

Paul McGill

Week 51

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Working with Brett on noise-reduction strategies for Simrad sonar
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Worked with Jared to troubleshoot camera glitches during the last LRAUV mission
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
 - Working on SOI Antarctic proposal with Aaron M
- Out of Office
 - Out on medical appts Thu
 - On vacation Mon and Tue

Week 50

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Finalized design for Serial Splitter board. Fab is next.
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Fixed problems with AOS PIC24 sensor PCB. Will submit for fab in Jan.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Attended another training session for machine learning tools to process UAV images.
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Ordered multiple cameras and Raspberry Pi boards for evaluation
 - Attended brainstorming session on what hardware might improve Piscivore image quality
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Processed more fluorometer data
 - Wrote documentation for fluorometer data file format to avoid confusion about recorded values
- 902306 - SINKER
- Overhead
 - Continuing to help Jason A with his mooring's ground-fault circuit design
- Out of Office

Week 49

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Had remote meeting with UW to discuss new PCB bring-up and mechanical design
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Finished calculations for Tom O to determine geographic coordinates of corners in aerial images
 - Attended a training session for our AI processing of aerial images
- 901904 - Deep-Sea Coral Community Observatory
 - Tracking down beacons for deployments next year
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Analyzed fluorescence data from MARS deployment
- 902306 - SINKER
 - Helped a bit with tank testing of instrument in preparation for next week's dive
- Overhead
 - Continuing to help Jason A with his mooring design
 - Attended international telecon for Charlie P's Canyon Seismic experiment
 - Attended meetings and did research for Aaron M's Geo Sense and CSEM projects
- Out of Office

Week 48

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office
 - Was on vacation Thu and Mon

Week 47

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam

- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office
 - Was on vacation Thu and Mon

Week 46

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Had another meeting with UW ME to work on layout of internal chassis
 - Troubleshooting ground-fault issues on Mini Node
 - Still working with Duane T on serial port splitter
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Met with Kelly and Chad about ground faults on MARS Echosounder and how to move forward
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Started some photogrammetry analysis for Tom O
- 901904 - Deep-Sea Coral Community Observatory
 - Starting analysis of images from recently recovered Mega Coral Cam
- 902304 - Piscivore Cam
 - Choosing components for a Raspberry Pi camera system for testing
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Had a meeting with software team at McLane to work out details of NRE programming
 - Helping Crissy with power issues on the ISSUS camera
- 902306 - SINKER
- Overhead
- Out of Office
 - Was on vacation Thu and Mon

Week 45

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Held another Zoom meeting with ME at UW to work out details of internal chassis design
 - Trying to figure out how to mount Meinberg N2X box with tabs instead of DIN rail
 - Spent some time playing with Meinberg M600 PTP clock to understand its operation
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Worked on PCB design for new AOS sensor but board house is rejecting my submission
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
 - Worked on design for rescue float pack for Coral Mega Camera so it can be retrieved on Fri
- 902304 - Piscivore Cam
 - Had meeting to discuss this year's progress and plans for next year
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Shipped controller end cap and stepper motor back to McLane for upgrade to Gen3
- 902306 - SINKER

- Overhead
 - Attended marathon meeting to choose best candidate for EE Tech hire
- Out of Office

Week 44

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Met with Greensea's programmer to explain Ventana ground fault sampling protocol
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Participated (via telepresence) in Thu's dive to recover main node
 - Trying to figure out how to set up Meinberg PTP timing hardware
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Achieved partial success in storing AOS PIC24 constants to EEPROM, needs more work
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Still struggling with radio connection between antenna aiming system and ground control station
- 901904 - Deep-Sea Coral Community Observatory
 - Looked up lens specs for Aaron so we can design focus motor drive
 - Attended review of Multi-spectral Camera system
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Finally got PO submitted for Gen3 controller
- 902306 - SINKER
- Overhead
 - Had another meeting with Jason A about electrical design of his mooring
- Out of Office

Week 43

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Supported deployment of MARS mini-node on Tue until the dive was aborted
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Tweaking details on AOS PIC24 upgrade
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Participated in recovery of SES on Tue via telepresence
- 902306 - SINKER
- Overhead
 - Participated in international Zoom meeting to plan for Charlie P's 2024 SeismoSands project
 - Did some research into leveling mechanism for OBX-90 seismometer
- Out of Office
 - Took a sick day on Wed

Week 42

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Did calculations to modify HV power supply controls for reduced voltage
 - Working on budget reallocation to fund UW's supplement request
 - Worked on serial splitter design
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Worked on antenna pointing system with Bryan but we're having problems with the radio link
- 901904 - Deep-Sea Coral Community Observatory
 - Read through review materials for upcoming
- 902304 - Piscivore Cam
 - Helped Jared with prep for this week's deployment
 - Did capacity test on controller Li-ion cell to see why it died
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
 - Helped Todd figure out why new forum projector is shutting down, more testing needed
 - Researched OBX-90 seismometers to prepare for Thu's planning meeting for Charlie Paull's canyon experiment next year
- Out of Office
 - Medical appointment Wed morning

Week 41

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Did some data modeling in Mathematica to verify that new ground-fault sampling scheme will work
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Did extensive search for 4PDT relays for serial splitter board
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Finished PCB design for new BMA456 sensor for AOS PIC24
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Working on antenna-aiming servo platform to improve connectivity with UAV during flights
- 901904 - Deep-Sea Coral Community Observatory
 - Did some macro camera pixel size calculations for Steve L
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 40

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Helped DJ troubleshoot ground-fault issues on Ventana

- Developed a sampling scheme for ground-fault readings to be implemented by Greenseas
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Had two Zoom meetings with UW team to settle technical issues
 - Finally got serial splitter to work, but we may go with relay switching instead
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Now that attitude sensor is working, trying to figure out how to store offset values in EEPROM or flash
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 39

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Tested serial port splitter so we have two ways to control each module in system. There are problems with it which I'm trying to solve.
 - Arranging for review of UW's design for LVPS chassis
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Working on PCB for new AOS PIC24 sensor
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Prepping for this week's deployment of two cameras on LRAUV
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Negotiated reasonable cost for NRE to modify Gen3 controller for remote triggering
- 902306 - SINKER
- Overhead
 - Reading resumes and interviewing candidates for electronics assembler position
- Out of Office

Week 38

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Reorganized ground fault system docs and am helping Ethan B. to understand the new system
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Working on requirements docs for MARS LVPS
 - Working on NSF budget request for UW's subcontract
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Spent 3 days troubleshooting code for new Bosch attitude sensor for Simrad transducer position, and finally got it to work

- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Went to storage at end of island to look at our Sediment Traps and pick the best one to modify for remote triggering
 - Got quote from McLane for new Gen3 Sed Trap controller and NRE for modification for remote triggering
- 902306 - SINKER
- Overhead
 - Helping Drew B. find a housing for Rickett's new camera system
- Out of Office

Week 37

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Reviewed all MARS LVPS schematics to look for errors
 - Held electrical design review with UW so they can get boards fabbed
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Helped Duane E write abstract for OSM 2024
- 901904 - Deep-Sea Coral Community Observatory
 - Helped Alana write abstract for OSM 2024
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Helped Crissy write abstract for OSM 2024
- 902306 - SINKER
- Overhead
 - Helped retire old equipment in Castroville storage
- Out of Office

Week 36

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office
 - On vacation until Sep 6

Week 35

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office
 - On vacation until Sep 6

Week 34

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Worked with DJ to get new GF isolator card integrated onto Ventana.
 - Helped DJ with a 120/240 VAC transformer issue for the vehicle.
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Made corrections and additions to MARS MVPS requirements doc.
 - Reviewed all system design docs sent to us by UW
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Still working on AOS PIC24 code. Was successful in talking to BMA456 sensor with a Bus Pirate, but PIC code isn't working yet.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Got another camera controller I/O board built to replace one of our cameras that was stopping recordings early.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Had a Zoom call with engineers at McLane to discuss their Gen3 sediment trap controller.
- 902306 - SINKER
- Overhead
 - Helping Jason Adelaars at CeNCOOS design a ground-fault detector for a mooring buoy.
 - Met with Andrew M and others to figure out how to deploy 1 km of fiber optic cable for Geo Sense.
- Out of Office
 - On vacation until Sep 6

Week 33

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Working with Knute to get UW subaward refunded to make up for shortfall.
 - Called Kandy Binkley at NSF to keep her in the loop.

- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Troubleshooting issue with last deployment where one of the cameras stopped recording part way through each day. We'll build a new camera module in case the old one has an intermittent failure.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Finally resurrected Snappy TNG after tracking down an obscure error with the Timer1 asynchronous mode. Also corrected bug in Microchip's MCC-generated code.
- 902306 - SINKER
- Overhead
- Out of Office

Week 32

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Finally finished calculations to account for weird behavior of Ventana's new ground-fault scanner. Hopefully we can get it working during the upcoming shore period.
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Worked on budget with Knute to get more money to UW subaward.
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Helping Brett with Faraday shield for latest Simrad sonar payload build.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Prepared for two deployments at Terrace Point but got fogged out both times.
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Found and fixed more bugs in v1.2.0 of camera controller code, ran a multi-day test, and loaded code onto both cameras for this week's two-camera deployment on Pontus.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Reviewed documentation for newest McLane sediment trap controller to see how we might control it with our own remote trigger.
- 902306 - SINKER
- Overhead
 - Working on reviving Snappy upgrade to get Irene up to speed on project. I'm currently fighting with the Microchip XC8 compiler, which is throwing errors on code generated by MPLAB.
- Out of Office

Week 31

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Continuing circuit analysis for ground-fault detection system to account for errors
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory

- 902304 - Piscivore Cam
 - Discovered another bug in the latest code release but I fixed it.
 - Getting another camera controller I/O board built
 - Preparing for two-camera deployment next Tue
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Working with McLane engineer to determine method for remotely triggering sediment traps
- 902306 - SINKER
- Overhead
 - Attended MARS team meeting to solve budget problems
 - Helping to troubleshoot power supply overheating issue on MARS mini-node
- Out of Office

Week 30

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Met with MBARI management to discuss plan for financing UW cost overrun
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Spent all day at Terrace Point in Santa Cruz on Fri waiting for fog to clear and winds to calm. Finally flew UAV in the evening and recorded 414 survey images.
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Released version 1.2.0 of camera controller code with user interface improvements
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office
 - Out on sick leave since Mon caring for wife after surgery

Week 29

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Have revived the ground fault channel isolator project, doing some circuit analysis
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Made Rover poster for Open House, dealing with Open House logistics
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Investigating how to test ground station antenna servos without using Pixhawk
 - Planning Friday's flight at Terrace Point with Tom O.
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Made major progress on next revision of camera controller code.
 - Reviewed video from most recent deployment. We got good stuff!
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER

- Overhead
- Out of Office

Week 28

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Searched the lab for parts for UAV ground station antenna pointer with Bryan, and discussed how to get system up and running.
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
 - Worked on proposals most of the day Tue
- Out of Office
 - Returned from vacation on Tue

Week 27

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office
 - Took sick day on Tue to take wife to medical appointment.

Week 26

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER

- Overhead
- Out of Office
 - Took sick day on Tue to take wife to medical appointment.

Week 25

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Planning for Davenport flight this Friday.
- 901904 - Deep-Sea Coral Community Observatory
 - Preparing Coral Macro Camera for deployment next Tuesday. Did tank testing today and re-aimed lasers.
- 902304 - Piscivore Cam
 - Preparing camera for deployment next Monday.
 - Fixing minor interface bugs in camera control code.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Continuing to monitor data from SES. So far, so good.
- 902306 - SINKER
- Overhead
- Out of Office
 - Took sick day on Tue to take wife to medical appointment.

Week 24

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Met with Knute, Danielle, Andy, and Kelly to prepare for Zoom meeting with Tim McGinnis at UW tomorrow about their funding supplement request.
- 901618 - Pelagic-Benthic Coupling
 - Just returned from ASLO in Mallorca, Spain. Poster presentation went fine.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
 - Did yearly Hazard Communications training.
 - Watched Director's Dialog from Tue.
- Out of Office
 - Took day of vacation on Tue to recover from international travel.

Week 23

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana

- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 22

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 21

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
 - Troubleshooting ground-fault issues on two instruments
 - Worked with Kevin G to get access to MARS data in SSDS
- 901618 - Pelagic-Benthic Coupling
 - Finished analyzing Rover fluorescence data
 - Finished poster for ASLO
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Attempted to run v2.1 camera on bench but had multiple problems
 - Configured and deployed v2.0 camera for its third LRAUV deployment on Tue
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Continuing to monitor SES data as it comes in from MARS
- 902306 - SINKER
- Overhead
 - Setting up a ground-fault monitor for Erich R to use
- Out of Office

Week 20

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Processed all available Rover fluorescence images.
 - Completed 90% of my poster for ASLO Mallorca.
- 901700 - Acoustical Ocean Ecology
 - Helped Brett with building a Faraday shield for LRAUV Simrad sonar.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Designed and built improved Piscivore Camera controller I/O board. Tested it with George S. and it works.
 - Preparing latest camera for deployment next Tue.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Wrote code to process SES macro images.
- 902306 - SINKER
- Overhead
- Out of Office

Week 19

- 300059 - DMO Divisional Support - David Packard
 - Helped Bryan T-S with current sensor mystery in Doc Rickett's power system.
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
 - Worked on xducer attitude sensor code. Stuck on vexing problem.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
 - Attended meeting to plan recovery of cameras from Sur Ridge.
- 902304 - Piscivore Cam
 - Designing and building new controller I/O board to better control GoFish camera.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Deployed the SES on MARS on Monday. It works!
- 902306 - SINKER
- Overhead
 - Attended Engineering meeting
 - Attended Aaron Micallef's Geo-Sense proposal meeting
- Out of Office

Week 18

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling

- Working on Rover fluorometer data for ASLO meeting.
- 901700 - Acoustical Ocean Ecology
 - Wrote code for new sonar transducer attitude sensor but am having trouble getting I2C comms working.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Prepped and deployed camera for its second deployment, coming back on Thu.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Prepping SES for Monday's deployment.
- 902306 - SINKER
- Overhead
 - Lots of paperwork to do for NSF to make me the MARS PI.
 - Attended proposal workshop.
- Out of Office

Week 17

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Checked condition of PCam v2.0 from its first deployment—it worked! Battery voltages were about where they should be.
 - Reviewed a bunch of video from PCam to look for interesting events.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Fixed bad connector on Benthos modem. It now works, so I put it back on the SES frame.
 - Retrieved six float blocks from Castroville.
 - Working with Mtechs to get SES configured for May 8 deployment.
- 902306 - SINKER
 - Trying to make sense of the power budget spreadsheet.
- Overhead
 - Upgraded the OS on my desktop computer.
 - Interviewed Etech candidate Devin Kasproicz.
- Out of Office

Week 16

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Finished repairing SES after discovering weird power supply issues.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam

- Ran a full-up test over the weekend to check hardware and software.
- Prepared PCam for deployment and it went out on an LRAUV on Tue.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Finished closing all SES housings.
 - Ran SES in Test Tank on MARS WNS all day Wed; it passed all tests.
- 902306 - SINKER
- Overhead
 - Went over Chad K's design for LASS controller and attended design review.
- Out of Office

Week 15

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 14

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Solved leaking problem with SES fluorometer.
 - Worked with Irene H. to reassemble camera and fluorometer onto SES and purge the air from their comp hoses.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Helped with Trinity flight last Thu at ESB.
 - Trying to improve images taken by hyperspectral camera.
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Wrote last part of camera controller code, in testing now.
 - Set up a run-time test with George S. to see how long main battery would last.
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
 - Interviewed candidate for Ventana pilot position.
- Out of Office

Week 13

- 300059 - DMO Divisional Support - David Packard

- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Still trying to fix the leaking SES fluorometer. Many things tried, non successful. We're considering more drastic measures.
- 901700 - Acoustical Ocean Ecology
 - Reading reviewer's comments on Kelly's acoustics paper.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
 - Edited Jim B's octopus garden paper.
- 902304 - Piscivore Cam
 - Did clock accuracy testing of controller boards.
 - Wrote the deployment section of the controller code and it is being tested now.
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
 - Still helping Facilities with the Test Tank ground system. Did some testing today and I think we know what to do next.
- Out of Office

Week 12

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Trying to reassemble SES but we're running into lots of problems. Working through them one by one.
 - Went to Castroville and found missing syntactic floats, removed precious nitrile SS hardware for safe keeping.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Continuing to work on camera controller code. Went over functional req's with Jared F.
 - Did more power testing of controller and tried to run clock accuracy test but battery died.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Preparing for meeting with McLane on Thu
- 902306 - SINKER
- Overhead
- Out of Office

Week 11

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Analyzing Benthic Rover fluorescence images
 - Collected info on SES for meeting with McLane about possible tech transfer

- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Making good progress on Arduino code for camera controller
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
 - Reviewed job posting for MiniROV hire
 - Training: attended online seminar by Keysight on signal integrity for PCBs
- Out of Office
 - Medical appt on Wed morning

Week 10

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Did Rover lab cleanup with Alana and Rich H. Still more to deal with but much progress has been made.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
 - Tested new code with George to power up camera and start recording—it works.
 - Built new camera controller board to interface with Pololu power supply for testing next week.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Disassembled, cleaned, inspected, and replaced o-rings on SES camera and fluorometer with Irene H's help.
 - Opened SES battery sphere after wasting hours of Paul C's time removing a galled titanium screw.
- 902306 - SINKER
- Overhead
 - Helping Greg V. with Test Tank ground-fault detector system so Doc Ricketts can go into tank.
- Out of Office

Week 9

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Disassembled Camera Tripods for storage, removed used lithium batts.
 - Submitted abstract for ASLO Mallorca.
 - Continuing to process Rover fluorescence data.
 - Tracked down missing syntactic float packs which are probably in Castroville.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
 - Attended kickoff meeting for the year where we rearranged some deployment dates.

- 902304 - Piscivore Cam
 - Wrote code for TinyZero microcontroller to control Piscavore camera.
 - Bench-tested controller and camera with George and adjusted time constants to make things work.
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 8

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 7

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 6

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Finally figured out why optodes aren't working on Rover. Parts on order.
 - Continuing analysis of Rover fluorescence data for ASLO conference.
- 901700 - Acoustical Ocean Ecology
 - Built up a Simrad Sonar Faraday cage for Brett to see if can fit it in LRAUV.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory

- 902304 - Piscivore Cam
 - Met with Jared about plans for this year, trying to set date for kickoff meeting once we know exactly who's on project this year.
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Found silicone oil to refill sediment trap motor.
- 902306 - SINKER
- Overhead
 - Helped George Stern get settled as Alana was wfh after COVID exposure.
- Out of Office

Week 5

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Working on Rover fluorescence data to present at ASLO.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Helping with assembly and checkout of new Trinity UAV
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Got SES working again with old motor, new cable on order for new motor.
 - Finished processing SES data from past deployments to identify significant sedimentation events.
- 902306 - SINKER
- Overhead
 - Had annual review.
 - Helping to get new EE George Stern spun up.
- Out of Office

Week 4

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
- Out of Office

Week 3

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Made progress on ground fault channel isolator with Jose.

- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Working on paper ideas for ASLO Spain in June.
 - Replaced broken parts on Smith Macro Camera laser.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Attended project kickoff meeting.
 - Working out wiring for new sediment trap motor and repairing wiring of Hall switch.
 - Reprocessing old deployment data to see trends in sedimentation rates and to review quality of data.
- 902306 - SINKER
 - Attended project kickoff meeting.
- Overhead
- Out of Office

Week 2

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
 - Worked with Jose on Ground Fault Channel Isolator board, found a bug, wrote a software patch, have yet to test.
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Tested damaged laser on Smith Macro Camera and ordered parts to repair.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
 - Worked with Rich H. to find reason for fail on previous deployment, found a bad Hall sensor cable and noted other anomalies that I'm investigating further.
- 902306 - SINKER
- Overhead
 - Replaced batteries in UPS for (non-IS supported) DeepDark computer, tested okay.
- Out of Office

Week 1

- 300059 - DMO Divisional Support - David Packard
- 300070 - DMO Divisional Support - Ventana
- 300079 - DMO Divisional Support - Rachel Carson
- 701147 - MARS O&M IV
- 901618 - Pelagic-Benthic Coupling
 - Working on repairing laser for Smith Macro Camera that was damaged while being put in storage
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral Community Observatory
 - Did calculations for size of field of view for Coral Mega Camera deployment on Sur Ridge

- 902304 - Piscivore Cam
- 902305 - Event Detection using the Sedimentation Event Sensor
- 902306 - SINKER
- Overhead
 - Working on materials for annual review
- Out of Office
 - Out sick Thu and Tue