

Alana Sherman Sorted By Project

706008 - READI-net

- Making parts in Orcad for Scott's sampler control board (Week 23)
- Refreshing my Orcad skills (Week 23)
- Working on Sampler board, made parts for STM32 processor and the motor drive section (Week 24)
- Working on block diagram of system (Week 33)
- Looking for solenoid driver with higher startup current capacity (Week 33)
- Working on block diagram and components in orcad (Week 35)
- Revisiting board schematics (Week 45)
- Working on external connectors on board (Week 47)
- Looking into STM32 necessary filtering on power inputs and programming link (Week 49)
- Looked for perfect switch for low current sensors but did not find something suitable (Week 49)

901618 - Pelagic-Benthic Coupling

- Digging up materials on our MF modem for Rover to help James test the new one (Week 5)
- Labeled and prepped the Smith Camera Tripods for storage (Week 9)
- First pass at cleaning out Rover lab (Week 11)
- Helped dig around for SES modem cable to make test cable (Week 16)

901809 - Deep Sea Bioinspiration

901904 - Deep-Sea Coral Community Observatory

- Reviewed battery capacity to determine next deployments (Week 5)
- Met and set up schedule for recovery and macro camera turnaround (Week 9)
- Macro coral cam coming back this week (Week 24)
- The Coral Macro camera was recovered last week. I downloaded the images (>19k), which took over a day. The camera stopped one week before recovery but we discovered the cards on the camera filled up with images. (Week 25)
- Turning the camera around for deployment next week. Batteries have been changed, running tests and servicing the instrument. We will confirm focus in the tank today. (Week 25)
- Tank tested Coral Macro: checked focal plane distance, aligned lasers, tested deep sea connect (Week 26)
- Packed for cruise (Week 26)
- Deployed system at Sur Ridge on June 27 (Week 26)
- Started next mission, deployment was rushed due to bad conditions but system is working and looks like well positioned (Week 26)
- Wrote abstract for ASLO on camera tripods (Week 37)
- Providing support for Mega camera recovery (Week 45)
- Our megacoral camera was recovered after a stressful period of time when it had been released but did not surface. (Week 46)
- On Monday I connected to the camera and was happy to find it had ~9500 images. It worked for 13 months at Sur Ridge and appears that there were not any significant technical issues. We are investigating whether the focus was set optimally for the scene. Also, for the first time, there was biofouling on the glass port of the camera. (Week 46)

902204 - Scalable Robotics

- Interview of RE candidate (Week 7)
- Interview (Week 9)
- Met to discuss new sled requirements (Week 21)

902208 - MiniROV Support

- Putting together top-side control center for MiniROV Fulmar days with Dale. We are rewiring the system after its return from the Arctic. (Week 2)
- Working with Dale to get the Fulmar topsite set up running. This involves rewiring the entire topside electronics (Week 3)
- I am also taking this opportunity to label and document as I go (Week 3)
- (Week 3)
- Setting up zoom interviews for Mini hire (Week 5)
- Continued bringing up the topside control room electronics. We got all the video systems working. (Week 6)
- Began interviews for Mini position (Week 6)
- Met with all MBARI science users for 2023 to discuss cruise plans (Week 6)
- Working on preparing the vehicle for test tank deployments (Week 7)
- Troubleshooting two issues: (Week 7)
 - Noise on funnel cam- resolved, was an issue with the Analog to SDI converter (Week 7)
 - Overlay software working but not showing up on display (Week 7)
- Talked with Jean and Wyatt trying to get April dates for the Fulmar in order and figure out logistics like payment, weights of loads, etc (Week 7)
- Worked through several issues to get the vehicle into the tank for the first time. Issue arose with the USB connection to the belly pack. (Week 8)
- Edited Main GUI source code to replace Mod bus elements with a new library that will not require a second LabView add on license. (Week 8)
- Still need to resolve: ground fault, overlay, autodepth, nav ZMQ strings (Week 8)
- Spoke with Jean from R/V Fulmar and worked out some details for April cruise dates. (Week 8)
- Found a couple of the ground faults that were detected during last tank tests (Week 9)
- Cleaning up all the cabling in the top side rack (Week 9)
- Still trying to figure out Overlay issues (Week 9)
- Working on top side block diagrams of video and computer system connections (Week 11)
- Had some success troubleshooting issues with video issues but still can't get overlay working. (Week 11)
- Debugging the heading sensor calibration and comms issues (Week 12)
- Got the sonardyne system up and running (Week 12)
- Still wrestling with the Overlay software (Week 12)
- Continuing to prepare Mini (Week 13)
 - Debugged heading issue with clump (Week 13)
 - Finally got overlay working on second monitor (Week 13)
 - Set up sonardyne USBL with Winfrog and made sure the nav data is being fed into the main gui (Week 13)
- Starting to write up documentation on starting up the system (Week 13)
- Calibrated heading sensor with help of the Compass lab (Week 15)
- Spent a morning troubleshooting a fiber issue that left us without HD video (Week 15)
- Tore down lab set up of topside electronics in prep for Fulmar mob on Thursday (Week 15)
- Documented connections on topside for Fulmar mob (Week 15)
- Lots of wrangling of help and scheduling between NOAA, the aquarium, and mbarians to get all the schedule logistics set for these three weeks of ship days (Week 15)
- Mobilized the Mini on the Fulmar (Week 16)

- Had some issues with the RAID networking and the video extenders which are always problematic it seems (Week 16)
- Ordered several spares (Week 16)
- Weather is not cooperating so we have been waiting for wind to abet (Week 16)
- Out on the Fulmar for Aquarium (Week 18)
- Worked on troubleshooting an issue with the autoheading- turned out to be a fiber issue (Week 21)
- Found issue with logging and timestamps that needs to be resolved (Week 21)
- Delved into tracking down logs. Found logs were recorded but dates on files were erroneous. (Week 22)
- Working on hiring (Week 24)
- Working on proposal numbers for Charlie (Week 26)
- Put together preliminary ship schedule for the Mini in 2024 (Week 32)
- Met with scalable robotics group to discuss new sled (Week 33)
- Reviewed fiber connections and energy budgets (Week 33)
- Going to load test Aux +415V circuit this week, as well as test fiber upgrade port (Week 33)
- A mechanical failure was discovered in the Mini EPod, the fix itself was not difficult but did require removing almost all the wires in the lower half of the housing. James and I are working to build it back up. (Week 34)
- Conducting interviews (Week 35)
- Epod wired up again (Week 35)
- Testing re wired epod (Week 35)
- (Week 35)
- Testing out the rewired e-pod have narrowed it down to two issues: (Week 37)
 - Heading sensor not sending data (Week 37)
 - Cwdm fiber needs reterminating (Week 37)
- Spent much of the week troubleshooting small issues with the rewired j-box. Was able to resolve: (Week 38)
 - Comms issue with clump due to fiber connection (Week 38)
 - No comms with core j-box micro due to loose wire on a SS relay (Week 38)
 - No power to the heading sensor due to the 5V power wires being put in the wrong slots on the wago thus blowing a fuse (Week 38)
 - Given that we rewired easily over a hundred wires, it all went pretty smoothly (Week 38)
- Continuing testing and prep for upcoming Fulmar cruise (Week 39)
- Testing new sled for GT (Week 40)
- Tracking down losses on fibers (Week 40)
- Trying to check in software, much fun with git (Week 40)
- Worked with Dale on a couple fixes and plans for fixes post Fulmar cruise (Week 40)
- Preparing for Fulmar cruise series (Week 41)
- Worked out some issues with GPS connections to Sonardyne/Winfrog/GUI (Week 41)
- Providing shore support for logistics and scheduling, also fielding calls as needed for system operation (Week 45)
- Was released from Covid isolation just in time to go on the last day of Fulmar operations on Friday with the Scalable Robotics Group. It was a very successful dive all around. (Week 46)
- Demobilized from the Fulmar on Monday and then rebuilt control room in the lab Monday and part of Tuesday. The vehicle is now operational. (Week 46)

902306 - SINKER

- Team meeting to review requirements (Week 5)
- Attended design review for main controller board (Week 22)

902312 - Seafloor Processes

- Working with Mandy to start thinking about permitting issues with the sanctuary for CSEM and DAS applications (Week 23)

- Working on first steps in permitting process (Week 24)
- Had very productive call with company producing DAS interrogators. Seems like there is a viable pathway to a system more conducive to autonomous deployments (Week 26)
- Working on proposals (Week 26)
- Meetings with DeRegt about cables and DAS (Week 34)
- Meetings with DMO about deploying DAS (Week 34)
- Meeting with cable company (Week 35)
- Work on phase 2 (Week 35)
- Speaking with contacts at Sintella about the schedule and specs for the stand alone DAS. (Week 38)
- We are gearing up for our first meetings on the Geosense and CSEM projects. (Week 46)
- Had kickoff meeting for Geosense and CSEM (Week 47)
- Created task list for Geosense (Week 47)
- Did research into fiber optic connector options (Week 47)
- Work on quotes for FO connectors (Week 49)
- Wrote document for sanctuary permits (Week 49)
- Followed up with Sintella regarding NRE (Week 49)

Out of Office

- On vacation Jan 1-9
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- Out most of Tuesday
- Was on vacation last week
- Missed a couple days with sick kids
- Out weds am for dentist
- Working remotely weds
- Was out sick Friday and used a vacation day on Monday
- Vacation day Monday 10/9
- Still home waiting out my covid isolation

Overhead

- Working on office space plans for new hires (Week 2)
- Starting performance review preparations (Week 2)
- Working on annual performance reviews all week (Week 4)
- Starting up MiniROV hiring. Reviewing applications and holding first meeting with hiring committee (Week 4)
- Finished all reviews and submitted materials (Week 5)
- ME hire interview (Week 6)
- ASOE hiring committee interview (Week 6)
- The past week: interviews of candidates for MiniROV, ASOE, REE (Troni), and ME (Week 7)
- Interviewed candidates for REE position (Week 8)
- Interviewed candidates for Mini position (Week 8)
- SRSC meeting (Week 8)
- Working on revised job description for Mini position (Week 9)
- Worked on rewrite of Mini Pilot/engineer position (Week 11)
- Meeting with Tektronix reps (Week 12)
- Reread implementation plan section of the SR (Week 15)
- Back to the SR, and reading over sections. Implementation plan is complete. (Week 16)
- Getting things started for Aaron Micallef's proposals. (Week 18)
- Attended abstract presentations (Week 21)
- Last week gave lunch time seminar to 80 people at JPL on Robotics in Ocean Exploration (Week 21)
- Worked on Battery Design committee charter (Week 21)

- Working on MiniROV hire. (Week 22)
 - Reviewed applications (Week 22)
 - Met with hiring committee (Week 22)
 - Jessica conducting phone screenings (Week 22)
- Worked with Battery Safety Committee to come up with charter (Week 22)
- Working on learning more about CSEM and DAS for work with Aaron Micallef (Week 22)
- Working on MiniROV hire (Week 23)
- Working on proposals for multiple projects (Week 26)
- Last week was zoom interviews for MiniROV Pilot/Engineer position (Week 26)
- Proposal review all week. (Week 31)
- Proposal review all last week (Week 32)
- Tracked down questions and details for labor and ship time conflicts (Week 32)
- Hiring: (Week 32)
 - Review DMO director candidates and had kickoff meeting (Week 32)
 - Zoom interview and in person for ASOE position (Week 32)
 - Scheduling for MiniROV reference and zoom screening (Week 32)
- One zoom interview this week for ASOE position (Week 33)
- Hiring committee meeting for DMO position (Week 33)
- Arranging interview schedules for Mini position (Week 34)
- Responding to people needing guidance before phase 2 (Week 34)
- Phase 2 conversations (Week 35)
- Hiring!! Last week was 5 zooms for DMO director, this week 2 in person interviews for ASOE and MiniROV (Week 37)
- ASOE interviews hopefully completed (Week 38)
- Finished MiniROV/engineer interviews and made an offer (Week 38)
- Working on new hire details for miniROV position (Week 39)
- Preparing for new hire Johann Voigtlander (Week 41)
- DMO director search activity (Week 46)
- Giving a talk tonight to the Sea Scouts in Santa Cruz about MBARI (Week 49)
- Talked with UCSC student group working on senior engineering project (Week 49)
- Organizing new hire brown bag seminar and tour (Week 49)