

Engineering Weekly Report 6/18/2026 - 6/25/2026

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

Executive Council Notes

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Individual Activities

- Michael Anderson
- Kevin Barnard
 - Out of Office
 - Working remotely May 11, 2026 – May 14, 2026
 - MIW May 18, 2026 – May 22, 2026
 - CVPR Jun 1, 2026 – Jun 5, 2026
- Francois Cazenave
- Laura Chrobak
 - Out of Office
 - CVPR Jun 1, 2026 – Jun 5, 2026
- Danelle Cline
 - Out of Office
 - September 21-24 Oceans Conference, Monterey
- Duane Edgington
 - Out of Office
 - June 10 Medical appointment
 - June 15, 17. 19 Medical Appointment
 - September 21-24 IEEE Oceans Conference Monterey
- Kevin Gomes
 - Out of Office
 - Jun 29 - Jul 1 : Vacation
 - Aug 25-27: Monterey Data Conference
 - Sep 21-24: Oceans conference
- Andy Hamilton
- Kent Headley
 - 701147 - MARS O&M
 - test planning w. Knute and Bryan
 - reviewing utils related to ZMQ pub/sub and fan control, potentially useful for tank test troubleshooting.
 - 901101 - Seafloor Mapping
 - Chatted w Dave re code review, TRN, Axial etc.
 - 902204 - Scalable Robotics
 - wrote util to convert svlog to LCM and generate MB1 from LCM log
 - wrote a little test code to help reverse engineer the Cerulean discovery protocol
 - made an initial grid/map of the blue boat survey (20260614) w/o extrinsics
 1. generated LCM bathy data from svlog
 2. merged LCM bathy with nav/attitude log

- 3. generated MB1 log from combined LCM log
 - 4. used MB-System to generate grid
 - Still work to do to incorporate extrinsics and evaluate actual validity/quality of map
- Overhead
 - DOEST ocean soundscape demo
 - proposal review, process prep
 - Code review for libtrnav, MB-System
 - misc admin
- Out of Office
 - Sep 21-24: Oceans conference
- Rich Henthorn
 - 300078 - DMO Support - AUV
 - Local dead reckoning on the backseat
 - 901405 - Wave-Energy Conversion for Oceanographic Applications
 - New battery integration postponed
 - Overhead
 - Proposal input and review
 - Out of Office
 - June 29 to July 6 - Vacation
 - July 16 to 24 - Caress LASS cruise
 - August 10 - 13 - Vacation
- Akshay Hinduja
 - 901809 - Deep Sea Bioinspiration
 - Integration of new backseat app on test bench
 - Improvements in configs for easier operator control
 - Install deployable version on Triton backseat
 - 902101 - LRAUV Technology Development
 - Work plan for terrain awareness work for proposal
 - 902204 - Scalable Robotics
 - Literature review on SOTA place recognition techniques
- Brett Hobson
- Irene Hu
 - 901101 - Seafloor Mapping
 - Made some cables for RBR turbidity sensor and communicated with instrument
 - 901217 - Chemical Sensors
 - Looked into some LEDs for wastewater ISUS
 - 901805 - Coastal Biogeochemical Sensing Program
 - Measured signals and found a code bug for Thom's contractor, NAND flash now communicates
 - Finished Nanofet bias battery power toggling board in KiCAD and sent off for fab and assembly
 - Some discussions and sent some emails about deploying eddy covariance next year
 - 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Fixed up some of the camera interface code, but having troubles getting camera to connect to Harlequin
 - Overhead
 - DOEST tour preparations
- Scott Jensen
 - 901205 - ESP SURF Center
 - Support of Bozeman instrument field testing

- 901405 - Wave-Energy Conversion for Oceanographic Application
 - Helped check out of HDS Harbor battery
- 902106 - Niobicon-Based AUV Docking Development
 - Oversee the build of the WEC - Dock interface bottle
- Out of Office
 - June 26-July 7 (vacation)
 - July 15 - 21 (vacation)
- Brent Jones
- Chad Keczy
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - Out of Office
 - 07/01 (GMT -7)
 - 07/17-07/22 (GMT -4)
 - 07/26-08/07 (GMT +9)
 - 08/26-08/28 (GMT -4)
- Denis Klimov
- Eric Martin
- Thom Maughan
 - 902004 - Planktivore
 - Attended MidSEC conference. Demonstrated Planktivore V1 with swim tow and live feed from small stream. Conference was excellent with lots of discussion, connections.
 - Deployed Planktivore V1 in a research salmon pen near Bergen Norway, collaboration with Tidal.
 - Planktivore proposal
 - Out of Office
 - Fifteen days June 12 - 29 for Norway Planktivore collaboration with Tidal and imaging workshop in Sweden.
 - Two week vacation July 6 to July 17, Colorado
- Mike McCann
 - Out of Office
 - 19 June - 10 July: Vacation
 - 18-24 July: SIGGRAPH in LA
 - 21-24 September: Oceans Conference
- Enoch Nicholson
- Tom O'Reilly
- Mike Risi
 - 200105 - Core Navigation - MDUC
 - Completed DVL PD5 reader process
 - 300070 - DMO Support - Ventana
 - Working on VISCA pan and tilt driver for Ventana Accupositioner
 - 901101 - Seafloor Mapping
 - Set up TCU with Chad on Packard for July expedition
 - Started initial TCU network testings with help from IS
 - 902606 - Low Altitude Survey AUV
 - Meeting and scoping of work for next year's LASAUV proposal
 - 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
- Paul Roberts
 - Out of Office
 - June 13 - June 20, 2026 MidSEC, Sweeden
- Brent Roman
- Carlos Rueda
 - 901502 - Ocean Soundscape
 - Group meetings. Intern mentoring. New VM+GPU in place now (thanks IS!).
 - 902101 - LRAUV Technology Development
 - TethysL now [4.9.72](#) with enhancements and fixes and latest LRAUV definitions.
 - [Mission documentation](#) updates, including a fix to the tethysl pygments lexer for syntax highlighting.
 - TethysDash [4.99.82](#): Important maintenance release, plus API documentation fixes.
 - TethysDash [4.99.80](#): With Claude's assistance, reviewed and merged [PR#74](#); thanks Karen Salamy and Claude for the contribution.
 - Overhead
 - Input to proposals
 - Reported a Quarkus [issue](#) and submitted a [PR](#).
 - Out of Office
 - June 29-30 vacation
- Karen Salamy
 - 300057 - Mooring Maintenance
 - Successful 202606 M1-Mooring Turn
 - 901101 - Seafloor Mapping
 - Received an update request from Jenny P. Will look into it despite being out of projet time.
 - 902101 - LRAUV Technology Development
 - Features
 1. Improved Build a Command modal UX for mission variables: #696, PR #700
 2. Enhanced science/depth charts w/ time window, logset, & axis controls: PR #703
 3. Added Server Health modal with health and subscriber status:PR #704
 4. Added recently used missions/ Amend Command to Build a Command: PR #700
 5. Filtered unit choices by selected mission parameter in Build a Command: PR #708
 6. Restricted Server Status menu item to operator/admin roles only
 - Bug Fixes
 1. Removed stale Mission Script Guide link & clarified variable description:PR #706
 2. Sorted Deprecated/ missions to the bottom of the mission picker: PR #711
 3. Collapsed Deprecated sub-paths into a single group
 - Planning/Research
 1. Reviewed open Dash5 GitHub issues for 2027 effort estimation (for PI request)
 2. Reviewed open issues for potential closure
 - TethysDash

- 902111 - Carbon Flux Ecology
 - SINKER (sinker-dash) - In Progress (PR #57)
 1. Implemented NetworkTab with real live data, toolbar health widgets, and status-logger improvements
 2. Hardened API layer: 503 handling on missing SINKER_API_URL, power draw coercion, Redis default port, isOnline checks
 3. Restored camera aliases and power_status integer enum
 4. Added filesystem cache, jq fallback, and nc guard for instrument status
 5. Fixed SSE relative import path and keyboard accessibility on network widget
 6. Addressed 10+ rounds of Copilot PR review comments
 7. Reviewed the 2027 SINKER Proposal and commented.
- Out of Office
 - March 22-24, 2027 - Vacation
 - On-campus 3 days/week (**T, W, TH**). New OFFICE - G106.
- Brian Schlining

Updated code [for watermarking external framegrabs](#) and adding EXIF metadata. (e.g. [Original](#), [Watermarked](#))

Updated external database embargoes ([M3_ANNOTATIONS](#), [VARS_KB](#))

Configuring [calypso.mbari.org](#) to replace [ione.mbari.org](#) as the external DSG server. Updated the orchestration project, [vars-quickstart-mbari](#), to support the new external configuration.

- Out of Office
 - Jun 11 - Jun 19: Midwater Science and Engineering Community Conference, Sweden.
 - Jun 22 - Jun 26: Vacation
 - Jul 27 - Aug 6: Vacation
- Quinn Shemet
 - 902101 - LRAUV Technology Development
 - IEEE AUV docking paper
 - Some new software hire onboarding
 - 2027 proposal planning
 - Overhead
 - DOEST prep and presentation
 - Proposals
 - Staff council meeting
 - Out of Office
 - June 25: Remote
 - Jun 26 - Jul 5: Vacation
- Alana Sherman
- George Stern
 - 300078 - DMO Support - AUV
 - PO transmitted to DSPL for initial pressure testing, waiting for their approval to ship HW
 - 902106 - Niobicon-Based AUV Docking Development
 - Active 3 phase bridge schematic redrawn and lightly modified; still need to review
 - 902204 - Scalable Robotics
 - Initial preparations for testing new mola thruster hardware/software
 - Identified/Ordered new low power SBC (Rock 3C) with NVME interface since the RPi SD card and USB flash hardware is not able to sustain write speeds in Oak500m
 - 902304 - Piscivore Cam
 - Finished schematic and mechanical design for gen4, began ME drawings and Etech transfer

- Started ordering longer lead items, unfortunately the world is out MCBH8MAS
- Justin Tucker
 - Out of Office
 - 6/5-6/12
- Johann Voigtlander
- Emme Wiederhold