

WeeklyReport

Engineering Weekly Report 7/17/2025 - 7/24/2025

<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
 - Aug 11, 2025 - Aug 12, 2025 – vacation
- Francois Cazenave
- Danelle Cline
- Duane Edgington
 - 901502 - Ocean Soundscape
 - Reviewing suggestions from google-kaggle multispecies whale model developer Matt Harvey regarding our issues using that model to screen for calls in the MBARI MARS soundscape dataset.
 - Intern meeting
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Team meeting
 - Intern meeting
 - Overhead
 - Reading selected 2026 proposals
 - Prep for ML/AI workshop
- Jon Erickson
- Kevin Gomes
- Andy Hamilton
- Kent Headley
 - Out of Office
 - Jul 14 - Aug 1 (vacation)
- Rich Henthorn
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - Monitoring SES performance on MARS
 - Controller timeout issue seems to have been addressed
 - 902401 - Geo-Sense
 - Norway deployment support
 - Overhead
 - Open House comp time
 - Rec-Com
 - Out of Office
 - Aug 7 and Aug 11: Vacation, email contact
- Akshay Hinduja
 - 901809 - Deep Sea Bioinspiration

- Meet with Joost to go over DeepPIV objectives
 - Start initial research on video stabilization and image denoising pipelines
- 902204 - Scalable Robotics
 - Worked with Sebastian to get the GIM robotics front end submap generator
 - Searched for MBSYSTEM grids to test with as reference grids
 - Wrote scripts to generate and assess databases made from grd file generated pointclouds
 - Generated s7k records for recent BlueBoat data to test for heave data
 - Made changes to 7k-writer's snippet record generator based on Norbit feedback, however their feedback seems to conflict with data
- Brett Hobson
- Irene Hu
 - 901217 - Chemical Sensors
 - Helping to troubleshoot noise issues with pH for MSC3
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - Clean up after last week's deployment, follow up with Benthos
 - Finished updating schematics and turnaround howto guide
 - Out of Office
 - July 21 - 25: intermittently out of office due to flood at home, need to move
- Scott Jensen
 - Out of Office
 - 7/(17-22)/2025 vacation
- Brent Jones
- Chad Key
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - 300083 - DMO Support - LRAUV
 - Supporting deployments for Daphne, Ahi, Brizo (CANON, MBTS, Synchron)
 - 902101 - LRAUV Technology Development
 - Updates for horizontal control during surfacing
 - Docking arm power investigation
 - Fixed sample volume bug for ESP
 - Supporting Opah deep/nav deployment
 - Overhead
 - More LOC-NESS deployment planning
 - 2 days of hotspot work to support CANON experiment.
 - Out of Office
 - 07/23
 - 07/28-08/01 (MST)
 - 08/25-29 (PDT)
 - 9/15-30 (UTC+2)
- Denis Klimov
 - Out of Office
 - Vacation 6/11/2025-6/16/2025
- Eric Martin
 - Out of Office
 - Jul 7, 2025 - Jul 8, 2025 : Vacation
 - Aug 4, 2025 - Aug 5, 2025 : Vacation
- Thom Maughan

- 300083 - DMO Support - LRAUV
 - Built two battery packs for vehicle integration test and deployment
 - Updated serial protocol spec (again)
 - BatMan firmware updates to enhancements to the protocol
- Out of Office
 - TBD
- Mike McCann
 - 901009 - CANON
 - Processed MBTS Dorado mission 2025.203.00
 - 901101 - Seafloor Mapping
 - Presented [X3D and 3D Tiles for Oceanographic Data Visualization poster](#) at ESIP
 - 901910 - Plankton Taxonomic Groups from AUVs
 - Starting reprocess of entire Dorado archive with improved value for fluo_bl_threshold
 - Overhead
 - ESIP Summer Meeting
 - Out of Office
 - 22-25 July – ESIP Summer Meeting
 - 28 July - 8 August – Remote work
 - 10-14 August – SIGGRAPH
 - 18-29 August – Remote work
 - 1-5 September – Vacation
 - 8-13 September – Web3D & Digital Heritage Conference
 - 15-18 September – Vacation
- Paul McGill
 - Out of Office
 - I've been busy sleeping in because I'm retired!
- Enoch Nicholson
 - 706008 - READI-Net
 - Fido sampler build
 - Assembled turn tables, rams, nitrogen assys
 - 901007 - Benthic Biology & Ecology
 - Met and debriefed the june deployment
 - Made plans to work towards October deployment of brs
 - 902306 - SINKER
 - Met to discuss system status since deployment
 - Actuator stuck, but we were able to successfully get it moving again by driving it at max speed
 - Overhead
 - Helping with snocam
- Tom O'Reilly
- Mike Risi
 - 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
- Paul Roberts
 - 702108 - Deployable AI

- Triton camera data review
 - Triton 45 deployment prep
- 902004 - Planktivore
 - V2B build
- 902306 - SINKER
 - MARS testing / troubleshooting
 - Data publishers for dashboard
- Brent Roman
 - Out of Office
 - May 30 – June 23
- Carlos Rueda
- Karen Salamy
 - 300057 - Mooring Maintenance
 - Prepping for M1 Mooring turn tomorrow AM.
 - 902101 - LRAUV Technology Development
 - Added new github issues for Dash5 for the LRAUV team.
 - 902306 - SINKER
 - The first SINKER dash is up and running on sinker.shore.mbari.org/sinker. The deployment of the system went well on the 15th of July, however, there have been some major power issues for SINKER on MARS. Several cameras have had to be turned off to save power. Images are still being taken and slowly transferred daily but it is not possible to truly show images and videos in RT. Danelle and I are discussing the temporary setup of a docker volume that would contain all of the images taken for this deployment to display for the team on the Dash. More on that soon hopefully.
 - Overhead
 - Reading proposals for my 2026 allocated time.
 - Gone next week for vacation.
 - Out of Office
 - July 30-August 5, 2025 - Personal vacation time
 - On-campus 3 days/week (**T, W, TH**). New OFFICE - G106.
- Brian Schlining
 - Out of Office
 - Jul 21 - 24 - Vacation
 - Aug 11 - 12 - Vacation
 - Aug 18 - 21 - Vacation
 - Sep 3 - Sep 17 - Out of Office
- Alana Sherman
 - Out of Office
 - On vacation 7/17-25
- George Stern
 - 902204 - Scalable Robotics
 - Mola light strobe control board built and tested
 - 902304 - Piscivore Cam
 - Identified a new lens
 - First housing is assembled and mostly working
 - Out of Office
 - Open house
- Justin Tucker
 - 902010 - Mesopelagic LRAUV
 - Amalga composite tube order for destructive testing

- 902101 - LRAUV Technology Development
 - Working through a solidworks macro to export mass properties for the entire assembly.
 - Update and reprint of thruster alignment templates
- Overhead
 - ANSYS license update
- Johann Voigtlander
 - 902204 - Scalable Robotics
 - Started Mola2 commissioning, discovered overdischarged batteries
 - Mola1 in the test tank on Tuesday, collecting data
 - Designed and printed mounts for WiSub & USBL on Mola AUV docking station
 - Helped Pushyami repair Blueye ROV thruster
 - 902208 - Mini ROV Operations
 - Packaged and inventoried the last few items to ship up to Alaska
 - 902504 - Scalable Semantic Mapping
 - Blueboat heave test completed
 - Out of Office
 - Dec 16th - Jan 10th - Vacation
 - May 30th - June 5th