

Engineering Weekly Report 8/18/2022 - 8/25/2022

Executive Council Notes

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Individual Activities

- Michael Anderson
- Kevin Barnard
 - 701139 - ML Tracking
 - Provided i2MAP transect images/localizations to OWOD group
 - 902002 - FathomNet
 - Set up seminar at CSUMB in December via the ENSCI dept.
 - 902204 - Scalable Marine Robotics Foundations
 - Got Kimera-VIO working on simulated dataset
 - Overhead
 - AWS workshop
 - Out of Office
 - Marine Imaging workshop Oct 3 - 7 2022 CEST Brest, France (GMT+2)
 - Vacation Oct 8 - 23
- Francois Cazenave
 - 901405 - Wave-Energy Conversion for Oceanographic Applications
 - Preparing buoy for deployment
 - 902106 - Niobicon-Based AUV Docking Development
 - Designing new mooring
 - Out of Office
 - Out sick on Monday
- Danelle Cline
 - Out of Office
 - Marine Imaging workshop 3 - 7 Oct 2022 CEST Brest, France (GMT+2)
- Duane Edgington
 - 901502 - Soundscape Research and Education
 - Continue monitoring the Alexa Skill MBARI Ocean Soundscape.
 - Todo: update code with Alexa Presentation Language (Display Interface is now deprecated; images are no longer rendering on Alexa Show devices i.e. devices with a screen).
 - 902005 - VARS Annotation Assistance
 - Started work on StrongSort tracker. Trying to get it to build on my machine and in SageMaker.
 - Overhead
 - AWS training day August 23
 - Out of Office
 - Monterey Data Conference, Aug 29 - Sep 1 2022 PDT.
 - Vacation (international) Sept 12 - Oct 1 2022
 - Marine Imaging workshop Oct 3 - 7 2022 CEST Brest, France (GMT+2)
 - Vacation (international) Oct 9 - 19 2022
 - Vacation October 21-23 2022 (Southern California)
- Jon Erickson

- Kevin Gomes
 - 902012 - Telepresence on MBARI Research Vessels
 - Preparation work for telepresence cruise
 - Some feature addition and monitoring first production use of new telepresence web portal
 - 902202 - MBARI Cloud Integration Exploration
 - Hosted AWS for combined training/meetings
 - Working on AD/SSO integration between AWS and MBARI
 - Account and user management with the new AWS SSO system
 - Overhead
 - Proposal/resource related overhead
 - More Qt exploration
 - Out of Office
 - 9/7-9/8: Vacation
 - 10/3-10/6: Vacation
- Andy Hamilton
- Kent Headley
 - 600034 - Precision Control Technologies for ROVs and AUVs
 - Rob and I have made some good progress on Dorado TRN/fastsim integration. The simulator is publishing empty beam data, which is being picked up by a test client. I've made some updates to the test client to fix bugs and add features. Helping Rob with various network and software issues, and MB-System installation as needed so we can test more of the TRN path.
 - 902204 - Scalable Marine Robotics Foundations
 - Working on image capture - climbing Qt learning curve
 - Overhead
 - DEI Committee meeting
 - SRSC meeting
 - Hiring (circulating draft job description, forming committee)
 - Misc admin
- Rich Henthorn
 - Out of Office
 - Aug 22 - Aug 30, WFH mostly, pre-travel
 - Aug 31 - Sep 16, vacation in Germany, email only
 - Sep 19 - 21, WFH post-travel quarantine
 - Sep 28 - Oct 6, Sta.M Cruise (final scheduled cruise of the Western Flyer)
- Brett Hobson
- Scott Jensen
 - Out of Office
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- Brent Jones
 - Out of Office
 - Sick Leave due to Covid exposure
- Chad Keczy
- Brian Kieft
 - 706007 - USGS Great Lakes Prey Fish Assessment
 - Preparing to wrap up Lake MI deployment next week.
 - Dealing with various issues on Stella and running vehicles.
 - 708168 - DHS/LRAUV Under-Ice
 - Troubleshooting Stella GPS issues
 - Tagging/loading Polaris and Stella. Assisting in prep for Polaris for Tuesday's salinity intrusion cruise off the cape.

- 901009 - CANON
 - Did a couple runs for Giancarlo to collect raw AHRS data. Working on reviewing.
- 901513 - Targeted Sampling by Autonomous Underwater Vehicles
 - Troubleshooting basic host sim issues with Yanwu
- 902101 - LRAUV Technology Development and Fleet Operations
 - Updated CPLD programming repo and tested on test mobo
 - Diagnosed clock issue on spare mobo
- 902106 - Niobicon-Based AUV Docking Development
 - Integrating stepper motor actuator for docking arm
- Out of Office
 - 07/31 - 08/11 (EDT) USGS
 - 08/19 - appointments
 - 08/28 - 09/01 (EDT) USGS
 - 09/12 - 09/28 (GMT+2 - vacation)
- Denis Klimov
- Eric Martin
 - Out of Office
 - Aug 21-Sept 18 Arctic Expedition
- Thom Maughan
 - 901009 - CANON
 - Working microfluidics quote
 - eDNA toolbox charged up, tested, provided to Kobun for filming.
 - 901805 - Coastal Biogeochemical Sensing Program
 - Chasing ymodem bugs, found root cause issue was in microsd card f_read fail on MFET, two different MFETs had this problem. Looking into update of FatFS and building a test case
 - Working a bug on MpHOX test menu (no data config'd causes crash).
 - 902004 - Planktivore
 - Prep Planktivore for deployment
 - Camera controller updates for power reduction, wakestr board bringup, boost converter review package.
 - Out of Office
 - 2week Vacation postponed until sometime in early Sept.
- Mike McCann
 - 901101 - Seafloor Mapping
 - Merged changes to improve basemaps and filtered table & map data views in smdb
 - 901221 - Midwater Time Series
 - Writing code in auv-python to routinely process new i2MAP mission data
 - Overhead
 - Investigated fixes for truncated camera log data for V999 from 1995
 - AWS day: Sagemaker, Robomaker, Python & CLI
 - Trying to figure out bitbucket-pipelines to use docker-compose for emdb
- Rob McEwen
- Paul McGill
 - 300070 - DMO Support - Ventana
 - Did hydraulic and tether loss calculations to help pilots troubleshoot problems.
 - 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Wrote code to generate Laser Measure calibration files for import into Dan Davis' code. Am tweaking calibration files to try to improve accuracy.
 - 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Got equipment mobilized so Coral Macro Camera can be recovered on Kakani's WF cruise.

- Out of Office
 - Will be on vacation Aug 29 thru Sep 5.
- Tom O'Reilly
- Doug Pargett
 - Out of Office
 - August vacation
- Mike Risi
 - Out of Office
 - May 5 - vacation
 - May 9-10 - vacation
 - June 2-8 - OI cruise
 - June 10-14 - vacation
 - June 20-22 - vacation
 - July 19-20 - vacation
 - August 8-9 - out of office
 - Out of office most Fridays
- Paul Roberts
 - Out of Office
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- Brent Roman
 - 708179 - Saildrone AK
 - Rogue DHCP server was confusing ESP, so disabled DHCP client.
 - ESPserver's banIP service erroneously blocked Surveyor's Iridium IP
 - Todd Ruston helped temporarily disabled banIP
 - 708165 - NOAA-MERHAB
 - ESPfriday's forearm actuator is failing – probably mechanical slippage
 - Patched with hacks to rehome Forearm after any failure
 - Seems to be working again, for now.
 - DQ1971 - PCM/HAB Lake Erie
 - Working with Preston and Ussler diagnose sampling trouble on ESPhonu
 - Out of Office
 - Sept 6 through roughly Sept 16
- Carlos Rueda
- Karen Salamy
 - Out of Office
 - Vacation: August 4-5; family visiting from out of town.
- Brian Schlining
 - 500055 - VARS, M3/RS, DSG
 - [Finished specs for video player](#). Shopping for external contractor.
 - Iron Mountain video ingest.
 - 902002 - FathomNet
 - Writing a new [Oceanvision AI game logger](#).
 - Created [milestones](#) for upcoming, externally funded work. Starting work on a development plan for [beta-2](#).
 - Overhead
 - AWS workshop
 - Out of Office
 - 10/3 - 10/7 - [Marine Imaging workshop](#), Brest, France
- Alana Sherman
 - 901809 - Deep Sea Bioinspiration

- Tried to troubleshoot an issue with the science port comms to the DeepPIV camera. In the end there seemed to be either a fault or configuration issue with the focal serial expansion board. We changed the internal wiring to bring serial comms through another port. It is a hack but should get us through this cruise.
- 902208 - MiniROV Operations
 - Worked on vehicle schedule for 2023 as part of Phase 1 proposal feedback
- Overhead
 - Spent most of Friday trying to balance labor resources and review feedback as part of phase 1
 - Strategic Roadmap meeting
 - Crane training
 - Scheduling interviews for EE position
- Out of Office
 - Out for dentist appt