

WeeklyReport

Engineering Weekly Report 8/7/2025 - 8/14/2025

<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
 - Leveraging [Carlos work on scripts to automate production of audio products from Pacific Sound data](#) to automate production of resampled 24kHz data, and feeding 5 sec sound segments to google kaggle multispecies whale model. Working on 32cpu virtual machine gizo.shore.mbari.org
 - Team meeting Aug 13
 - Intern meetings.
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Intern meeting
 - Overhead
 - Intern symposium Aug 13
- Jon Erickson
- Kevin Gomes
 - 300059 - DMO Support - RV David Packard
 - Finishing configuration of ODSS locations to TimeZero on bridge.
 - Overhead
 - With help from Antje, John Zicker, and Cindy, put on a machine learning workshop on 8/4.
 - Proposal review
- Andy Hamilton
- Kent Headley
 - 902204 - Scalable Robotics
 - fixed bug in LCM timestamps
 - Overhead
 - Proposal review discussion
 - Hiring: interviewing
 - misc admin
- Rich Henthorn
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - More SES data analysis
 - Active time of year for sediment transfer

- Setting up trigger trap for possible deployment next week
 - Overhead
 - Rec-Com
 - Out of Office
 - Aug 7 and Aug 11: Vacation
- Akshay Hinduja
 - 901809 - Deep Sea Bioinspiration
 - Prepare plan for testing pipelines for OceanShot project
 - 902204 - Scalable Robotics
 - Prepare and push deployment ready versions of sen_norbit, 7k_writer, and mbes_localization
 - Facilitate technology knowledge transfer for team travelling to arctic cruise
 - Update Atuncita with latest versions, verify modules work
 - Update readmes and write guides for offshore team
 - Overhead
 - Intern support
- Brett Hobson
- Irene Hu
 - 901217 - Chemical Sensors
 - Continuing experiments with noise on PTC
 - 901904 - Deep-Sea Coral-Sponge Community Observatory
 - RS485 interface board sent out for fab
 - Troubleshooting controller-to-controller comms
 - Started work on wiring diagrams
 - Out of Office
 - Aug 12: WFH
 - Aug 15: out of office, moving
- Scott Jensen
 - 706008 - READI-Net
 - Performed first run checkout on all instruments
 - Flow sensor calibrations
 - Discussions about puck counter sensor
 - 808015 - Monitoring McCloud
 - Monitoring TNC cooling pump situation
 - 901405 - Wave-Energy Conversion for Oceanographic Applications
 - Another meeting closer to building but some questions linger
 - Out of Office
 - 9/(8-12) Vacation
- Brent Jones
 - 901112 - Monterey Bay Time Series
 - Carson day
 - Diagnose SIPPER failure. Bad digital I/O on EPOS4 motor controller. Coded work around and tested in tank
 - 901502 - Ocean Soundscape
 - Re running Triton software to detect clicks
- Chad Keczy
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - Out of Office
 - 07/23

- 07/28-08/01 (MST)
 - 08/25-29 (PDT)
 - 9/15-30 (UTC+2)
- Denis Klimov
- Eric Martin
 - 901101 - Seafloor Mapping
 - Arctic Prep
 - Lidar Vendor meeting, progress is slow, but will be on time.
 - 902204 - Scalable Robotics
 - Arctic Prep
 - 902504 - Scalable Semantic Mapping
 - Arctic Prep
 - 902505 - 2025 Arctic Expedition
 - SO MUCH PREP
 - Out of Office
 - Aug 4, 2025 - Aug 5, 2025 : Vacation
- Thom Maughan
 - 300083 - DMO Support - LRAUV
 - Enhanced the battery charge handler in BatMan, testing and bug fixing.
 - Added fields and new serial commands to support charging.
 - Testing on LRAUV
 - Updated protocol spec.
 - 902004 - Planktivore
 - Met with Chad, discussed feedback on camera controller schematics. Discussed next task as power control for long term deployments.
 - Working with Brent on camera controller, strobe board and cable testing.
 - Overhead
 - Deployment of first Argo Float with MSC3 and MoSoS v5.1.7 on Tuesday 12 Aug 2025!!! Data looks solid.
- Mike McCann
 - 901009 - CANON
 - Got search2.mbari.org and dods2.mbari.org temporary DNS entries for testing of the new elvis2
 - 901101 - Seafloor Mapping
 - Conversations and presentations about [X3DOM + OGC 3D Tiles](#) at SIGGRAPH
 - 901910 - Plankton Taxonomic Groups from AUVs
 - Figured out provenance tracking between data in stoqs_all_dorado and stoqs_all_dorado_t
 - Ended up renaming stoqs_all_dorado_t to stoqs_all_dorado for follow-on ML work
 - 902403 - Expedition DB Modern
 - Issuing PO for ActiveState renewal
 - Out of Office
 - 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
 - Completed basic checkout on all FIDO instruments
 - Performed flow sensor calibrations
 - Puck counter calibrations, developing improved calibration method using lookup tables
 - Finalized mechanical loose ends
- Overhead
 - Conducted MTECH interview with Able Wallace for technician position
- 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
 - 901221 - Midwater Time Series
 - 4k recorder housing fab
 - 4k recorder chassis design and i2map upgrades
 - 902004 - Planktivore
 - V2B build
 - 902204 - Scalable Robotics
 - HSI strobe design
 - 902306 - SINKER
 - Real-time data and system health status
- Brent Roman
 - 708184 - ESP Monitoring PNW
 - ESPfriday continues sampling using Certus for comms
 - 901205 - ESP SURF Center
 - Working with Preston to diagnose PCR instrument failures in Iceland
 - The PCR temperature sensor seems to be reading 35C high
 - 902304 - Piscivore Cam
 - Integration of packaged camera is going well.
 - Initial tests in tank working well
 - Need to confirm that LRAUV restart sys will warn camera of shutdown
 - Need to create some LRAUV mission to switch camera off at night
 - Out of Office
 - Visiting family in Anacortes, WA for funeral Sept 3 - 9th
- Carlos Rueda
 - 901502 - Ocean Soundscape
 - [mbari-pbp 1.7.4](#) with a regression fix and other adjustments. Jupyter@gizo updated as well. Hands-on session with Duane re the use of [sox](#) to batch resample 256kHz audio files to 24kHz.
 - 902101 - LRAUV Technology Development
 - TethysDash backend [4.97.4](#) with significant internal changes as part of modernization.
 - Assistance to WHOI.
 - Finally managed to have a functional LRAUV sim after a long time. This is very important in general for LRAUV/TethysDash development/testing, and more recently to test/validate the significant changes going on in TethysDash, which involve the critical [dataLink](#) endpoint that vehicles use to connect.

- 902504 - Scalable Semantic Mapping
 - Dial [1.8.74](#).
 - Set up and tested Dial on Atuncita in preparation for the Arctic.
- Overhead
 - Intern symposium
- Karen Salamy
 - 902306 - SINKER
 - Heavily focused on the SINKER UI updates for the SINKER team. Added data view capabilities in real time under the Data Menu item

The screenshot shows the MBARI SINKER-DASH web interface. The left sidebar contains a navigation menu with categories: Cameras (PTVR High-Mag, PTVR Low-Mag, SedFlux High-Mag, SedFlux Low-Mag, Shadowgraph), Instruments (ADCP), Lights (SedFlux Light, Shadowgraph Light), Controls (Interface Control), and Power (Battery Bank, Power System). The main content area is titled 'ADCP - Acoustic Doppler Current Profiler' and displays a table of data. The table has columns for DEVICE, DATE/TIME, ACOUSTIC VELOCITY, DIRECTION (°), CURRENT SPEED (M/S), DEPTH (M), PRESSURE (BAR), TEMPERATURE (°C), SALINITY, POWER DRAW (KHZ), and POWER STATUS. The data is sorted by Date/Time (desc) and shows 150 rows of data for ADCP measurements taken on 8/13/2025.

DEVICE	DATE/TIME	ACOUSTIC VELOCITY	DIRECTION (°)	CURRENT SPEED (M/S)	DEPTH (M)	PRESSURE (BAR)	TEMPERATURE (°C)	SALINITY	POWER DRAW (KHZ)	POWER STATUS
ADCP	8/13/2025, 11:38:09 AM	1482.40	241.10	0.08	886.83	886.83	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:37:09 AM	1482.40	232.96	0.08	886.80	886.80	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:36:09 AM	1482.40	239.92	0.07	886.82	886.82	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:35:09 AM	1482.40	243.10	0.08	886.82	886.82	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:34:09 AM	1482.40	250.35	0.08	886.79	886.79	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:33:09 AM	1482.40	240.77	0.08	886.77	886.77	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:32:09 AM	1482.40	236.61	0.08	886.79	886.79	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:31:09 AM	1482.40	244.25	0.08	886.77	886.77	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:30:09 AM	1482.40	239.85	0.07	886.76	886.76	4.29	0.00	0.93	ON
ADCP	8/13/2025, 11:29:09 AM	1482.40	248.47	0.06	886.76	886.76	4.28	0.00	0.93	ON
ADCP	8/13/2025, 11:28:09 AM	1482.40	239.29	0.05	886.80	886.80	4.28	0.00	0.93	ON
ADCP	8/13/2025, 11:27:09 AM	1482.40	247.36	0.06	886.75	886.75	4.28	0.00	0.93	ON
ADCP	8/13/2025, 11:26:09 AM	1482.40	245.22	0.07	886.75	886.75	4.28	0.00	0.93	ON
ADCP	8/13/2025, 11:25:09 AM	1482.40	250.90	0.06	886.77	886.77	4.28	0.00	0.93	ON
ADCP	8/13/2025, 11:24:09 AM	1482.40	264.35	0.06	886.78	886.78	4.28	0.00	0.93	ON
ADCP	8/13/2025, 11:23:09 AM	1482.40	241.89	0.05	886.72	886.72	4.28	0.00	0.93	ON
ADCP	8/13/2025, 11:22:09 AM	1482.40	233.66	0.05	886.75	886.75	4.28	0.00	0.93	ON
ADCP	8/13/2025, 11:21:09 AM	1482.40	261.13	0.04	886.73	886.73	4.28	0.00	0.93	ON

- Overhead
 - Just returned from vacation and spent time catching up with email and project updates.
- Out of Office
 - On-campus 3 days/week (**T, W, TH**). New OFFICE - G106.
- Brian Schlining
 - Out of Office
 - Aug 7, 2025 - Aug 12, 2025 - **Vacation**
 - Aug 18, 2025 - Aug 21, 2025 - Vacation
 - Sep 3, 2025 - Sep 17, 2025 - Out of Office
- Alana Sherman
 - 902208 - Mini ROV Operations
 - Held meeting to discuss the electrical system of the Mini with Arctic team prior to their departure.
 - Overhead
 - Proposal review all week
- George Stern
 - 902204 - Scalable Robotics
 - Completed fixturing design and drawings
 - Purchased and received remaining mechanical hardware
 - Electrical interconnect planning and procurement
 - 902304 - Piscivore Cam
 - Final preparations and integration checks for the deployment
- Justin Tucker

- Johann Voigtlander
 - 902204 - Scalable Robotics
 - Assisting with Mola in the test tank
 - Purchased RTK GPS options for the Arctic
 - Resolving shipping issues
 - 3D model of the docking station complete
 - 902208 - Mini ROV Operations
 - MiniROV high voltage meeting with Alana
 - 902402 - CSEM
 - Trigger box housing completed
 - Programming finished and tested
 - Out of Office
 - Dec 16th - Jan 10th - Vacation
 - May 30th - June 5th