

Engineering Weekly Report 4/9 - 4/15

Executive Council Notes

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Individual Activities

- Francois Cazenave
 - Out of Office
 - Special leave
- Mark Chaffey
- Danelle Cline
- Duane Edgington
 - Out of Office
 - April 8-9: Vacation
 - April 13-15: Out sick
- Jon Erickson
- Kevin Gomes
 - 901009 - CANON
 - WaveGlider portal
 - 901915 - Improving MBARI Data Impa
 - Catalog research and design
 - Overhead
 - Lots of planning and organization. Doing some things that I've wanted to get cleaned up for some time now.
 - Battling some strange computer issues and think I have them resolved
 - Out of Office
 - May 6-7: Vacation
- Andy Hamilton
- Kent Headley
 - 600034 - Control Tech - Rock
 - Working with Rich on some TRN code cleanup
 - Writing proposed plan for managing new TRN repo
 - 901101 - Ocean Imaging
 - Syncing trndev branch with updates from master
 - Addressing (cosmetic/style) issues in TRN code
 - Overhead
 - meetings
 - Out of Office
 - errands for at-risk family/neighbors
- Rich Henthorn
 - 600034 - Control Tech - Rock
 - libtrnav replaces G2TerrainNav as development repo going forward
 - Using trn-replay to validate libtrnav ⇔ G2TerrainNav numerics
 - TRN LCM comms
 - 901221 - Midwater Time Series

- Planning for auv-qnx CVS to git migration
 - 901405 - PowerBuoy Development
 - Minor MBC repository restructuring to accommodate project-wide LCM types
 - 901800 - LRAUV Payload & Support
 - Planning for auv-qnx CVS to git migration
 - TRN LCM comms
 - 901807 - Next Gen Acoustic Dorado
 - Planning for auv-qnx CVS to git migration
 - Overhead
 - Training
- Brett Hobson
- Scott Jensen
- Brent Jones
 - 901502 - Passive Acoustic Sensing
 - Training a CNN to hopefully detect Sperm Whale clicks. Finished processing 5 years of hydrophone data. Documenting process
 - 901800.98 - Bioacoustic Payload
 - Modifying proposal as requested by MT
- Chad Key
 - 901704.99 - 8 Camera Obs Lander
 - Plugging away at the documentation with Elena (online)
 - 901713 - Nearshore FOCE
 - Attended a weekly online meeting
 - 902000 - Multi-Spectral StealthCam
 - Prepping the questions Chris S. requested
 - Overhead
 - Writing some practive LabView VI's (Producer/Consumer loops)
- Brian Kieft
 - 708158 - DHS Y6
 - Weekly meeting to discuss plans and data review
 - Y7 budget/scoping
 - 901800 - LRAUV Payload & Support
 - Working on SLCD for backseat architecture
- Denis Klimov
 - 300083 - DMO Support - LRAUV
 - Reviewing new conceptual battery pack design (with Daniel Gomez-Ibanez and Erik Trauschke)
 - Overhead
 - Several changes to the schematic of BEDS bridge board as a result of layout review
- Eric Martin
 - 901101 - Ocean Imaging
 - Scoping strobe guard modifications
 - 901206 - Coastal Profiling Float
 - Server testing
 - 901405 - PowerBuoy Development
 - LCM tool upgrades complete
 - 901807 - Next Gen Acoustic Dorado
 - Wrote MT project impact report
 - 901911 - ROVVR
 - VARS Data preparation for UCSC handoff
 - 901702 - Benthic Lander

- Providing information for the operational components to the technical writer on contract.
- Overhead
 - Orcad training
- Out of Office
 - Due to childcare needs I'm half time until schools reopen. I tentatively plan on being online from 12:30-5
- Thom Maughan
 - 300083 - DMO Support - LRAUV
 - Pcb fab is complete, boards received. , Dropped parts, pcb and stencil to Indtec
 - Worked on design review slides, had phone call with proj mgr
 - 901009 - CANON
 - Attended BOG meeting. Working on GPU enabled PC options
 - Small progress on BLAST
 - Scheduled meeting with intern to discuss options
 - 901805 - Coastal Biogeochemical Sensing
 - Discussion on power consumption, npHOx desing
 - 902000 - Multi-Spectral StealthCam
 - Responded to Chads email. Planning to drop a Feather M0 I bought for St. Helena to Bridget so she can continue.
 - 902004 - Planktivore
 - Working on revised project plan update
 - 901713 - Nearshore FOCE
 - Attended nsFOCE meeting
 - Out of Office
 - Dealing with multiple family challenges both here and remote.. Unsettling times making it hard to work.
 - Attended zoom of MontereyBayMakers, managing Slack space, Glen tending the printer, as a group of over 50 we are on track to 2000 faceshields. Talked briefly with Dale Graves about how printing PPE is not a good fit for MBARI machines
 - Working at home and not needing to drive to MBARI as MLML is feeding Rascal
- Mike McCann
 - 901111 - AUV Infrastructure Supprt
 - Still trying to get access to i2MAP log files
 - Outlined a plan for the next steps in the Python-based AUV data processing pipeline
 - 901915 - Improving MBARI Data Impa
 - Group meeting
 - Overhead
 - My laptop decided to start randomly rebooting, so I asked Norm's permission to get my backup laptop (a 2011 MacBook Pro) and now I'm busy installing my development tools on it
- Rob McEwen
 - 600034 - Control Tech - Rock
 - Looking at re-activating the psi_berg state in TRN
 - 901902 - Aerial Drones for Sci&MO
 - Learning how to extract data from tlog format
 - Overhead
 - Learning GIT
 - Setting up home office
- Paul McGill
 - 901618 - Pelagic-Benthic Coupling
 - Working on camera tripod optical calculations for a paper Crissy is writing.

- 901700 - 2017 Acoustical Ocean Eco
 - Still trying to reconcile differences in results between Mathematica and MxNET. Am trying to import results from one framework into the other to offer some insight.
- 901803 - Carbon Wave Glider Development
 - Working with Andrea and Craig to write project coronavirus update for management.
- 901904.99 - Coral Camera System
 - Had Zoom meeting with team to discuss this year's plans.
- Overhead
 - Training - Got OrCAD 17.2 loaded onto my virtual Win10 machine to take online course
- Ed Mellinger
- Tom O'Reilly
 - 901101 - Ocean Imaging
 - Developing prototype GUI for bathymetry grid viewer, working with Caress to distribute for team evaluation/feedback
 - 901800 - LRAUV Payload & Support
 - Met with team to discuss further steps to integrate LcmSlateWriter functionality into LRAUV software component with minimum effort. Working with team to formalize requirements.
- Craig Okuda
 - 901220 - Midwater Ecology
 - Design flush valve actuator and drive circuit board
 - Overhead
 - ORcad 17.4 upgrade and resolve install issues
 - Resolve PCB editor 17.4 install problems
- Doug Pargett
- Ben Raanan
 - 708158 - DHS Y6
 - Y7 budget
 - Data analysis and debriefing with the team at WHOI
 - 901800 - LRAUV Payload & Support
 - Working on LRAUV LCM back-seat interface
 - Overhead
 - GTC training
- Mike Risi
 - 300080 - DMO Support-Mini ROV
 - Working on ZMQ PUB/SUB interfaces to MiniROV
 - 600034 - Control Tech - Rock
 - Continuing plumb in signals and testing with LCM log files
 - Working on first cut of gain scaling for the range and lateral control loops
 - 901809 - Deep Sea Bioinspiration
 - Shared LCM type repo with cvision
 - Update of control system re-write at weekly meeting
 - Out of Office
 - February 19-22: Ocean Imaging Cruise
 - March 9-12: Vacation
 - September 18-29: Ocean Imaging Cruise
 - September 30 - October 2: Vacation
- Brent Roman
 - 901205 - ESP SURF Center
 - Supported recovery of ESPgordon from Scotts Creek
 - Finally managed to tame the Sara-R410M LTE-M1 USB modem

- Lots of low-level shell scripting to recover from firmware crashes
 - Confirmed that Raspberry Pi users see the same lockups I do
 - Swapped ESPtower for ESPstumpy in my home office
 - Fun times reassembling the internal plumbing :-)
- Out of Office
 - 2nd week of April (college prospecting) (6th - 10th) [postponed...]
- Carlos Rueda
 - 901009 - CANON
 - MXM: Actually I enabled snyk.io vulnerability monitoring for <https://github.com/mbari-org/mxm> this week. (Snyk has proved useful for me in other js and scala projects, sometimes giving more detailed diagnostics compared to Github. The snyk CLI is also handy.)
 - 901101 - Ocean Imaging
 - Resuming some work on MB-system dockerization (syncing with upstream, checking other docker related activities there).
 - 901502 - Passive Acoustic Sensing
 - Group meeting. Presented recent [HMM exercise](#) on 4.5hr whale song unit data.
 - 901800 - LRAUV Payload & Support
 - LRAUV: Per Ben's request, [fixed a compiler warning](#) in ESPComponent, exposed with the use of more recent gcc versions wrt the one currently used on tethyscode.
 - Overhead
 - CentOS 6 EOL: *okeanids* migration completion ready to proceed. Emailed key LRAUV folks for any comments/concerns and to proceed hopefully very soon. After this I'll focus on the preparations for the *tethysdash* migration (pretty advanced already).
 - SE IE and Engineering meetings.
 - Out of Office
 - A few hours spent on kids school related activities.
 - April 17: vacation
- Karen Salamy
 - Overhead
 - Rebuilt VirtualBox and Vagrant development environment on new Mac with Catalina OS. I have begun testing Docker containers for ElasticSearch (E), Logstash (L), Kibana (K) and Grafana (G), as well as Superset (Adobe). This week I will be using pluralsight examples on building RT dashboards with these containers.
 - Out of Office
 - March 30 - Apr 2: Vacation
- Brian Schlining
 - 500055 - Video Annotation DM
 - CSUMB students presented their ROV dive portal to the video lab
 - 901221 - Midwater Time Series
 - Updated the [auv-rawdata-server microservice](#) and redeployed
 - 902002 - Fathomnet Detect and Classify
 - Thinking through [data server design](#) and [user stories](#)
 - 902005 - VARS Annotation Assistance
 - [New release of VARS Annotation which supports localization on video](#)
 - [Packaged Cthulhu for Mac and Linux](#)
 - Added [docs for localizing on video](#)
 - Overhead
 - Met with Diana LaScala-Gruenewald (New CenCOOS hire) to discuss exporting annotations to OBIS.

- Studying up on functional [IO effects](#)
- Out of Office
 - April 17th. - Will be participating in [online Scala conference](#) on Saturday 18th instead
- Rich Schramm
 - 200105 - Core Nav - MDUC
 - Begin work on new LCM compatible Vorne display - part of navproc upgrade work
 - 300058 - DMO Support-WF
 - Continue dataprobe work (split w/300079)
 - Out of Office
 - Today, Unscheduled vacation/'Mental Health' day - weather just too nice in PG !
 - Jul 30 - 3-Aug Vacation
 - Aug-10 -21 Vacation
- Alana Sherman
 - 901809 - Deep Sea Bioinspiration
 - Spent a lot of time trying to add what I thought would be a simple feature to display the zoom ratio of the sony camera. I have that working now.
 - Working on initial settings for the camera on start up, and disabling features when in auto vs. manual conditions.
 - Working on adding focus speed control and an indicator, also need to integrate logging.
 - 901904.99 - Coral Camera System
 - Zoom meeting to discuss project
 - Overhead
 - zoom meetings and telecon with my LabView guru.