

Doug Pargett Sorted By Project

300078 - DMO Support - AUV

708143 - ECOHAB - Andy Allen

- Preparing the MV1 and Honu instruments for deployment. (Week 18)

708146 - Saildrone

- Finding valves that may be added to MV3 to work better during the long deployment. Looking for ways to mount and connect up for control/power. (Week 14)
- Preparing the MV3 Instrument for the saildrone deployment. (Week 18)
- The MV3 ESP is repaired, and has the external valve and new bottle holder. We're ready... if only Saildrone was ready. (Week 19)
- Replaced the intake tube on the Saildrone (Week 22)
- Preparing the MV3 instrument for deployment (Week 22)
- Built a new copper intake for the Saildrone and prepared equipment. (Week 24)
- Installed the MV3 instrument in Saildrone up at Alameda (Week 24)

901007 - Benthic Biology & Ecology

- Meeting to discuss knowledge transfer (Week 11)

901205 - SURF Center

- Disassembled the bad toroid valve ring and delivered it to the shop as a test article for machining the new one. (Week 1)
- Working (from home) on the design for the new toroid valve actuator to fit in the reduced space but still use the same motor and similar mechanism. (Week 1)
- Running thermal and pressure FEA models of new cartridge with the mods needed for injection molding. (Week 2)
- Coordinating work in machine shop and ordering new parts. (Week 3)
- Lots of FEA work for the new cartridges. (Week 3)
- (Week 3)
- Thermal FEA of latest Function design. Estimating the power split to better balance the temperature of the filter. (Week 4)
- Redesigning the linkage for the G3 valve actuator to clear interferences and maintain linear motion. (Week 4)
- (Week 4)
- Reviewing G3 pump calibration process (Week 4)
- Ordered new 3d printed toroid valve rings. (Week 5)
- Documenting Bill of Materials for next ESP builds (Week 5)
- Completed redesign of the linkage for the G3 valve actuator, had to modify to reroute cables and include an aluminum motor mount plate. (Week 5)
- Inspected latest cartridge parts (Week 5)
- Inspected SeaTrac vehicle for installing a G3 ESP into. (Week 5)
- Working on a bill of materials for the next ESP build (Week 7)
- Redesigning the handoff mechanism for G3 ESP. (Week 9)

- Redesigning actuators (for Function cartridges) to have greater throw and fit inside the limited space. Using shorter X208 stepper motors and Sarrus linear motion linkages. Currently iterating the linkage geometry for full range of motion but also to not interfere with other parts. About 60% design stage. (Week 11)
- (Week 11)
- Organizing and ordering parts for 2022 build of ESP instruments and equipment. (Week 11)
- Function cartridge status meetings discussing leaking and operation issues with the latest demo versions. (Week 13)
- Meetings with NOAA and Seatrac to discuss issues and possible locations to mount the ESP. (Week 13)
- Ordering long lead parts for the 2022 G3 ESP build-o-rama! (Week 13)
- Investigating external valves for the G3 ESP and how to get that installed on the existing system quickly for the Saildrone deployment. (Week 13)
- Repair of ESP MV1 oil diaphragm (Week 14)
- Getting quotes, ordering parts (Week 14)
- Checking inventory of parts in lab (Week 14)
- Making mods to 10m housing design (Week 15)
- Disassembled MV3 instrument to modify existing 10m housing end cap (Week 15)
- Inventoried more G3 ESP parts for coming build (Week 15)
- Sent fab requests to shop for part machining. (Week 15)
- Calls and zoom meetings to support what I can remotely. (Week 16)
- FEA of 10m housing redesign (Week 16)
- Rebuilding the MV1 ESP valve assembly to solve a combined leak and no-flow error. (Week 17)
- Reassembling the MV3 ESP to prepare it for Saildrone deployment. Making a new bleach bottle holder and external valve assembly. (Week 17)
- Ordering parts and making drawings for CNC fabrication of the 10m housing end caps. (Week 22)
- Making new drawings of housing caps for CNC machining. (Week 24)
- Ordering housing caps for G3 ESP (Week 26)
- Starting build of sub-assemblies (Week 26)
- Started assembly of parts for G3 bench instruments (Week 27)
- Ordering housing caps, material and finish options. Payment issue remains. (Week 27)
- Starting assembly of G3 sub-assemblies. (Week 28)
- Ordering housing caps (Week 28)
- Getting some parts reworked. (Week 28)
- Knowledge transfer of ESP parts, models, and assembly methods. (Week 29)
- Building bulkhead valve assembly (Week 29)
- Revising drawings for outside shop (Week 29)
- Transferring G3 ESP build knowledge (Week 30)
- Some final design mods to the new handoff mechanism for G3 (Week 30)

901713 - Nearshore FOCE

902101 - LRAUV Technology Development and Fleet Operations

DQ1971 - PCM/HAB Lake Erie

Out of Office

- Some vacation time last week.
- Working from home until testing clears the latest school exposure notices.
- Working from home until testing clears.
- Holiday
- Working from home during the outbreak at the schools.

- Sick leave
- Working remotely
- Working from home for a while.
- Working from home for a while longer.
- Sick leave for family health care, a few days.
- Vacation
- Back in home quarantine
- Sick leave
- Back from off-grid vacation
- Spending a week helping my parents (Sick leave)
- Back from spending a week helping my parents (Sick leave)
- On vacation week of July 4th.
- Finished out vacation week
- August vacation

Overhead

- Meetings (Week 1)
- reviews (Week 5)
- Meetings (Week 9)
- DEI training (Week 13)
- Meetings (Week 14)
- A few hours working with HR planning my departure from MBARI. (Week 29)
- Cleaning and packing up office (Week 30)
- Closing out my office here (Week 32)