

Engineering Weekly Report 6/2/2022 - 6/9/2022

Executive Council Notes

- MBARI now has a non-profit Team account on GitHub. Here's the email from Brian Schlining: "If you've read this far then you already know that MBARI has a non-profit account at <https://bitbucket.org/mbari/> for hosting both public and private Git repositories at no-cost to MBARI. In addition, we've just received a non-profit Team Plan for GitHub at <https://github.com/mbari-org>. So what does this mean? You now have more options for hosting source code repositories. If you've been using bitbucket and are happy with it, then carry on; there's no need for you to do anything. On the other hand, if you'd like the option to use GitHub, please send me or Kevin Gomes (kgomes@mbari.org) the email or username for your GitHub account and we will add you to the mbari-org team. If you have any questions about GitHub or GitHub vs Bitbucket please don't hesitate to contact me."

Individual Activities

- Michael Anderson
- Kevin Barnard
 - 701139 - ML Tracking
 - Started writing track visualization code
 - Working to reconstruct unlogged data for analysis
- Francois Cazenave
 - 901405 - Wave-Energy Conversion for Oceanographic Applications
 - Monitoring buoy.
 - 902106 - Niobicon-Based AUV Docking Development
 - Participated in DOEST presentation
 - Designing new buoy
- Danelle Cline
 - Out of Office
 - May 27th, 28th,
- Duane Edgington
 - 901603 - Video TAG
 - Working sessions with intern Manuel Gozzi.
 - 901618 - Pelagic-Benthic Coupling
 - Working session on Laser Measure with Paul McGill June 9
 - 902005 - VARS Annotation Assistance
 - Continued work on testing ECS/SQS batch processing video files with yolov5-deepsort detection and tracking
 - Out of Office
 - Registered for Monterey Data Conference, Aug 29 - Sep 1 2022
 - CVPR June 19 - June 24 2022 (virtual) CDT (GMT-5)
 - Marine Imaging workshop 3 - 7 Oct 2022 Brest, France
- Jon Erickson
 - 701145 - Penguin Hotspots
 - Still doing assembly. Both gimbal assemblies are done. Waiting on the flow shell parts from vendors.
 - 800139 - EyeRIS (Remote Imaging System)

- The shop is still working on the 1500m version
- 902010 - Mesopelagic LRAUV
 - Have prints for the Chassis assembly and Load Control, as well as the prints for the assembly cart. All these are being drawing checked.
 - Still working with and advising Quest Institute. Mostly about their MARS experiment.
- Ben Erwin
 - Out of Office
 - Vacation 2/12-2/20
- Kevin Gomes
 - Out of Office
 - 5/17-18: Sick leave
 - 6/20: Vacation
 - 8/1-8/5: Vacation
 - 10/3-10/6: Vacation
- Andy Hamilton
- Kent Headley
 - 600034 - Precision Control Technologies for ROVs and AUVs
 - Working to resolve ROV TRN issues
 - 901101 - Seafloor Mapping
 - Generated a feature update and MB-System TRN release for Sentry re upcoming Axial cruise
 - 902204 - Scalable Marine Robotics Foundations
 - Looking at Gemini sonar SDK
 - Meet w/ GT and Bastian
 - Overhead
 - Working on upcoming hires and staffing
 - 2023 budget prep
 - Shipped Carbon Waveglider materials, working on how to transfer solidworks models
 - DEI committee
 - Out of Office
 - July 14-29 (tentative, vacation)
- Rich Henthorn
 - 600034 - Precision Control Technologies for ROVs and AUVs
 - TRN Replay for DeltaT data in CSV format
 - 800139 - EyeRIS (Remote Imaging System)
 - EyeRIS LRAUV Interface
 - Camera controller communication
 - LRAUV syslog interface
 - 901405 - Wave-Energy Conversion for Oceanographic Applications
 - Trefoil Controller plug-in module for buoy_sim Gazebo application
 - 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Weekly meeting
 - Overhead
 - DOEST
 - Out of Office
 - July 4 - 18, WFH and vacation, email, phone, zoom OK
 - Aug 30 - Sep 16, vacation in Germany, email only
 - Sep 22 - 29, Sta.M Cruise (final scheduled cruise of the Western Flyer)
- Brett Hobson
- Scott Jensen
 - Out of Office

- June 9-10 for UofW/APL visit
 - June 20-22 Ohio recovery
- Brent Jones
 - 901805 - Coastal Biogeochemical Sensing Program
 - Final bench checks on Spray OCR integration
 - Prep Spray 29 for deployment
- Chad Keczy
- Brian Kieft
 - Out of Office
 - 05/15 - 06/04 (EcoHAB PDT)
 - 07/02 - 07/09 (HST - vacation)
 - 07/13 - 07/22 (AKDT)
 - 08/01 - 09/03 (EDT)
 - 09/12 - 09/28 (GMT+2 - vacation)
- Denis Klimov
- Diana LaScala-Gruenewald
- Eric Martin
- Thom Maughan
 - Out of Office
 - May 27 - 31 Camping at Caswell Memorial Park by Stanislaus river
 - Jun 12 - 22? TBD. Remote work from Colorado for elder care.
 - Jul 6 - 19 Camping, Bear Lake Monster Swim
- Mike McCann
 - 901009 - CANON
 - Watching for delayed mode LRAUV data to load into [stogs_echohab_may2022](#)
 - 901111 - AUV Infrastructure Support
 - Processed Dorado Gulper mission 2022.158.00
 - 901221 - Midwater Time Series
 - Validating dissolved oxygen computations by writing unit tests in auv-python
 - Overhead
 - Still working with Peter on a git/ssh solution for ssdsadmin on host elvis
 - Out of Office
 - 27 June - 29 July: Vacation
- Rob McEwen
- Paul McGill
 - 300070 - DMO Support - Ventana
 - Working with pilots to solve wiring issue with hydraulic servo valves.
 - 701145 - Penguin Hotspots
 - Assembling and wiring the second REMUS sonar payload.
 - 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Collecting documentation for Squirty sediment-trap agitator for IP license to a New Zealand collaborator.
 - Met with Duane E. about Laser Measure, will meet again this week.
 - 901700 - Acoustical Ocean Ecology
 - Editing paper on animal avoidance of vehicles.
 - Out of Office
 - Was out of office Thu for dental work.
- Tom O'Reilly
- Craig Okuda
- Doug Pargett

- Ben Raanan
- 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
 - August 8-9 - out of office
- Paul Roberts
 - 800139 - EyeRIS (Remote Imaging System)
 - Deploying AyeRIS on LRAUV Galene for tracking tests, image transfer, and you transects
 - Starting to ingest ROIs into RIMS database
 - 901809 - Deep Sea Bioinspiration
 - Finalizing multicamera PoE hardware and PSU
 - 902001 - Ventana 4k camera
 - Reviewing final optical corrector design for revised MxD optics
 - Presented 4k camera developments during DOEST
 - 902204 - Scalable Marine Robotics Foundations
 - Designing laser and LED pattern projectors for test tank platform
- Brent Roman
 - 706005 - eDNA Grass Carp Sandusky
 - Updated Daily mission framework to allow changing start time of next phase
 - 708143 - ECOHAB - Andy Allen
 - Ussler reports code for evaluating SPR results in real-time seems to be working
 - 708146 - Saildrone
 - Surveyor still in Alameda. ESPmv3 loaded and ready for it to depart.
 - 708165 - NOAA-MERHAB
 - Discovered that external pump flow rate is not being reported correctly by can
 - But it is correct in the logs (alerted NOAA so we can replicate in their lab)
 - 901205 - SURF Center
 - Finished last of the seven 2hr ESP training sessions via Zoom
 - Google disabled Gmail login for ESPs yesterday
 - Disabled user chosen passwords for 3rd-party apps
 - Switched to one of their generated passwords
 - 901913 - WetWiFi
 - OceanComm sent me their updated lease agreement.
 - Still negotiating the “special conditions” therein.
 - Out of Office
 - July 21 through roughly August 21
- Carlos Rueda
 - 901009 - CANON
 - Revising MXM implementation
 - 902009 - AUV User Experience Design
 - Revamping the TethysDash API definition and documentation, while also doing associated adjustments in implementation – <https://docs.mbari.org/tethysdash/apidocs/>
 - 902101 - LRAUV Technology Development and Fleet Operations
 - Created API key and explored <https://www.marinetraffic.com/> API to possibly include a layer of vessel positions on the map.
 - Some exploration trying to include a “Chlorophyll-a, NOAA VIIRS” layer on the map.

- Fixed a bug in TethysDash backend, now [4.8.88](#).
 - Preparing docker release
- Overhead
 - Attended some DOEST presentations.
- Out of Office
 - June 9–10: vacation
 - Just 15 afternoon (medical)
- Karen Salamy
 - 300057 - Mooring Maintenance
 - Working with Jared F. on upcoming M1 202207 turn (July 15th, 2022) deployment.
 - 901101 - Seafloor Mapping
 - Adjusting some code to work with Mike M's updateMap() method. The addition of the Leaflet-Geoman geometry menu tool does not currently work with it.
 - 902009 - AUV UI
 - Will be working with Carlos to create a complete list of REST API calls for the new @mbari/api-client package and have responses typed based upon the Irauv-dash API calls. I hope to chat with Carlos this week or early next.
 - Overhead
 - Spent some time working with Git command line calls this week.
 - Also, looking at ReactJS.
 - Out of Office
 - Planning vacation: June 16, June 20-24.
- Brian Schlining
 - 500055 - VARS, M3/RS, DSG
 - Finishing up the [implementation](#) of the [new video player remote protocol](#).
 - 902002 - FathomNet
 - [Discussions with the BIIGLE team](#) about the [ifdo](#) 'standard'.
 - Wrote a [proof-of-concept ifdo to FathomNet csv converter](#).
 - Out of Office
 - Brian is working at home taking care of a daughter with COVID.
 - Jul 7-8 Vacation
 - Jul 25-28 Vacation
- Alana Sherman
 - Out of Office
 - Out sick all week