

Rich Henthorn Sorted By Project

300078 - DMO Support - AUV

- Investigating some multi-queue strategies for OTH missions (Week 5)
- Researching Multi/Sequential mission support (Week 8)
- Multi/Sequential mission use-cases (Week 9)
- CARL setup program (Week 14)
- Discussed multi-mission processing with Erik Trauschke (Week 20)
- Better power management options for i2MAP (Week 25)
- i2MAP section power management (Week 26)
- Proposal research (Week 26)

901101 - Seafloor Mapping

901405 - Wave-Energy Conversion for Oceanographic Applications

- Making CLI app to set permissive mode for the power converter (Week 15)
- Check-in service reporting issues (Week 19)
- Check-in service (Week 28)
- Moving shore side utilities to new Ubuntu server (Week 41)
- Shore-side processing to collada_u (Week 43)
- nav440 (Week 43)
- AHRS server (Week 44)

901904 - Deep-Sea Coral-Sponge Community Observatory

902305 - Event Detection Using the Sedimentation Event Sensor

- CLAMShell programming on Benthos modems (Week 2)
- Install serial card on new SES controller (Week 2)
- Project team meeting (Week 3)
- Port SES image processing software and scripts from server to V3 target (Week 4)
- Investigate V3 serial kernel requirements (Week 4)
- Installing Python tools on the new SES controller (Week 5)
- Installed the other image processing tools on the new controller (Week 5)
- Removed the SES controller chassis from the housing (Week 5)
- Experiments with new controller (V3) system OS variants (Week 6)
- Ported image processing Python script to V3 (Week 6)
- Good results but the performance is lacking - may need to convert to C++ (Week 6)
- Lab's Python processing scripts enabled on target (Week 7)

- Tinkering with new version of lab's image analysis scripts (Week 7)
- Redesign for use in deployed system (Week 7)
- Conducted timing tests with Python image processing scripts on target hardware (Week 8)
- Results indicate a reasonable amount of time to process an image during normal mission execution - conversion of scripts to C++ probably not necessary (Week 8)
- Got acquainted with new trigger-trap controller from McLane (Week 8)
- Installing serial board on new controller (Week 9)
- Building and testing kernel updates for controller (Week 9)
- V3 controller Linux kernel 8250_ts module integrated (Week 10)
- All serial and ethernet ports setup for system testing (Week 10)
- V3 controller board installed in SES camera frame (Week 11)
- Testing V3 controller with SES functions (Week 11)
- Testing SES missions on V3 controller (Week 12)
- Adjusting hibernation timing (Week 12)
- Testing V3 controller comms on the instrument (Week 13)
- Developing onboard image processing and event detection (Week 13)
- Progress made on the SES V3 controller (Week 14)
- All communication pathways tested and verified (Week 14)
- Successfully tested on the SES instrument frame with connectors (Week 14)
- Replaced obsolete environmental sensor with TEMPerHUM (Week 14)
- Controller ready to be reinstalled in housing (Week 14)
- Image processing implementation and testing on target (Week 15)
- Repo housekeeping (Week 16)
- Event detection code (Week 16)
- Integrating image analysis into mission control (Week 17)
- Reinstalling controller chassis in SES housing (Week 17)
- Integrating image processing tools into SES behavior control (Week 18)
- Installing controller back into housing (Week 18)
 - Done - Way to go McGill and Hu! (Week 18)
- Testing SES with installed controller (Week 18)
- Testing controller system (Week 19)
- Issues with full-auto system need to be addressed (Week 19)
- SES testing and development at Test Tank (Week 20)
- McLane Trigger Trap (Week 20)
- Image processing and detection algorithms on SES target controller (Week 21)
- Detection tests success (Week 21)
- Trigger trap testing (Week 21)
- Troubleshoot acoustic modem comms (Week 24)
- Finishing touches made to image processing and detection scripts (Week 24)
- Tested instrument in test tank with trigger sediment trap target (Week 24)
- Testing and prep for deployment on June 20 (Week 25)
- SES and the McLane Trigger Trap deployed near MARS last week (Week 26)
- Post deployment wrap (Week 26)

- Communicated with SES while at MARS for SINKER (Week 29)
- Code repo management (Week 33)
- Analyzing deployment data (Week 39)
- (Week 39)
- Analysis of recent deployment (Week 40)
- Some issues but we are able to explain and correct them (Week 40)
- Analyzing the event detection to explain differences between the bench and deployed processes (Week 41)
- Identifying modifications necessary for Jan 2025 deployment (Week 41)
- Post mission analysis of energy usage (Week 43)
- Refactor image processing and event detection code (Week 44)
- Prep for variable event detection parameters (Week 44)
- Looking at possible redeployment in December (Week 44)
- Prep for SES deployment (Week 46)
- Improvements and fixes for SES (Week 46)
- Tank testing (Week 46)
- Implementing event detection with variable trigger limits using input from Yanwu (Week 47)
- Improved acoustic communication interface (Week 47)
- Preparing for deployment scheduled for Dec 6 (Week 47)
- Prep for next week's deployment (Week 48)
- Integrating new detection script (Week 48)
- General operation tests in the test tank (Week 48)
- Prep for SES deployment at MARS rescheduled for Wed Dec 4 (Week 49)
- Variable thresholds, trigger trap setup, and modems (Week 49)

902306 - SINKER

- Kickoff Meeting (Week 4)
- SINKER controller board checkout (Week 4)
- Ship day Feb 6 (Week 4)
- Installed bootloaders and updated software onto the camera and system control boards (Week 5)
- Control board software (Week 6)
- Ready for Mar 5 deployment and tank testing (Week 7)
- Carson cruise Mar 5 to observe current flow in and around sinker tube (Week 10)
- Engineering meeting to go over critical tasks for July deployment (Week 19)
- Meeting discussion about July deployments (Week 24)
- Check out EPOS interface code for ucontrollers (Week 25)
- EPOS controller code search (Week 26)
- Instrument test at MARS (Week 29)
- Motor control interfaces (Week 41)

902401 - Geo-Sense

- Weekly meeting (Week 2)
- Weekly meeting (Week 6)
- Prep for meeting with Sintela next Monday (Week 6)
- Prep for meeting with Sintela (DAS manufacturer) (Week 7)
- Meeting morning of Feb 14 (Week 7)
- Weekly meeting (Week 9)
- Weekly meeting (Week 10)
- Weekly meeting (Week 11)
- Weekly meeting (Week 15)
- Team is down-selecting cable purchase options (Week 17)
- Cable review meeting (Week 18)
- Prep for Thursday PDR (Week 19)
- Weekly meeting (Week 20)
- Weekly meeting (Week 21)
- Cable selection (Week 21)
- Meeting (Week 24)
- Meeting - proposal discussions (Week 26)
- Sintela system Docker image (Week 40)
- Sintela cable interrogator installed in MARS shed (Week 46)
- Preparing for arrival of our modified Sintela DAS unit (Week 47)
- Looking for possible assembly and test areas (Bldg G, ESB, etc.) (Week 47)
- Reviewing Sintela user-guide for training class next Monday (Week 48)
- ONYX system training (Week 49)

902405 - Precision Control Technologies

- Planning meeting with Rock and LRAUV team (Week 2)
- Finishing up a CoNav/TRN LRAUV comms interface class (Week 3)
- Encapsulates translation of LrauvLcmMessage TRN message for clients and servers (Week 3)
- TRN - LRAUV LCM comm software (Week 4)
- Lrauv LCM decoder for CoNav channel (Week 7)
- Integrating vehicle TRN data into vehicle CoNav processing (Week 8)
- TRN - CoNav integration (Week 9)
- Vehicle TRN inputs integrated into CoNav computation (Week 10)
- Testing CoNav with local vehicle TRN onboard (Week 11)
- TRN and CoNav simulations (Week 12)
- CoNav simulation on LRAUV (Week 13)
- Shout out to Michael Anderson for 3-vehicle LRAUV sim with acoustic comms (Week 14)
- Design of LCM handling in both TRN and CoNav (Week 15)
- TRN and CoNav LCM (Week 16)
- Analyzing multi-vehicle TRN sim with DAT info transmission (Week 17)
- Refining LCM message handling (Week 18)

- CoNav/TRN LCM (Week 20)
- TRN in LRAUV simulation (Week 21)
- Simulation data acquisition for Rock (Week 24)
- TRN and CoNav test results (Week 26)
- Proposal discussions (Week 26)
- Verifying simulation results (Week 28)
- Developing test utilities for TRN and CoNav that take data from Rock (Week 29)
- TRN and CoNav on LRAUV (Week 34)
- TRN mission prep on pontus (Week 41)
- TRN testing and install on pontus and tethys (Week 43)
- Double check TRN installation on pontus (Week 44)
- Examining TRN results from LRAUV (Week 46)
- Testing TRN on LRAUV and reviewing results with Rock (Week 47)
- TRN on LRAUV (Week 49)

Out of Office

- Jan 22 - 25: WFH
- Jan 22: WFH
- Feb 6: Rachel Carson
- Jan 31: WFH
- Feb 6: Rachel Carson to test SINKER wiper at depth
- Feb 12 - 16: WFH Tu Th F, vacation M W
- Feb 12 - 15: WFH Tu & Wed, vacation Mon & Th, at MBARI Friday
- Mar 18 - 21: Vacation and WFH
- Mar 5 - Rachel Carson
- Mar 13: After 3 PM
- May 28 - 30: Vacation
- July 3 - 11: Vacation and WFH
- Aug 26 - Sep 11: Vacation
- Mar 18: Sick leave
- Mar 25: med
- Mar 27: After 2:30 PM
- Apr 10: WFH
- Apr 11 - 12: Vacation
- May 8 - 10: WFH
- May 28 - June 5: Vacation
- May 8: WFH morning, intermittently in the afternoon
- May 9 - 10: WFH
- June 20: SES deployment on Carson
- June 20: SES deployment from Carson near MARS
- July 9: SINKER test from Carson
- July 16: SINKER test on Carson
- Aug 5 - 8: WFH
- Some sick leave

- Sick leave, WFH Aug 14 - 22
- Sick leave: Sep 16 - 23
- Oct 21 - 25: WFH
- Oct 21 - 25: Next week WFH, phone, email, zoom, slack, vpn, you name it.
- Oct 21 - 25: This week WFH, phone, email, zoom, slack, vpn, the whole shebang.
- Dec 20 - Dec 31: Vacation/Holidays
- Dec 6 - Rachel Carson
- Nov 21 - WFH, doc appts in AM and PM
- Dec 4 - Rachel Carson
- Dec 5 - WFH for local appointments - network, phone, zoom, I'll get back to you ASAP

Overhead

- Touching base w/ group (Week 1)
- Annual review prep (Week 1)
- Hiring (Week 1)
- Misc admin (Week 1)
- Engineering meeting (Week 2)
- Measurement Seminar (Week 3)
- Rec-Comm bagel break (Week 4)
- Eval (Week 5)
- Engineering meeting (Week 11)
- Planktivore Update (Week 14)
- Rec-Com (Week 17)
- Rec-Comm stuff (Week 20)
- Rec-Comm softball (Week 21)
- Rec-Comm stuff (Week 24)
- Rec-Com stuff (Week 25)
- Rec-Comm stuff (Week 26)
- Proposal stuff (Week 28)
- Rec-Com stuff (Week 33)
- Rec-Com (Week 34)
- Rover export (Week 43)
- SciComm webinar (Week 44)
- Sexual Harassment Prevention Training (Week 49)