Johann Voigtlander Sorted By Project

300062 - DMO Support - Doc Ricketts

901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach

- Studying for Part 107 examination (Week 14)
- Studying for Part 107 license (Week 18)
- Visual observer for the VTOL UAV in Santa Cruz (Week 24)

902101 - LRAUV Technology Development

- Rebuilt LRAUV battery holder (Week 20)
- Designed and 3D printed DSP&L Camera mount for Tethys AUV (Week 20)
- Refurbished LRAUV battery bank (Week 21)
- Reconfigured hovering AUV thrusters to match MOLAs thruster configuration (Week 24)

902204 - Scalable Robotics

- Working with Craig from Boxfish to repair Mola 2 batteries (Week 2)
- Cleaned up the lab for the National Geographic tour (Week 3)
- I created a 2-page manual for the Event Camera, which will be deployed by the Compas lab on Friday on Ventana. (Week 7)
- Gave Pushyami and Javiera a tutorial on how to use the Event Camera for their Ventana deployment (Week 8)
- Uninstalled equipment from the Ventana sled to be installed on the MiniROV (Week 8)
- MiniROV Deployment from David Packard Mar10-17th. (Week 12)
- Demobed from ship (Week 12)
- Mobing at MBARI (Week 12)
- Assisted in Arctic trip packing (Week 13)
- Removed front and rear cameras from MiniROV for George (Week 14)
- Forklifted some rowe packs from ESB (Week 15)
- Writing BlueBoat Oceans poster abstract (Week 18)
- Completed Oceans 2026 blueboat poster abstract “A Compact ASV for High Resolution Bathymetric Mapping in Shallow Water” (Week 19)
- Improved documentation for the blueboat (Week 21)
- Blueboat harbor survey with the Cerulean Sonar (Week 24)
- Set up Conch laptop with blueboat software (Week 24)
- Installed Compas lab equipment on the MiniROV (Week 24)
- Wired up and finished VN100 ‘mini’ housing. (Week 25)

- Installed and secured all compas lab equipment on MiniROV (Week 25)
- Tested all compas lab equipment on Mini, completed a wet and dry test (Week 25)
- Got the BlueBoat set up so Kent could work on the Cerulean sonar (Week 27)

902208 - Mini ROV Operations

- Upgraded the new NUCs to Labview 2025 32 bit. (Week 2)
- Removed Datalogging and supervisory control module from copilot (Week 2)
- Working on a new LabVIEW program to integrate the VN100 IMU (Week 2)
- The A125 DVL LabVIEW integration is nearing completion. (Week 3)
- Frank and I have been outfitting the 10-foot control van with all necessary ROV equipment. After two days of rewiring and system integration, we powered up the vehicle without any issues. While there is still significant work remaining, we are currently ahead of schedule. (Week 7)
- Installed MiniROV equipment in the 10-foot control van. (Week 8)
- Debugging ground faults (Week 8)
- Mini in TT, made up a new laser bracket, upgraded all NUCs to windows 11 which involved a lot of testing and software installation. The MiniROV system seems stable so far. Camera and laser calibrations are all done. (Week 9)
- Mobilized MiniROV on DP (Week 10)
- Deploying minirov from David Packard (Week 11)
- Got a quote for Sonardyne battery replacement (Week 13)
- Purchased bulkheads for the new heading sensor housing (Week 13)
- Camera calibration for GT's sled (Week 13)
    - Removed GT's sensors afterwards for his next deployment (Week 13)
- Ordered new 8-pin heading bulkheads for heading sensor (Week 14)
- Inventoried and organized fiber cables (Week 14)
- 3D printed a new tilt motor mount, cut new tilt motor tracks to tension the belt. (Week 14)
- 3D modelled a new "Foam pack adapter", the front panel which holds the heading and CTD sensor. It is now much more rigid and modular. (Week 14)
    - Had to do some maintenance on the Prusa XL printer to print this part (Week 14)
- Got VARS data transferred for Brian (Week 14)
- Working with Justin on the new heading sensor housings (Week 14)
- Took apart the dead Sonardyne beacon. Got a quote for a new battery for it. (Week 14)
- Changed the oil on the thrusters. Replaced filter board O-rings (Week 15)
- Opened EPOD and moved fiber bulkhead locations. Increased RX dB by ~5 (Week 15)
- Tested all cables for ground faults. Inspected and cleaned the ends (Week 15)
- Refurbishing MiniROV cables (Week 16)
- Working with Susan to record a time-lapse of the miniROV rebuild (Week 16)
- Cleaned connectors, changed O-rings, and general maintenance (Week 16)

- Replaced cracked manipulator arm manifolds (Week 17)
- Rebuilt one USBL (Week 17)
- Rebuilding the MiniROV (Week 17)
- Potted cables that were damaged/cracked (Week 17)
- MiniROV has been rebuilt. Frank and I placed it in the test tank and we have some thruster ground faults that we are addressing (Week 18)
- Working with Justin for the new heading sensor housing (Week 18)
- 3D printed CCW thruster for the MiniROV to try counter rotating props (Week 19)
- Repaired some of the oil compensation lines (Week 19)
- Rebuilt the benthic expansion can after it was re-anodized (Week 19)
- Ordered new tubing/zip ties (Week 19)
- Made a deployment document to share with Italy (Week 19)
- Frank and I ballasted and investigated ground faults in the tank. The only ground faults on the vehicle are from the thrusters which are coming from multiple thrusters but are small, ~200 all together. (Week 19)
- Started moving from 10' van to 20' (Week 20)
- 3D designed and printed reinforced parts that broke (Swing arm mount, foam pack adapter) (Week 20)
- 3D printed CCW miniROV propeller out of resin (Week 20)
- Rewiring the MiniROV with improvements to simplify breaking down/setting up the server racks (Week 21)
- Working on deployment document for Gaia Blu (Week 21)
- Completed 20' control van swap. Completely re-organized and optimized the racks so that our next swap(s) should go MUCH smoother. (Week 22)
- Completed a 25 page document on MiniROV deployments, sent it to Mandy for export compliance. (Week 22)
- Started installing Compas lab equipment on MiniROV (Week 22)
- Got quotes on Kongsberg USBL purchase/rental (Week 22)
- Finished up control van wiring (Week 24)
- Ordered new UPS (Week 24)
- Made fixture for NAS in rack (Week 24)
- (Week 24)
- Submitted the MiniROV 2027 proposal and budget (Week 27)
- Installed Paul's stereo camera on the vehicle for testing (Week 27)
    - Designed and 3D printed a mount for it (Week 27)
    - Confirmed cable wiring and voltage (Week 27)
- Sent clarification emails to pietro in Italy (Week 27)
    - Had to edit the master deployment document (Week 27)
- Installed and tested VOYIS camera on the MiniROV. (Week 28)
- Fixed clump cam flickering - was a faulty SDI bulkhead (Week 28)
- Made some major improvements to the new joystick console (Week 28)
    - Can now stream video on the network (Week 28)
    - Has overlay for scientists/pilots/winch operator (Week 28)

902312 - Seafloor Processes

- I've returned from a successful Antarctic cruise. We completed three CSEM deployments and three BlueROV dives. During each dive, we collected water samples using the Niskin bottle trigger mechanism I designed, which performed reliably. (Week 7)
- The equipment is currently en route back to MBARI and will then be forwarded to Europe. I've also prepared a comprehensive list of tools for Eliana to purchase, as these will remain at MBARI for future use. (Week 7)
- Sent out paperwork to get the CSEM shipment back from Punta Arenas to MBARI (Week 10)
- Working on project update presentation (Week 13)
- Project update on CSEM (Week 14)
- Palletized CSEM shipment for Italy (Week 14)
- Working with Matt and Mandy to finalize CSEM shipment paperwork (Week 16)
- Booking flights to Italy (Week 18)
- Gathering bubble camera requirements from Aaron (Week 27)
- Finalizing CSEM logistics in Italy. (Week 28)
- In italy for csem July 14 to 26. (Week 29)

902504 - Scalable Semantic Mapping

- Csem Antarctica Jan 17 to Feb 6th (Week 4)
- Reinstalled the camera on the BlueBoat (Week 28)
- Assisted Kent in turning the Cerulean sonar on for bench testing and to figure out how the new driver will work. (Week 28)
- Tried to organize a blueboat Paragon deployment. Paragon was booked out. (Week 28)

Out of Office

- Dec 16th - Jan 10th - Vacation
- May 30th - June 5th
- Oct 9-13th

Overhead

Wrote up a list of potential components to use for the Mola top hat dock