

Scott Jensen Sorted By Project

901205 - ESP SURF Center

- Preparations for Rio. Dug up previous configuration drawings and began working to implement the configuration for the Tupan (Week 3)
- Year planning around deployments and installations throughout the year (Week 3)
- Finalized puck potting protocol (Week 4)
- Transferred potting task to The Rosal Group (Week 4)
- Supporting design of the rebuild of the USV platform interface (Week 4)
- (Week 4)
- Supporting work for upcoming ASV deployments (Week 5)
- Instrument check outs for Brazil deployment (Week 7)
- Ran instrument cold (Week 7)
- Code clean up due to many legacy files still remaining (Week 8)
- Testing of mechanism in hot and cold (Week 8)
- Vacuum pump leak and adding a valve to deal with (Week 8)
- Packing and preparations for Brazil (Week 8)
- Support of preparation for Brazil (Week 8)
- Finishing preparations and logistics for Brazil deployment (Week 12)
- Installed FIDO-Marina (002) on Brazilian Research vessel (Week 15)
- Assisted with installation of ESP-Koa on Tupan UASV (Week 15)
- Returned home from Brazil (Week 15)
- Supported delivery and commissioning of first USGS FIDO instrument (Week 15)
- Ran into a number “bugs” with FIDO that needed some attention (Week 18)
- One was a logic bug that left the instrument in a loop that required manual control to break (Week 18)
- Another was a leaking intake valve which turns out it had a foreign object inside. (Week 18)
- A mysterious vacuum leak was traced to a stick slip problem with the puck lid. A solution was devised for that as well. (Week 18)
- Finally a method to program new firmware was implemented and tested (Week 18)
- Preparing instrument for shipment (Week 19)
- Monitoring Bozeman progress and support (Week 19)
- Finally have knocked down all the vacuum issues, from debris in the valve to the failing pump. Hoping now true progress to use cases can begin. (Week 19)
- Back from vacation and deep in the issues (Week 22)
- Pump controller version 4 seems to work ok but due to a user setting it was faulting. (Week 22)

- A patch has been implemented to increase some of the pump controller limits to allow more room to operate. (Week 22)
- Fido-010 in Wisconsin is having an issue with its Force Sensing Resistor (fsr). The preload value seems to have dropped. (Week 22)
- The fsr issue uncovered a weakness in the calibrate routine that needs to be fixed. (Week 22)
- Delivery of instruments has unearthed many little details and most of them have been addressed. (Week 23)
- Fieldwork support is commencing but time pressure is limited (Week 23)
- The linux computer for FIDO is having disk problems. The cause is not completely clear. (Week 25)
- Reducing log writing is the first line of offense. (Week 25)
- The mechanism seems to be running well (Week 25)
- Latest update was installed and has been proving out well (Week 25)
- Support of Bozeman instrument field testing (Week 26)

901405 - Wave-Energy Conversion for Oceanographic Applications

- Our Laser range finder still seems to be failing and the mode or means is eluding the team (Week 2)
- Beginning build up of test bench power electronics (Week 3)
- Support of Battery build (Week 3)
- Search for powerline technologies (Week 4)
- Located G.Hn which looks like a strong contender (Week 4)
- Preparing for Dolphin visit. (Week 4)
- (Week 4)
- Helping set up calibration routines for the 6 new boards sets. (Week 5)
- Overseeing HDS battery fabrication (Week 5)
- Preparing lab set up for the arrival of the HDS battery (Week 5)
- Preparation for onsite visit to DolphonLabs (Week 7)
- Onsite visit to DolphinLabs (Week 7)
- Reassembled bench system with new torque sensor (Week 12)
- HDS battery has received (Week 22)
- Catching up on the development process of the AUV dock (Week 22)
- Supporting HDS battery bring-up (Week 23)
- Lots of features and trying to understand and check out their function (Week 23)
- Slow start seems to be the biggest issue as they assume a nearly pure capacitive load. (Week 23)
- Representative from HDS and UofW APL are onsite for battery testing (Week 25)
- A few issues and concerns have been found (Week 25)
- Future discussions will be around resolution (Week 25)
- Helped check out of HDS Harbor battery (Week 26)

902101 - LRAUV Technology Development

902106 - Niobicon-Based AUV Docking Development

- Project planning meetings for the year (Week 3)
- Investigated options for copper solutions between surface and floor (Week 3)
- Meetings about surface to seafloor communications (Week 5)
- Small amount of time helping with specifying communications EMC cable (Week 7)
- Trying to settle upon a EMC cable for the WEC to Dock (Week 8)
- Worked on configuration of power supplies (Week 12)
- Locating candidates for power (Week 12)
- Much work and discussion with the group about the “new” subsea bottle electronics and a desire to support autonomous recharging. (Week 18)
- After much searching for COTS parts to support this autonomy a solution was reached (Week 18)
- Now selling the idea and detailing out the concept of operation. (Week 18)
- Reached consensus it was a reasonable path forward (Week 18)
- Starting to test prospective parts (Week 18)
- Beginning to pull together schematic for fabrication and for housing layout design. (Week 18)
- Continued work identifying parts and transfer to EEtech (Week 19)
- Purchasing parts (Week 19)
- Defined custom PCB function and parts (Week 19)
- Support documentation and fabrication of the WEC version of the dock (Week 23)
- Supporting build of WEC dock bottle (Week 25)
- Oversee the build of the WEC - Dock interface bottle (Week 26)

DQ2435 - GLERL AK

DQ2517 - ONR Middleware

DQ2523 - Avian Influenza

DQ2533 - UW Tidal Turbine

Out of Office

- March 23-31 (estimate)
- May 11-24 (vacation)
- June 29-July 7 (vacation)
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- March 23-April 2
- June 26-July 7 (vacation)
- July 15 - 21 (vacation)

Overhead

- Catching up on where I left off (Week 2)
- Preparations for LARS load pin time response test (Week 7)