

WeeklyReport

Engineering Weekly Report 12/18/2025 - 12/25/2025

<https://docs.mbari.org/internal/projects/Engineering/Weeklies/2025/>

Executive Council Notes

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Individual Activities

- Michael Anderson
- Kevin Barnard
 - Out of Office
 - Nov 26 - Dec 2: vacation
- Francois Cazenave
- Danelle Cline
 - Out of Office
 - Dec 22 - Jan 2: Vacation
- Duane Edgington
- Jon Erickson
- Kevin Gomes
 - Out of Office
 - Dec 22 - Jan 2: Vacation
- Andy Hamilton
- Kent Headley
 - Out of Office
 - 12/22-1/2 vacation
- Rich Henthorn
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - Improvements to event detection usability
 - Testing updates
 - 902401 - Geo-Sense
 - Team is running cold room test of DAS unit in Bldg G
 - Recording time drift over the holiday weekend
 - Out of Office
 - Dec 18 - WFH
 - Dec 19 - Vacation (previous plans have been postponed TBD)
 - Dec 25 - Holiday
 - Jan 1 - Holiday
- Akshay Hinduja
- Brett Hobson
- Irene Hu
 - 901805 - Coastal Biogeochemical Sensing Program
 - Continued work on alkalinity flowcell. Latest version has been tapped for Durafet, alignment is more off than expected and may iterate. Contemplating a lid.
 - 901904 - Deep-Sea Coral-Sponge Community Observatory

- Bells and whistles to GUI so it can handle closing and opening window while system has already been in use. Required redoing some of back end.
 - Attempt to normalize reflectance image to Spectrolon blanks, still ongoing
 - Troubleshooting an unusually high temp coefficient in LED current that appeared during blank tests. Traced to slightly incorrect use of DAC
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Biweekly planning meeting
- Out of Office
 - Dec 25 - Jan 2: vacation
- Scott Jensen
 - Out of Office
 - Vacation December 22- January 2
- Brent Jones
- Chad Key
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - Out of Office
 - 12/05 (MST)
 - 12/08 (MST)
 - 12/20-01/02 (various)
- Denis Klimov
- Eric Martin
 - Out of Office
 - Vacation 12/22-1/2
- Thom Maughan
 - Out of Office
 - Vacation TBD around Christmas
- Mike McCann
 - Out of Office
 - 22 December - 2 January: Vacation
 - 5-19 January: Remote work
 - 20-23 January: ESIP Winter Meeting - remote attendance
- Paul McGill
 - Out of Office
 - I've been busy sleeping in because I'm retired!
- Enoch Nicholson
 - Out of Office
 - Thursdays at MLML
- Tom O'Reilly
- Mike Risi
 - 200105 - Core Navigation - MDUC
 - Update of navproc on David Packard after aquarium cruise.
 - Fixed issue with auto-start.
 - Working on a process to report power status of ROV instruments.
 - Wind sensor is up after changes in the signal distribution box, the process needed a few small changes.
 - 300062 - DMO Support - Doc Ricketts

- Meeting with Quinn and Drew to discuss 2026 Ricketts support work.
 - Setting up pt_control simulation and test environment for developing presets.
 - Looking into extending the viewing system to include more camera control.
- 300070 - DMO Support - Ventana
 - External control interface modifications.
- Out of Office
 - Offsite on Tuesday and Friday
 - March 3 - March 6, 2025 - vacation
 - June 2 - June 6, 2025 - vacation
 - June 16, 2025 - vacation
 - July 2, 2025 - vacation
 - July 29 - August 1st - vacation
 - November 10 - November 14 - vacation
 - December 1 - vacation
 - December 31 - vacation
 - January 2, 2026 - vacation
 - January 19, 2026 - January 30, 2026 - vacation
- Paul Roberts
 - Out of Office
 - Nov 22 through Nov 30, Scotland
 - Dec 26 through Jan 4, San Diego
- Brent Roman
- Carlos Rueda
 - Out of Office
 - Dec 1–11: vacation/sickness/some remote work
 - Dec 19, 23–30: vacation
 - Jan 2–5: vacation
- Karen Salamy

<http://smdb-dev.shore.mbari.org:8001/> and is built for full development tests before creating pull requests (github repo) and deployment to the production server.

<http://sinker.shore.mbari.org/sinker/>

There is a significant vulnerability in [React Server Components](#). CISA has added it to their Known Exploited Vulnerabilities (KEV) catalog which indicates they have evidence of active exploitation in the wild.

This impacts React Server Components specifically, not React as a whole. Unfortunately for us, that includes downstream frameworks including [next.js when using App Router](#). Based on a cursory GitHub scan, this appears to impact the following repos:

*Dash5: next version **15.2.3**, fixed in **15.2.6***

*Sinker-Dash: next version **15.3.3**, fixed in **15.3.6***

- Out of Office
 - On Vacation for Christmas Holidays: Mon. Dec. 22, 2025 - Fri. Jan 9, 2026. Back in the office on Jan 12th. I will be online and available to help during this time, albeit intermittently.
 - On-campus 3 days/week (**T, W, TH**). New OFFICE - G106.
- Brian Schlining
 - Out of Office
 - Apr 6, 2026 - Apr 24, 2026 - Vacation
 - May 18, 2026 - May 22, 2026 - Marine Imaging Workshop, Gibraltar

- Alana Sherman
 - 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Testing Macro in my office. So far it seems to be working with the new card well and all functionality seems good
 - Running a longer test in deployment mode, after which I will set the focus and can seal up the housing
 - 902208 - Mini ROV Operations
 - Met to plan the winter Mini operations in the face of the shipping delays.
 - 902401 - Geo-Sense
 - Year end spending and budgeting decisions
 - With the teams help we got the instrument up and running again and it is now being cold tested over the holidays
 - Overhead
 - Did final edits to the position description for the engineering division
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- George Stern
 - 300078 - DMO Support - AUV
 - Rough housing sketch and ordered housing/parts for the small pressure chamber upgrade to make eventual testing easier
 - 902204 - Scalable Robotics
 - HSI cap board RevB first board bring up completed without issue; need to test at least one more PCB before considering the design working
 - Next two LED boards tested
 - Opened existing HSI lights and began rebuild
 - Fixed ethernet continuously disconnecting in the mola dock stereo camera
 - 902304 - Piscivore Cam
 - Image testing data review
 - 902306 - SINKER
 - Found, programmed and tested 2 additional battery board som shield assemblies; this means 4 of 6 boards are working as designed; since only 4 boards are needed and there are no current plans to use the battery assemblies; it may not be worth troubleshooting the high current draw on the remaining subassemblies.
- Justin Tucker
 - Out of Office
 - Fridays through March 2026
- Johann Voigtlander
 - Out of Office
 - Dec 16th - Jan 10th - Vacation
 - May 30th - June 5th
 - Oct 9-13th