

Scott Jensen Sorted By Project

706008 - READI-net

- Lots of work and adjusting to get the vacuum prototype functional. It now loads and samples. (Week 7)
- Lots of work and attention to getting the prototype demonstration device working. It worked! (Week 9)
- Big national meeting yesterday was very insightful into project goals. (Week 9)
- Lots of progress on many fronts (Week 13)
- New clamp design taking shape and nearing a build stage (Week 13)
- Cylinder design is coming together (Week 13)
- Fluid control with duck bill prototype is under testing and showing promise. (Week 13)
- MoSCoW lists have been collated and sent to USGS (Week 13)
- Making progress on a few fronts. (Week 15)
 - Puck blanks in and a few unload cycles indicate the volume is not that terrible! (Week 15)
 - Transferred clamp to complete design. (Week 15)
 - Progressed on documenting basic flow of instrument. (Week 15)
 - Located solenoid driver that might provide a nice complete solution. (Week 15)
- Transfer mechanical design to ME (Week 17)
- Defining firmware scope for outside contractor (Week 17)
- Creating schematics for next electronics revision (Week 17)
- Testing of Flow Gauge (Week 18)
- (Week 18)
- Reviewing Sampler electronics prototype for fabrication (Week 20)
- A lot of investigation into the applicability of the Sutron Satlink3 product (Week 21)
- More attention (many meetings and discussions) to a possible off the shelf solution for control and communications. (Week 22)
- Support getting hardware to consultant and hard parts checked out (Week 22)
- Prepared pin assignments for the prototype to be reviewed (Week 22)
- Two copies of the wire-wrap prototype (wwp) have been fabricated and checked out. One copy has been delivered to the firmware developer. (Week 25)
- Using old code modified for the wwp, the clamp with its Force sensor has been enabled. Clamp is capable of moving between three positions: open, hold and close. (Week 25)
- Meetings about the filtering experiments (Week 25)
- Copy 1 updated (Week 26)
- Working on turntable code. Found noise issue and fixed. Will need to be implemented in PCB (Week 26)
- Clamp works with force sensor (Week 26)
- Received prototype copy 2 from contractor and begin check out (Week 31)
- Built development environment (Week 31)
- Supporting development of firmware and testing (Week 32)
- Meetings around website design (Week 32)
- Mechanism familiarization and check out (Week 34)
- Simple protocol work (Week 34)
- (Week 34)
- Preparations for Omics meeting (Week 40)
- Checked out and prepared instrument copy 2 (Week 47)
- Discussions about puck revision (Week 47)
- Flow sensor now works to stop sampling due to rate of volume limits (Week 50)

708178 - Marine E Development NAV

- The motor actually spins. After a few configuration changes and parameter updates it came down to another wire swap. (Week 1)
- Motor spinning using encoder but encoder alignment is unresolved (Week 2)
- Looks like a decent COTS part is a reality (Week 3)
- Diagnosing full Docking Buoy communications setup (Week 20)
- Preparing requirements document for battery system (Week 32)
- Requirements document (Week 34)
- Preparations for integration testing (Week 34)
- Preparations for plate arrival (Week 38)
- Received plate and beginning to evaluate (Week 39)
- Build of UofW plate (Week 40)

771131 - Great Lakes PCM/HAB

- Wiring is beginning (Week 13)
- Supported integration of ESP into SeaTrac (Week 15)
- Bring up of the TEC controller (Week 17)
- Parts location for powering ESP components in SeaTrac (Week 18)
- Some effort in completing drawings for the installation of ESP into SeaTrac (Week 21)
- The electronics that need to be added to Seatrach have been checked out (Week 22)
- Wiring for Honu fabricated and tested. (Week 22)
- There seems to be enough insulation on the flower pot ESP container to allow the cooler to keep the front section cool in a 40C environment. (Week 25)
- Cooler is capable of maintaining front chamber temperature with a simulated SPR module loaded. (Week 26)
- Thermal testing setup (Week 28)
- Preparing for full up thermal chamber testing (Week 29)

901205 - ESP SURF Center

- Supporting build of the next portable. (Week 1)
- The SPR module is suffering from temperature wows. One inaccuracy has been traced to a wrong part installed. The temperature drift continues. (Week 5)
- (Week 5)
- Redeployment of ESP at Clifton Forebay (Week 18)
- Recovered Clifton Forebay installation of instrument Waldo (Week 20)
- General support of lab and upcoming deployments (Week 26)
- Build up of filtering test equipment (Week 28)
- Preparing for filtering experiment (Week 29)
- Developing filtering protocol (Week 29)
- Supported filtering experiment data collection (Week 31)
- Support of filtering tests (Week 32)
- Support of 2 and 3g instruments (Week 34)
- Filtration data processing (Week 34)
- Preparations for Sampler demonstration (Week 38)
- LysNGo elf build (Week 38)
- Preparing for Sampling meeting on Oct 10-12 (Week 39)
- Preparations for Omic meeting (Week 40)
- Lab straightening (Week 47)
- Locating spare parts (Week 47)
- Support lab tool development to aid in post deployment processing (Week 50)

901405 - PowerBuoy Development

- Development continuing with a parallel COTS solution is being investigated. (Week 3)
- Found a possible solution to the battery BMS and have ordered development boards (Week 4)
- An evaluation board for the BMS cell measurement has been received and understanding is beginning. It has rather poor documentation which is slowing the progress on communications. (Week 5)
- Current measurement error was located and fixed. (Week 9)
- Battery ESR and Cell voltage can now be read. (Week 9)
- Much struggles with trying to read back configuration data from the BMS parts. (Week 9)
- First BMS prototype PCB has been sent out for fabrication (Week 13)
- Working on BMS prototype. The chip talks! (Week 15)
- Preparing next BSM prototype PCB for release to fabrication (Week 17)
- Started assembling the next revision of the BMS prototype (Week 21)
- Discussions about battery situation and funding (Week 26)
- Meetings about battery system development (Week 29)
- Prepared old bridge controller for shipment as a working model to UofW (Week 31)
- Preparing operations manual for power converter (Week 50)

901805 - Coastal Biogeochemical Sensing Program

- nanoFET continues to be noisy. Late last week an anomaly was discovered that looks like it answers the noise question. (Week 7)

902106 - Niobicon-Based AUV Docking Development

- Monitoring of the electrical build of the next dock (Week 1)
- Oversight of electrical build of Dock (Week 3)
- Supporting James as he brings up the electronics. (Week 4)
- Looking into possible solutions to the communications road block. (Week 25)
- High capacitance when the dock is in water causes a lack of communications (Week 25)
- Fact finding around communications across dock. Need to try measuring using S21. (Week 26)
- Conducted an experiment to determine just how capacitive the docking rod is. It does present a challenge to high speed communications. (Week 32)

902311 - Wire-Walker Power Generation

DQ2210 - READI-net

- Parts for the next build of the sampler have been fabricated and now assembly is starting. (Week 1)
- Continued work detailing rotating arm for puck manipulation (Week 2)
- Continued progress with the final assembly of the 47mm prototype. (Week 3)
- Making good progress on bringing up the 47mm mechanism. A few printing errors are needing to be fixed. Most axis work, move but position is a bit off. (Week 4)
- The slide prototype is slowly progressing. The scale up from 25 to 47mm is causing some issues which might make it a dead end. (Week 5)

Out of Office

- 6 - 10 January, 2023 (got to get used to writing that)
- March 31 - April 6
- Vacation May 11-15
- Vacation June 30-July 5
- Vacation July 24-28

- Vacation June 30-July 7
- Vacation Aug 28- sept 1
- Family leave

Out of Office December 6,8,21-1/2

Overhead

- E-Tech hiring committee (Week 3)
- Interviews and evaluation (Week 4)
- E-tech hiring (Week 7)
- E-Tech interview candidate selection (Week 13)
- More E-tech hiring (Week 15)
- E-tech position hiring committee (Week 17)
- python (Week 25)
- Discussions about 2024 projects and budgets (Week 26)
- EE-tech hiring committee, process and review applicants (Week 32)
- E-tech hiring committee (Week 34)
- Interviews for E-Tech (Week 39)
- E-Tech hiring committee (Week 40)
- Motor sizing research (Week 47)