

Paul McGill

Week 52

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Continuing work on machine learning to identify sonar targets
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Repaired carousel motor on SES well enough for testing until new unit arrives
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Edited Fanny's paper on the Coral Mega Camera
- 902201 - Blue Whale Observatory
- Overhead
 - Training - Still working through textbook on PyQt6 GUI programming
- Out of Office

Week 51

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Repaired carousel motor for SES
 - Finished writing Web page for Laser Measure
- 901700 - Acoustical Ocean Ecology
 - Spent most of a day updating NVIDIA drivers on DeepDark because latest version of Mathematica wouldn't run with old drivers
 - Worked on using Differential Evolution to tune hyperparameters on CNN for sonar return classifier
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Read draft of latest octopus paper based on our Barry Macro Camera images
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 50

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade

- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on Mon for medical appointment
 - Out on Tue due to possible COVID exposure last week

Week 49

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on Mon for medical appointment
 - Out on Tue due to possible COVID exposure last week

Week 48

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Worked on finding a replacement stepper motor for SES but will buy assembly from McLane instead
 - Wrote draft of text for Laser Measure Web page
 - Identified problem with Laser Measure cal files but can't test it until I reinstall Matlab with the new license
- 901700 - Acoustical Ocean Ecology
 - Have resumed writing code to predict fish species based upon their sonar returns
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on Mon for medical appointment
 - Out on Tue due to possible COVID exposure last week

Week 47

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson

- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on Tue due to possible COVID exposure on Carson

Week 46

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Got Squirty shipment ready to go to New Zealand but plans changed and now we'll reassemble sed trap in high bay
 - Found some errors in Laser Measure calibration but total error is still too large—the search continues
 - Serviced all beacons from last cruise by removing batteries, cleaning, repairing labels, and testing
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Deployed Coral Macro Cam on Sur Ridge from Carson on Thu
 - Working on method to focus lens remotely with servo on Raspberry Pi
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on Tue due to possible COVID exposure on Carson

Week 45

- 300070 - DMO Support - Ventana
 - Working on issues with ground-fault channel isolator with Jose.
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Created new calibration files for Laser Measure but still can't pin down source of errors
 - Troubleshooting failure in Rover optodes
 - Troubleshooting failures in Camera Tripod strobes
 - Identified and corrected missing images in Camera Tripod VARS repository
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Mobing for cruise to deploy Coral Macro Camera on Thu
- 902201 - Blue Whale Observatory

- Overhead
- Out of Office
 - Took vacation day Monday

Week 44

- 300070 - DMO Support - Ventana
 - Started documenting recent calculations to determine why Ventana's hydraulic system was overheating
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Made movies from camera tripod time-lapse images
 - Wrote code to analyze time-lapse images and determine when one or both strobes failed to fire
 - Analyzed failure in Dual Camera Tripod near-field camera
 - Worked on refining Laser Measure code to reduce errors
 - Preparing Squirty hardware for shipment to New Zealand
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Reviewed images from most recent Macro camera deployment
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 43

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Troubleshoot near-field camera on Dual Camera Tripod to see why it stopped working halfway through the deployment. It was a problem with the Canon camera.
 - Made movies from Camera Tripod, Macro Camera, and Rover images.
 - Recharged battery for Smith Macro Cam.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
 - So much email to catch up on...
- Out of Office
 - Was on sick leave until Mon, Oct 24.

Week 42

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV

- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on sick leave until Mon, Oct 3.

Week 41

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on sick leave until Mon, Oct 3.

Week 40

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on sick leave until Mon, Oct 3.

Week 39

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory

- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out on sick leave until Mon, Oct 3.

Week 38

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation Aug 29 thru Sep 5.

Week 37

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation Aug 29 thru Sep 5.

Week 36

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation Aug 29 thru Sep 5.

Week 35

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation Aug 29 thru Sep 5.

Week 34

- 300070 - DMO Support - Ventana
 - Did hydraulic and tether loss calculations to help pilots troubleshoot problems.
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Wrote code to generate Laser Measure calibration files for import into Dan Davis' code. Am tweaking calibration files to try to improve accuracy.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Got equipment mobilized so Coral Macro Camera can be recovered on Kakani's WF cruise.
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation Aug 29 thru Sep 5.

Week 33

- 300070 - DMO Support - Ventana
 - Helped pilots troubleshoot an issue with Ventana's servo valves—problem was a missing ground.
- 300079 - DMO Support - Rachel Carson
 - Continue to work with Paul C to decommission microwave equipment on the Carson and remove what's no longer used.
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Still working on Laser Measure calibration. Had a breakthrough with data processing and am slowly progressing.
- 901700 - Acoustical Ocean Ecology
 - Worked with Chad W to troubleshoot yet more noise issues with Simrad sonar on REMUS AUV. Shielding additional cables and isolating RS-232 seems to have helped a lot.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach

- Met with Tom O about processing of aerial images from Trinity UAV. Tracked down info about local survey markers to compare with Google Earth.
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
 - Helped Chris W come up to speed with the Anritsu antenna analyzer so he can tune his AUV antennas.
- Out of Office
 - Out Monday with medical appointment.

Week 32

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 31

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Still dealing with sonar noise issues on REMUS vehicle. Adding a cap between computer ground and chassis has helped a lot but there are other problems.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Having problems with matrix algebra for Laser Measure calibration. Laser dots transformed into camera coordinate system don't make sense, but I'll find the error.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Helped with Trinity flight over Moss Landing on Tue morning—all went well.
 - Working with Tom O. on analysis of flight images.
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Processing data from recent recovery of Coral Camera Tripod.
 - Preparing for turnaround and redeployment of both coral cameras.
- 902201 - Blue Whale Observatory
- Overhead
 - Reviewing Thom M's docs for Wakestr power controller.
- Out of Office

Week 30

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots

- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Was on vacation last week.

Week 29

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Worked on rotation vectors for Laser Measure calibration.
 - Tried to fix spare Raspberry Pi for BLISS.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
 - Reviewed resume for Ventana pilot candidate.
- Out of Office
 - Was on vacation last week.

Week 28

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - On vacation until Mon, July 18. I have jury duty that week and may not be at MBARI.

Week 27

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade

- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - On vacation until Mon, July 18. I have jury duty that week and may not be at MBARI.

Week 26

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out last Thu for medical appointments.

Week 25

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Tested AOS sensors after potting and all are okay.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Helping to prep Macro Camera for next week's deployment.
 - Got Laser Measure code running on my computer, learning how it works.
- 901700 - Acoustical Ocean Ecology
 - Got AOS sensor software to output transducer angles instead of accelerometer counts.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
 - Still dealing with FCC licensing issues for microwave system.
- Out of Office
 - Out last Thu for medical appointments.

Week 24

- 300070 - DMO Support - Ventana
 - Worked with pilots to resolve issues with servo valves
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Got AOS sensors tested, repaired, and molded

- Got sonar payload #2 wired enough for Chad W. to finish
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Tested Macro Camera with Alana, resolved battery issues
 - Met with Duane E. to get walk-through of Laser Measure setup and use
 - Still working on MATLAB licensing issues to run Laser Measure
- 901700 - Acoustical Ocean Ecology
 - Working on AOS PIC24 code—much progress but bugs remain
 - Edited first draft of Kelly's paper on robotic observer effect
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 23

- 300070 - DMO Support - Ventana
 - Working with pilots to solve wiring issue with hydraulic servo valves.
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Assembling and wiring the second REMUS sonar payload.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Collecting documentation for Squirty sediment-trap agitator for IP license to a New Zealand collaborator.
 - Met with Duane E. about Laser Measure, will meet again this week.
- 901700 - Acoustical Ocean Ecology
 - Editing paper on animal avoidance of vehicles.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Was out of office Thu for dental work.

Week 22

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 21

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Wired AOS sensors to test before potting
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Arranging to get Laser Measure code from Dan Davis
- 901700 - Acoustical Ocean Ecology
 - Working on building new cable for MARS Echosounder
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
 - Helped Doc Ricketts pilots troubleshoot suction sampler carousel
 - Spent hours troubleshooting licensing issue with my PIC C compiler
- Out of Office

Week 20

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Working on getting AOS accelerometers potted. We are short of techs this week.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Met with Duane E. about Laser Measure and am trying to get latest software from Dan Davis.
 - Began tracking down lasers and batteries for Smith Macro Cam to be deployed June 29th.
- 901700 - Acoustical Ocean Ecology
 - Worked with Knute to track down source of ground fault on MARS Echosounder. We found two bad connectors and are working on getting them replaced.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Am editing Fanny's paper.
- 902201 - Blue Whale Observatory
- Overhead
 - Had online meeting with NOAA/PMEL to discuss transfer of Carbon Waveglider parts and design.
- Out of Office
 - Was on vacation April 21st thru May 11th.

Week 19

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach

- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation April 21st thru May 12th.

Week 18

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation April 21st thru May 12th.

Week 17

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation April 21st thru May 12th.

Week 16

- 300070 - DMO Support - Ventana
 - Helping DJ troubleshoot another ground-fault problem
- 300079 - DMO Support - Rachel Carson
 - Spent many hours troubleshooting microwave system with Paul C., Ariana, and Alana, and had partial success but it needs more tweaking.
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Calculated new Rover position for Wave Glider geolocation attempts next week.
- 901700 - Acoustical Ocean Ecology
 - Observed deployment of MARS Echosounder and am working with Knute and Chad W. to figure out what is causing a ground fault in the system.

- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Found design issue with UAV's external barometer board and had Jose make some mods to correct the problem.
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Will be on vacation April 21st thru May 12th.

Week 15

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
 - Troubleshooting error with RC's Sea Tel dish-pointing system.
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Trying to figure out coordinate transformation math for Laser Measure.
- 901700 - Acoustical Ocean Ecology
 - Did more noise testing of AUV sonar payload. Ordered new DC-DC converters for iBase computer to reduce interference.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Tested UAV barometer on bench, trying to figure out why it won't talk to Pixhawk4.
 - Helped team with 3 successful flights at Hollister airfield on Wed.
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - Out sick on Thu.

Week 14

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 13

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Tested power supply for second REMUS sonar. Assembling chassis with Chad W.
- 701147 - MARS O&M IV

- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Met with Duane E. to strategize about Laser Measure work this year.
 - Working on how to analyze calibration measurements from last year.
- 901700 - Acoustical Ocean Ecology
 - Finally got accelerometer talking to PIC micro for sonar xducer orientation sensor. Continuing to work on code to add features.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 12

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Building second sonar payload for Remus AUV.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Had 1 hr phone call with Dan Davis to answer his questions about our Laser Measure data. He's making some progress analyzing images.
- 901700 - Acoustical Ocean Ecology
 - Spent days rewriting PIC code for AOS (attitude sensor for sonar xducers). Existing code had some serious issues. Not done yet but making slow and steady progress.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 11

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 10

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
 - Met with DJ about RS-485 comms to new ROV winch.

- 701145 - Penguin Hotspots
 - Assembling second REMUS Sonar payload chassis.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Helping Colleen access current meter data from Smooth Ridge.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Released v1.0.0 of Believer UAV schematic.
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Participated via telepresence in Barry dive on Davidson Seamount to deploy Coral Macro Camera in octopus nursery. Initial images are stunning and camera will stay there until July.
- 902201 - Blue Whale Observatory
- Overhead
 - Still migrating software to new Mac Powerbook.
- Out of Office

Week 9

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Tested wiring for Remus sonar payload w/Chad and everything seems to be working. Will proceed with building second payload.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
 - Did some sonar testing on LRAUV w/Brett and Brian K. Having trouble finding source of 200 kHz noise.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Worked w/Alana and Aaron S. to prepare Coral Macro Camera for deployment this week on Barry's Flyer cruise. It was working when the ship left.
- 902201 - Blue Whale Observatory
- Overhead
 - Put together and tested new backup SSD for MacBook Pro.
- Out of Office

Week 8

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Had meeting with Dan Davis and Duane E. to go over Laser Measure analysis.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Resolved some final details on the Believer UAV schematic.
- 901904 - Deep-Sea Coral-Sponge Community Observatory

- Dealt with last-minute laser and power supply issues with Coral Macro Cam in prep for next week's deployment. Calibrated camera focus and targeting lasers in Test Tank.
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 7

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Mounted AOS PIC24 board to sonar chassis and am working with techs to get it wired.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Worked with Kent H. to refine Loop & Cross algorithm and identify problems during the last deployment.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Started drawing schematic of Believer UAV wiring and am 95% done with system interconnect diagram.
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Preparing Coral Macro Camera for deployment in two weeks.
- 902201 - Blue Whale Observatory
- Overhead
 - Setting up new MacBook Pro with Doug C's help.
- Out of Office

Week 6

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 5

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Gave AOS PIC24 board to Jon E. for mounting. Working out discrepancies in hole spacing with Brent J.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Finished Rover, SES, and Camera Tripod preparation for cruise.
 - Loaded ship
 - Currently on cruise waiting for bad weather at Station M to abate.

- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 4

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 3

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Corrected errors on sonar payload system schematics and gave prints to Chad.
 - Built test cables and programmed firmware onto 4 new AOS boards. Reviewing code to see if I can fix some shortcomings.
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Got Rover connectors repaired/cleaned and ran in test tank overnight—it's working.
 - Replaced battery in Dual Camera Tripod.
 - Rewired connector on SES motor, tested, and found problem with home sensor, yet to be solved.
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Worked with Alana to get new Canon camera integrated into Coral Macro Camera system.
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 2

- 300070 - DMO Support - Ventana
 - Jose and I are working through issues with the Ground Fault Channel Isolator
- 300079 - DMO Support - Rachel Carson
- 701145 - Penguin Hotspots
 - Put final details on sonar payload schematics
 - Working with John F to get last copper shield parts made
- 701147 - MARS O&M IV

- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Replaced all accessible connector o-rings on Rover, inspected and cleaned all connectors
 - Getting faulty Rover cables rebuilt
 - Analyzed Loop and Cross data from last Wave Glider deployment
 - Had online meeting with collaborators Kathy Dunlop and Nigel Keely to discuss SES
- 901700 - Acoustical Ocean Ecology
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Starting UAV schematics
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Worked with Alana to get camera and test equipment to her to work at home
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office

Week 1

- 300070 - DMO Support - Ventana
- 300079 - DMO Support - Rachel Carson
 - Interviewed candidate for ROV pilot position.
- 701145 - Penguin Hotspots
- 701147 - MARS O&M IV
- 701147.99 - MARS IV Node Upgrade
- 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Finished collating camera calibration data from last Laser Measure dive and will pass it on to Dan Davis for further analysis.
 - Worked with Alana and John F. to correct vignetting in Dual Camera Tripod Near-Field camera.
- 901700 - Acoustical Ocean Ecology
 - Added a section to a failure analysis report for the Deimos cable on MARS.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Worked with Alana to see if the new Canon R6 camera will fit into the Coral Macro Camera housing. We think it will but some mods will be required.
- 902201 - Blue Whale Observatory
- Overhead
- Out of Office
 - On vacation last week.