

Paul McGill

Week 53

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 52

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 51

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Met with UW team for update, working through final electrical issues
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory

- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Team met for the last time this year to discuss instrument recovery and data analysis next year
- 902306 - SINKER
- 902401 - Geo-Sense
 - Got batteries installed into spheres, and held a sphere-sealing workshop
 - Began testing Deepsea Connect and found that some changes needed to be made
 - Attended deployment review on Dec 18—still lots of details to be worked out
- 902402 - CSEM
- Overhead
 - Completed sexual harassment training
- Out of Office

Week 50

- 300070 - DMO Support - Ventana
 - Helped DJ troubleshoot a fan error message on the Miranda video box
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Had monthly meeting with Sintela—they won't ship DAS until just before Christmas
 - Testing Deepsea Connect power and comms functions with ROV toast
 - Got battery spheres wired and will install batteries just before we seal the spheres
- 902402 - CSEM
- Overhead
 - Rich H and I spent most of Tue showing the Rover to NOAA PMEL in the hopes they'll adopt it
 - Troubleshooting Ryan hydrophone failure with Bryan S to determine why fuse blew
- Out of Office

Week 49

- 300070 - DMO Support - Ventana

- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 48

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Reading Meinberg PTP clock manual so I can update the firmware—it's very confusing
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Worked with new ME techs to get SES battery sphere sealed
 - Did final checks and put SES in tank for testing over holiday
- 902306 - SINKER
- 902401 - Geo-Sense
 - Got Seacon penetrators molded to SubConn connectors
 - Installed penetrators into Benthos battery spheres
- 902402 - CSEM
- Overhead
 - Helped marine electrician to troubleshoot numerous wiring problems on R Carson
- Out of Office

Week 47

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Met with UW for progress report
- 901700 - Acoustical Ocean Ecology
 - Got wiring for MARS interface can for MARS Echosounder modified so it will fit in the small space better

- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Working with Bill K on ground station wiring
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Had pre-meeting meeting to discuss requirements doc for Rhonda Software and will have Zoom with them in Kazakhstan tonight
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Preparing for upcoming deployment on Dec 6, lots of work changing batts, fixing beacons, etc.
- 902306 - SINKER
- 902401 - Geo-Sense
 - Got battery sphere penetrator cables wired so they're ready for molding this week
 - Worked with Denis and Alana on low-voltage disconnect circuit
 - Worked with Aaron S to fit the Deepsea Connect hardware in a small housing
- 902402 - CSEM
- Overhead
 - I forgot to report our huge success last week in deploying 11 seismometers and 2 moorings in four days on the Carson (charged to Charlie's project)
 - Worked with MARS team to get John R's hydrophone back on MARS, but alas it only worked for a day before its power failed. Will recover it Dec 6 on Crissy's cruise.
- Out of Office

Week 46

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 45

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology

- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
 - Have worked all week either preparing for SeismoSands or going to sea to deploy SeismoSands seismometers (charged to Charlie's project, which isn't listed here)
- Out of Office

Week 44

- 300070 - DMO Support - Ventana
 - Continuing to work with DJ to find suitable thumbsticks for ROV camera control
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Evaluating if we can get the SES and trigger trap back at sea for Dec 16 deployment
- 902306 - SINKER
- 902401 - Geo-Sense
 - Filling in for Alana at weekly meetings while she's at sea
 - Got quotes for Seacon connectors but they're too expensive
- 902402 - CSEM
- Overhead
 - Spent a couple of days analyzing 23-year-old seismic data to establish background noise levels for upcoming SeismoSands deployment next week (time charged to Charlie's project)
 - Worked with Knute and Bryan to get MARS Wet Node Simulator operational (time charged to MARS O&M)
 - Moved rolling toolbox from Bldg. B Ex attic and emptied it so Paul C can give it to one of his new hires
- Out of Office
 - Another medical appointment on Monday

Week 43

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Ordered new cables for UAV telemetry receiver
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Presented results of latest fluorometry analysis to group
 - Working on new analysis resulting from discussion
- 902306 - SINKER
- 902401 - Geo-Sense
 - Made changes to system interconnect diagram and am fleshing out the details
- 902402 - CSEM
- Overhead
 - Have been analyzing seismic data from 1998 to establish background noise levels in Monterey Bay so we can set the gains of the OBSs for the upcoming deployment (actually charged to Charlie's project which is not listed here)
- Out of Office
 - Medical appointment on Monday

Week 42

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Had monthly meeting with UW, progress is good
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Analyzed fluorescence data from last deployment and found some interesting signals
 - Reviewing engineering data from last deployment to investigate battery anomaly
 - Working with Giancarlo to set up SES as a mapping target for his group
- 902306 - SINKER
- 902401 - Geo-Sense
 - Made lots of progress on DAS sphere schematic
 - Researching some system wiring changes to make system more usable and reliable

- Disassembled a spare Ti McLane controller housing to see if we can use it for Deepsea Connect
- 902402 - CSEM
- Overhead
 - Attended Marine Imaging Workshop last week
- Out of Office

Week 41

- 300070 - DMO Support - Ventana
 - Researching miniature joystick options for *Ventana* camera
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Working on DAS sphere schematic
- 902402 - CSEM
- Overhead
 - Attending Marine Imaging Workshop in Monterey Tue–Thu
- Out of Office
 - Sick days last Wed, Thu

Week 40

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office
 - Medical appts Mon, Wed; sick days Thu, Fri

Week 39

- 300070 - DMO Support - Ventana
 - Helped Ethan with setting nulls on repaired joystick
 - Worked with DJ on better way to control camera from pilot's joystick
 - Working with Duane and DJ to add isolation to new power monitor board
- 701147.99 - MARS IV Node Upgrade
 - Helping Bryan with grounding and isolation in new MARS power and electronics housings
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Trying to fix error with battery sphere penetrators
- 902402 - CSEM
- Overhead
- Out of Office
 - Medical appts Mon, Wed; sick days Thu, Fri

Week 38

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office
 - Medical appt Mon, sick day Wed

Week 37

- 300070 - DMO Support - Ventana
 - Helping DJ adapt a surplus potentiometer to fix broken joystick
- 701147.99 - MARS IV Node Upgrade

- 901700 - Acoustical Ocean Ecology
 - Assembled end cap for MARS Echosounder interface can
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Met to discuss response to proposal phase 2
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Started building battery spheres and ordered required parts
 - Found that penetrators I ordered won't work, looking for alternatives
- 902402 - CSEM
- Overhead
- Out of Office
 - Medical appt Mon, sick day Wed

Week 36

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office
 - Took vacation day Fri

Week 35

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER

- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office
 - Took vacation day Fri

Week 34

- 300070 - DMO Support - Ventana
 - Built circuit to test joystick range scaling
 - Attempted to repair potentiometer on old joystick without success. New pots on order.
- 701147.99 - MARS IV Node Upgrade
 - Reviewed new IPB board design with George S and UW engineers
 - Dealing with fallout of another funding request from UW
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Mapped out connector pinout of Trinity battery pack
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
 - Working with Knute to figure out how to order ODI connectors for MARS connection
- 902401 - Geo-Sense
 - Finished initial version of battery sphere schematic
- 902402 - CSEM
- Overhead
 - Finally finished updating OS and antivirus software on desktop computer
 - Troubleshooting failure of MARS hydrophone
 - Finding parts for replacement hydrophone to be deployed Sep 19
- Out of Office
 - Took vacation day Fri

Week 33

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor

- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 32

- 300070 - DMO Support - Ventana
 - Refining design of joystick range scaling circuit
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Planning for two flights I'll assist with on Thursday
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
 - Finished pressure testing of AOS PIC24 attitude sensor, will now see about fabricating more parts
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Working on battery sphere wiring
- 902402 - CSEM
- Overhead
 - Working with IS to address multiple issues preventing me from running OrCAD
- Out of Office

Week 31

- 300070 - DMO Support - Ventana
 - Did more troubleshooting and adjustments on Ventana joystick
- 701147.99 - MARS IV Node Upgrade
 - Reading docs for Meinberg precision clock so I can update firmware
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
 - Working with Brett to troubleshoot issues with RS-485 on LRAUV. Found an issue that may or may not be the problem but we'll fix it and do further testing at sea
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense

- 902402 - CSEM
- Overhead
 - Working on upgrading OrCAD but my computer's hard disk is full so it's making the process much more difficult
- Out of Office

Week 30

- 300070 - DMO Support - Ventana
 - Helped pilots fix two broken ROV joysticks that would've prevented science dives this week
- 701147.99 - MARS IV Node Upgrade
 - Reviewed and approved project budget status reports
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Met to discuss battery problems and upcoming flight ops
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
 - Ordered and received second power supply for sonar payload
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Met to discuss details of fiber-optic cables and connectors
- 902402 - CSEM
 - Met with Steve Constable to discuss our deployment of the SWAN CSEM system
- Overhead
- Out of Office
 - Was out sick with COVID last week

Week 29

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 28

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 27

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Reviewed new overcurrent protection circuit
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Got laser cable tested, rebuilt, tested again, and fabricated
 - Preparing
- 902101 - LRAUV Technology Development
 - Helping Vartha with LRAUV sonar payload
- 902304 - Piscivore Cam
 - Participated in 2025 proposal planning
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Edited 2025 proposal
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
 - Helping Justin T with LIDAR hot-water plume pumping system
- Out of Office

Week 26

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach

- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Installed and tested focus motor system with Aaron S and Alana
 - Got new laser housing schematic drawn for fab by techs
 - Set up second laptop with disco account and all required apps
- 902101 - LRAUV Technology Development
 - Ordered new power supplies for sonar payload
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Deployed SES and Trigger Trap near MARS last Thu—all went well
- 902306 - SINKER
- 902401 - Geo-Sense
 - Ordered more parts for Deepsea Connect
 - Edited 2025 proposal
- 902402 - CSEM
 - Edited 2025 proposal
- Overhead
- Out of Office

Week 25

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Working with Alana and Aaron S on lens focussing
 - Trying to incorporate limit switches into stepper motor driver
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Attended two meetings with potential vendors for next-gen cameras
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Preparing for Thu deployment
- 902306 - SINKER
- 902401 - Geo-Sense
 - Tested fit of Deepsea Connect components into proposed housing
 - Ordered more parts for Deepsea Connect build
- 902402 - CSEM
 - Helping Aaron M with next year's proposal
- Overhead
- Out of Office

Week 24

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade

- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 23

- 300070 - DMO Support - Ventana
 - Reviewed final version of power monitor board so Duane T. can send to fabrication
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Helped with two UAV missions on Wed at New Brighton and Seacliff beaches
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Helped Alana and Jim B. with their DOEST presentation
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Corrected wrong version of firmware on camera controller
 - Helped with Piscivore camera deployment on Mon
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Sealed battery sphere on SES and installed new cable on Trigger Trap
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 22

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Did further testing of focus stepper motor driver, and can now operate it through VirtualHere running on the Raspberry Pi
- 902101 - LRAUV Technology Development

- 902304 - Piscivore Cam
 - Found another timing bug in camera controller code, fixed it, and have been running verification tests
 - Loaded correct firmware into two cameras for Monday's deployment on LRAUV
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Rich and I got new acoustic modems covered with tape for scratch protection and mounted on both the SES and the Trigger Trap
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
 - Went to Bay Photo in Scotts Valley to pick up our awesome new Monterey Bay panorama map on display outside the Pacific Forum
- Out of Office

Week 21

- 300070 - DMO Support - Ventana
 - Reviewed final design for current/voltage monitor board
- 701147.99 - MARS IV Node Upgrade
 - Reviewed and approved new PO for UW contract
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Got Raspberry Pi set up with latest operating system for testing
 - Got focus motor controller turning the motor with laptop app
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Testing on camera controller software v1.3.1 continues
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Successfully tested modem triggering McLane controller on Trigger Trap
 - Finished drawing for modem-to-controller cable, sent to manufacturing
- 902306 - SINKER
- 902401 - Geo-Sense
 - Reviewed Winchester cable design and agreed to go ahead with order
- 902402 - CSEM
- Overhead
 - Replaced two computer monitors in my office with newer models, which required some office cleaning
- Out of Office

Week 20

- 300070 - DMO Support - Ventana
 - Tested new Hall sensor for prop RPM on vehicle

- Continuing to help DJ with load cell for tether management system
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Ordered focus stepper motor drivers. Working out wiring and connectors to connect focus stepper motor to driver board
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Testing bug fixes for camera controller code—each test takes days, but so far, so good
 - Trying to figure out how to increase resolution for video from Raspberry Pi cameras
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Trying to get quotes for Impulse connectors required for acoustic modem to talk to McLane controller
- 902306 - SINKER
- 902401 - Geo-Sense
 - Received power supplies for Deepsea Connect, working on wiring design
- 902402 - CSEM
- Overhead
- Out of Office

Week 19

- 300070 - DMO Support - Ventana
 - Helping DJ with a load-cell problem on the ROV winch
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Finally found the weird timing bug in the camera control firmware. Problem is caused by bug in Arduino real-time clock library and I'm programming around the issue. Now bench-testing the fix.
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Inspected wiper on SES carousel and found it full of gritty sediment
 - Cleaned camera viewport and what we thought were scratches are gone. Determined that other blemishes in image are caused by small bubbles that will disappear at depth.
- 902306 - SINKER
- 902401 - Geo-Sense
 - Preparing for design review on Thu morning
 - Have drawn most of schematic for Deepsea Connect can

- 902402 - CSEM
- Overhead
 - Helping Kavi with a shore-power wiring issue with the Carson
- Out of Office

Week 18

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
 - Working on replacing bad connector on MARS Echosounder. Also trying to improve sealing of adapter can, which will require a new plug to be designed and machined.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Set up new antenna on UAV ground station telemetry receiver.
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Continuing to troubleshoot software bug in controller software.
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Got SES battery sphere reconfigured for autonomous operation
 - Reinstalled SES controller into its housing.
 - Troubleshooting optical clarity issues with SES camera system.
- 902306 - SINKER
- 902401 - Geo-Sense
 - Attended FO cable design review.
 - Ordered and received parts for Deep Sea Connect.
- 902402 - CSEM
 - Did some reading on signal processing for CSEM to better understand what's important during operation at sea.
- Overhead
- Out of Office

Week 17

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Working on annual NSF report submission—almost finished
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Ordered new 2.4 GHz telemetry antenna
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Troubleshooting timing problem on v1.3.0 of camera controller code

- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Removed MARS interface hardware from SES
 - Working on converting SES battery sphere to autonomous operation
- 902306 - SINKER
 - Continuing to investigate getting a 1 Gbit MARS cable with less than a year's lead time
- 902401 - Geo-Sense
 - Got replacement connector to correct mis-shipment by SubConn
- 902402 - CSEM
- Overhead
 - Analyzing problem with VHF beacons causing interference on marine channel 16
- Out of Office

Week 16

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Dealing with another budget supplement request from UW
 - Met with Knute to discuss design of MARS science cables, contacted Brock for a cable quote
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Researched and identified a better 2.4 GHz antenna for telemetry
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Troubleshooting issues with flakey camera controller
 - Met to discuss development of next camera version
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
 - Attempting to find a Gig-E cable for this experiment
- 902401 - Geo-Sense
 - Inventoried latest shipment from SubConn and am dealing with their mistakes
- 902402 - CSEM
- Overhead
 - Safety committee meeting on Wed
- Out of Office
 - On vacation last week, returned to MBARI April 15

Week 15

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach

- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office
 - On vacation March 27, returning to MBARI April 15

Week 14

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office
 - On vacation March 27, returning to MBARI April 15

Week 13

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Had meeting with UW and we decided to respin the power supply boards due to multiple issues
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Participated in UAV flight at MBARI to show NOAA visitors our operation
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Ordered all of the SubConn connectors and cable assemblies

- Emailed Sintela about heat management of new DAS and they will simulate different orientations
 - Inspected glass and Ti spheres with Aaron M and Aaron S to make sure that they'll work for us
- 902402 - CSEM
- Overhead
 - Participated in SeismoSands cruise on Tue to help Charlie Paull test deployment of seismometers
 - Attended Director's Dialog
- Out of Office
 - On vacation March 27, returning to MBARI April 15

Week 12

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Working with UW to resolve issues with MARS power board overcurrent protection
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Helped Jared to troubleshoot problems with latest camera builds
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Working on deployment strategies and options for fiber-optic cable
- 902402 - CSEM
- Overhead
 - Helping Jason A with the ground-fault circuit for his mooring
- Out of Office
 - Took Monday as recovery day after international flight on Sunday

Week 11

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER

- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 10

- 300070 - DMO Support - Ventana
 - Continuing to help DJ sort out power issues on ROV.
 - Helping DJ figure out why hydraulic valves are slow. Looking at valve drivers and made some measurements on the valves.
- 701147.99 - MARS IV Node Upgrade
 - Investigated bias resistors on floating power supply outputs, as what was done previously wasn't well-documented.
 - Bi-weekly meeting with UW to update on progress.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Ran ground station for two flights on Monday.
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
 - Got second AOS sensor wired for testing in pressure test tank.
- 902304 - Piscivore Cam
 - Got three processors labeled, programmed, and attached to new I/O board to build new cameras.
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Opened battery sphere to configure for autonomous deployment.
- 902306 - SINKER
- 902401 - Geo-Sense
 - Re-laying out electrical connectors so we can use stock cables and connectors instead of long-lead-time custom assemblies.
 - Getting vendor quotes for parts.
 - Preparing for Lunding trip next week.
- 902402 - CSEM
- Overhead
- Out of Office

Week 9

- 300070 - DMO Support - Ventana
 - Helped DJ with ROV power problem
- 701147.99 - MARS IV Node Upgrade
 - Dealing with no-cost extension for UW
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Repaired broken telemetry antenna

- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Attended Irene's design review
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Investigating camera recording software
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Designing Deep-Sea Connect for Geo-Sense
 - Ordering connectors
- 902402 - CSEM
- Overhead
- Out of Office

Week 8

- 300070 - DMO Support - Ventana
 - Working with DJ and Duane T. on a power monitoring system for Ventana. They are having brownouts during dives and need to see where the power is going.
- 701147.99 - MARS IV Node Upgrade
 - Working with UW on various issues that have come up in testing of the boards for the new node.
 - Working on a new cable design to be the MARS standard for science instruments that need GigE Ethernet.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
 - Tested new BMA456 sensor board—it works! Now needs pressure test.
 - Finished code to store AOS offsets in EEPROM to survive power cycles. Cleaned up code in general and am almost ready to archive.
- 902304 - Piscivore Cam
 - Getting new PCam 2.0 I/O boards built. Tested first article and gave the go-ahead to build two more.
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
 - Searching for MARS cable that supports GigE Ethernet. Working on new cable design with MARS crew, but that will delay us a few months.
- 902401 - Geo-Sense
 - Searched in Castroville for both glass and Ti spheres.
- 902402 - CSEM
- Overhead
- Out of Office

Week 7

- 300070 - DMO Support - Ventana
 - Working on a couple of Ventana problems with DJ. We'll tackle them next week during the maintenance period.
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Reviewed some of the 20,000 images from the just-recovered Coral Macro Cam.
- 902101 - LRAUV Technology Development
 - Got Jose to build new AOS sensor boards, and will test them on Thu.
- 902304 - Piscivore Cam
 - Created documentation for build of PCam v2 I/O board
 - Put together build kit and submitted parts to e-techs to build new controllers
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Inspected new Gen3 controller just sent by McLane
- 902306 - SINKER
 - Tracking down new cable for SINKER connection to MARS. The cable we chose previously will not support GigE.
- 902401 - Geo-Sense
 - Working on requirements doc
 - Had telecon with Sintela people in England
- 902402 - CSEM
- Overhead
 - Wrote and presented a well-attended ground-fault tutorial.
- Out of Office

Week 6

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 5

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office

Week 4

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Locating camera tripod parts so they can be reassembled and deployed
- 902101 - LRAUV Technology Development
 - Sent design files off to have PIC24 AOS sensor PCBs fabbed
- 902304 - Piscivore Cam
 - Getting parts together for building two more cameras
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
 - Found a cable we can use for connection to MARS
 - Found a cable we can use for testing of wiper on Ventana dive
- 902401 - Geo-Sense
 - Trying to figure out new connectors will fit into existing holes in Ti sphere
 - Setting up travel for visit to Sintela in England
- 902402 - CSEM
- Overhead
- Out of Office

Week 3

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Got second serial splitter assembled and tested.
- 901700 - Acoustical Ocean Ecology

- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Repaired WABO Iridium beacon and will now test outdoors
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Commencing long-term testing of new controller software.
 - Troubleshooting intermittent controller battery connection issue on rear-facing camera
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Working on system interconnects and connector selection with Alana
- 902402 - CSEM
- Overhead
- Out of Office
 - Had medical appointment on Tue

Week 2

- 300070 - DMO Support - Ventana
 - Helped DJ with time synchronization issues with WinFrog upgrade, and refinement of ground-fault system on Ventana.
- 701147.99 - MARS IV Node Upgrade
 - Had serial splitter board fabbed and tested all ports at full speed—it works. Getting a second board built.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Made some more mods to Piscivore controller code, now bench testing over multi-day operations.
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
 - Attended kick-off meeting for this year.
 - Starting to draw system interconnect schematic.
- 902402 - CSEM
- Overhead
 - Attended review of Jason A's mooring design.
 - Mostly done with accomplishments doc for annual review.
- Out of Office

Week 1

- 300070 - DMO Support - Ventana
- 701147.99 - MARS IV Node Upgrade
 - Had Zoom meeting with UW to get progress update and to discuss possible power supply upgrade
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902101 - LRAUV Technology Development
- 902304 - Piscivore Cam
 - Added requested feature to camera software which will delay deployment for given number of days. Code is done but will take most of the week to test.
- 902305 - Event Detection Using the Sedimentation Event Sensor
- 902306 - SINKER
- 902401 - Geo-Sense
- 902402 - CSEM
- Overhead
- Out of Office