

Rich Henthorn Sorted By Project

600034 - Precision Control Technologies for ROVs and AUVs

- CoNav testing and data logging (Week 1)
- CoNav data logging - almost finished (Week 2)
- Finishing touches on data-logging (Week 3)
- Computation debugging (Week 3)
- Syslogging (Week 3)
- CoNav syslogging (Week 4)
- CoNav development (Week 4)
- Integrating CoNav DAT measurement cleaning into application (Week 5)
- CoNav class data logging (Week 5)
- Adding to and improving data logging (Week 6)
- Reviewing latest TRN logs (Week 6)
- Prep for Carson TRN cruise (Week 8)
- Dorado TRN prep and testing on Carson (Week 9)
- More cleaning and polishing seems likely before June mapping deployment (Week 9)
- Dorado mbtrnpp simulation component (Week 12)
- Dorado TRN driver rework (Week 13)
- TRN Replay for DeltaT (Week 15)
- Integrating Delta T measurements into TRN Replay (Week 16)
- Resuming CoNav development (Week 17)
 - Wrapped up first cut at data logging (Week 17)
 - Began next phase: config file, refining, documentation (Week 17)
- Combing through TRN syslog files to detect convergence (Week 17)
 - No network connection to BSC (Week 17)
- Reviewing results from Feb TRN runs on LRAUV at PL (Week 18)
- TRN for ROV and LRAUV (Week 19)
- TRN Replay for DeltaT data in CSV format (Week 23)
- Some TRN investigation (Week 24)
- CoNav dev (Week 25)
- Refining CoNav source code (Week 26)
- Meeting w/Rock to discuss 2023 proposal (Week 26)
- CoNav refinement and testing (Week 27)
- Some 2023 proposal work (Week 27)
- Proposal work (Week 28)
- LRAUV sim with Rock (Week 28)
- Refining CoNav - renaming member functions and variables (Week 28)

708167 - WEC Dynamics and Control

- Installed and built current command application on RPi controller (Week 7)
- Updating and verifying repo (Week 7)
- Installed USB-RS232 adapter on the new controller (Week 9)
- Met with folks from Open Robotics to discuss grant work (Week 14)
- Tested different controller boot failure scenarios (Week 15)
- Made a couple changes to address unhandled failures (Week 15)
- Successful 1st deployment of 2022 Monday (Week 16)

- Minor modifications (Week 16)
- Crossbow AHRS calibration (Week 16)

800139 - EyeRIS (Remote Imaging System)

- Kickoff meeting (Week 2)
- EyeRIS-LRAUV Interface ramping back up (Week 19)
- Serial comms to camera controller (Week 19)
- ELI to camera controller serial traffic (Week 20)
- Getting the EyeRIS LRAUV Interface (ELI) backup and going (Week 21)
- Working on the camera controller serial interface and logging (Week 21)
- CamController serial handling (Week 22)
- EyeRIS LRAUV Interface (Week 23)
 - Camera controller communication (Week 23)
 - LRAUV syslog interface (Week 23)
- Working on new features in EyeRIS LRAUV Interface app (ELI) (Week 26)
- EyeRIS - LRAUV Interface updating (Week 29)

901101 - Seafloor Mapping

- Modified Dorado TRN interfaces to address some issues (Week 9)
- Enabling MB-system TRN component to insert navigation offsets to Dorado nav (Week 9)
- Dorado vehicles Mapper1 and Mapper2 are now mostly operational with TRN (Week 10)
- The vehicles can now employ an MB-system-derived app with embedded TRN communicating with a Reson T-50 Multibeam sonar to provide position offsets to the navigation process (Week 10)
- Attempting to build old auv-linux code for Dorado Linux port (Week 10)
- Dorado QNX-to-Linux (Week 13)
- Building dorado-auv-linux code on an Ubuntu target (Week 14)
- QNX-Linux porting (Week 15)
- Delta T integration (Week 16)
- Some assistance to ROV TRN (Week 18)
- Proposal items (Week 19)
- Meeting to discuss Dorado QNX porting task for 2023 (Week 26)
- ROV w/TRN simulation meeting (Week 26)
- Dorado code Linux port (Week 27)

901221 - Midwater Time Series

901405 - Wave-Energy Conversion for Oceanographic Applications

- Michael Anderson onboarding (Week 3)
- Tidying repo (Week 3)
- Updated repo with changes from latest deployment (Week 4)
- Testing updated software (Week 6)
- Re-build RPi4 target system 'torque' after disk error (Week 6)
- Installed and built controller software on new RPi controller (Week 7)
- Reviewing ROS code on main buoy controller (Week 8)
- Checking out issue with RS232 hat on RPi4 controller (Week 8)
 - Comms seem to reset requiring processes to reopen serial ports (Week 8)
- Moved past RS232 comms issue, at least temporarily, using USB adapter (Week 9)
- RPi controller config (Week 10)
- Implementing a shore-to-buoy comms watchdog (Week 11)

- Controller will open doors if comms is lost for more than 30 minutes (Week 11)
- Prototype test has been running well for about a week (Week 11)
- Working on version 2 that will be more flexible and run as a service (Week 11)
- Buoy controller hardware watchdog install and test (Week 13)
- Duplicating buoy controller system onto larger drive (Week 13)
- Meeting discussed upcoming deployment (Week 13)
- Buoy controller prep for deployment (Week 14)
- Tested real-time clock on controller (Week 15)
- Monitoring deployment (Week 18)
- Monitoring buoy system (Week 19)
- Working around spotty comms to heave cone (Week 19)
- Addressing faulty comms to heave cone controller (Week 20)
- Refining DoorMan module and the application (Week 21)
- General monitoring of the deployment (Week 21)
- Building buoy-sim for development (Week 22)
- ROS2 and Gazebo (Week 22)
- Build and test (Week 22)
- Trefoil Controller plug-in module for buoy_sim Gazebo application (Week 23)
- Monitoring WEC deployment (Week 24)
- Buoy system monitoring (Week 25)
- Recovery this week (Week 25)
- Attended Gazebo Community Meeting (Week 26)

901618 - Pelagic-Benthic Coupling and the Carbon Cycle

- Benthic Rover component tank testing prep for Feb deployment (Week 1)
- Some bad connectors discovered after observing flakey comms (Week 2)
- Weekly meeting (Week 2)
- Rover cables and connectors refurbished/replaced and tested OK (Week 3)
- Rover operations testing at the tank - vehicle seems ready to go (Week 3)
- SES prep (Week 3)
- Rover ready to deploy (Week 4)
- SES carousel motor debugging - hall switch bulkhead connector and cable (Week 4)
- SES mission prep (Week 4)
- Sta.M cruise prep and mobilization (Week 5)
- Western Flyer cruise to Sta.M (Week 5)
- Sta.M - deployed Rover, SES, and Dual-Camera tripod (Week 6)
- Demobilization (Week 6)
- Weekly meeting (Week 7)
- Weekly meeting (Week 8)
- Weekly meeting (Week 10)
- Castroville visit (Week 10)
- Hunted (and found) SES images from latest MARS test deployment in 2020 (Week 10)
- Renamed image files from 2011 MARS test deployments to include VARS-style timestamp (Week 10)
- Weekly meeting (Week 13)
- Weekly meeting (Week 14)
- Weekly meeting (Week 15)
- Proposal items (Week 15)
- Weekly meeting (Week 16)
- Working through Rover communication issues (Week 17)
- Proposal items (Week 19)
- Weekly meeting (Week 19)

- Weekly meeting (Week 23)
- Weekly meeting (Week 25)
- Proposal inputs (Week 25)
- Proposal input for 901618 and new SES Event Detection project (Week 26)
- Camera deployment (Week 27)
- Proposal work (Week 28)
- Weekly meeting (Week 29)

902101 - LRAUV Technology Development and Fleet Operations

- Logs from recent TRN runs at PL (Week 7)
- TRN CoNavigation (Week 16)
- Pulled TRN logs from tethys (Week 18)
- Co-Navigation project (Week 19)
- Met with Ben Raanan a couple times regarding the LRAUV Ignition simulation (Week 28)
- TRN prep for pontus deployment (Week 42)

902106 - Niobicon-Based AUV Docking Development

- Dock buoy controller design (Week 13)

DQ2032 - DOE Wave-Energy Control

- Kickoff meeting with Open Robotics (Week 5)
- Verified Michael's ROS2 implementation of controller commands (Week 5)
- Rebuilt, installed, and tested RPi-based controller hardware on buoy (Week 7)
- Fired-up the spare RPi with duplicated system (Week 7)
- Setting up local watchdog timer on RPi controller (Week 11)
- Placed the shore check-in cron job on collada (Week 15)
- Meetings about ROS - Gazebo architecture (Week 18)

Out of Office

- Jan 24 - 28, vacation & WFH
- Feb 1 - 4, Sta.M Cruise
- Feb 14 - 18, vacation & WFH
- Sep 21 - 30, Sta.M Cruise
- Jan 24 - 28 (next week), vacation & WFH
- Feb 1 - 5, Sta.M Cruise
- March 14 - 25, vacation & WFH
- Jan 24 - 28 (this week), vacation & WFH
- Feb 1 - 5 (next week), Sta.M Cruise
- Feb 1 - 5 (this week), Sta.M Cruise
- Feb 14 - 18 (next week), vacation & WFH
- Feb 14 - 18 (this week), vacation & WFH
- March 1 - 3, TRN cruise on Carson
- March 1 - 3 (next week), TRN cruise on Carson
- March 1 - 3 (this week), TRN cruise on Carson
- March 14 - 25 (next 2 weeks), vacation & WFH, email & phone OK, MDT timezone
- July 4 - 18, vacation & WFH, email & phone OK
- March 14 - 25 (this week), vacation & WFH, email & phone OK, MDT timezone
- April 25 - out of the area, WFH
- Sep 21 - 30, Sta.M Cruise (final scheduled cruise of the Western Flyer)

- July 4 - 18, vacation & WFH, email, phone, zoom OK
- Aug 30 - Sep 16, vacation, email, in Germany
- May 16 - next Monday, WFH
- July 4 - 18, WFH and vacation time, email, phone, zoom OK
- Aug 30 - Sep 16, vacation in Europe, email
- Sep 22 - 29, Sta.M Cruise (final scheduled cruise of the Western Flyer)
- Thursday May 26, WFH after dentist
- Aug 30 - Sep 16, vacation in Germany, email
- July 4 - 18, WFH and vacation, email, phone, zoom OK
- Aug 30 - Sep 16, vacation in Germany, email only
- July 4 - 18, WFH and vacation, email/phone/zoom, mostly available so contact encouraged
- 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)
- Oct 24 - 28, WFH
- Nov 29 - Dec 7, COVID and quarantine
- Dec 19 - Dec 29, vacation

Overhead

- Meetings (Week 1)
- Annual Review: prep and review (Week 3)
- Engineering Meeting (Week 5)
- PCR test for Pargett contact (Week 7)
- Engineering meeting (Week 9)
- Farewells (Week 14)
- Engineering Meeting (Week 15)
- Drove vanpool to MBA Deep Sea Preview (Week 15)
- Proposal meetings (Week 16)
- Proposal Workshop (Week 18)
- DOEST (Week 23)
- Engineering meeting (Week 25)
- Open enrollment (Week 29)