ROI viewers on Data Viz:SedFlux High Mag and Low Mag cameras merged ([#101](#))
 - Completed for Current Sprint
 - SedFlux ROI viewer for High Mag and Low Mag sediment cameras ([#100](#))
 - Sprint Board
 - In progress: [#36](#), [#47](#), [#59](#), [#66](#), [#68](#), [#69](#), [#96](#)
 - Sprint Backlog: [#62](#), [#63](#), [#71](#)
- Overhead
 - Talks and presentations
- Out of Office
 - March 15-24, 2027 - Vacation
 - On-campus 3 days/week (**T, W, TH**). New OFFICE - G106.
- Brian Schlining
 - 901809 - Deep Sea Bioinspiration
 - Continuing work on [fine-grained licensing](#) for FathomNet images and annotations.
 - Out of Office
 - Sep 9 - Vacation
 - Oct 21 - 24 - Oceans Conference, Monterey
 - Nov 12 - Vacation
- Quinn Shemet

- Out of Office
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- Alana Sherman
 - Out of Office
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- George Stern
 - 902204 - Scalable Robotics
 - Organized remaining hardware for mola ESC and organized project files on the shared drive
 - 902304 - Piscivore Cam
 - Continued assembling and testing all the gen4 hardware; two problems
 - The limited lifetime buy boards purchased from Oclea just before they stopped accepting orders in 2026 do not load the olcamera blob; boards purchased from them in 2023 are not affected - same part number, same firmware... cause is unknown.
 - The 2023 boards loaded the camera until plugged into the gen4 breakout board, after a lot of testing, something in the olcamera blob appears to require a functioning root of trust/TPM module which was located on the som but has an I2C bus which is used on the Gen4 breakout board and is not responding - more testing needed to find root cause.
 - Minor problem, usb 5V power switch spec'ed the wrong part version with an active low instead of active high enable, correct part ordered.
- Justin Tucker
 - 902606 - Low Altitude Survey AUV
 - Concept review prep
 - BOM tracking
 - CFD drag and added mass matrix workflow and validation against SUBOFF
 - Out of Office
 - Oceans: September 21-24
 - Stanford Project team: September 29th
 - Vacation: October 13th-23rd
- Johann Voigtlander
 - 902208 - Mini ROV Operations
 - Booked flights to Greece
 - 902312 - Seafloor Processes
 - 3D modelled baseplate to mount electronics for bubblecam, working on rewiring everything more permanently.
 - 902504 - Scalable Semantic Mapping
 - Ordered bulkheads for blueboat for GPS masts and CTD
- Emme Wiederhold
 - Out of Office
 - November 25th - December 8th