

DQ1904 - NOPP Saildrone

Week 50

1. Doug Pargett
 - a. A few phone calls and emails with Saildrone about screen materials and fluid connections.
2. Brent Roman
 - a. Delivered ESPkoa to Alameda for one day of testing

Week 49

1. Brent Roman
 - a. Test fit ESPkoa onto Saildrone's 60ft long "Surveyor"

Week 43

1. Doug Pargett
 - a. I took the Koa instrument up to Saildrone to test the comms and power. Eventually it got sorted out, sort of. Saildrone's schedule is very optimistic, but they are motivated. They also would like to do the initial on-water tests without the ESP on board.
2. Brent Roman
 - a. Mad scramble to backport SSH tunnel support to older ESP software

Week 41

1. Doug Pargett
 - a. Standing by to meet with Saildrone and see how the ESP backwash cleaning protocol will work with them.

Week 40

1. Doug Pargett
 - a. Built up a check valve system for Koa to use weak bleach as a back flush fluid. This should help keep the instrument cleaner between samples.
2. Brent Roman
 - a. Worked with Preston to implement sample line bleaching protocol
 - b. Last minute calibration tweaks

Week 39

1. Doug Pargett
 - a. Koa has a check valve system on the output so we can test a mild bleach/flush backwash process.
 - b. The Flowerpot housing has new, grommated assembly straps and lift handles.
2. Brent Roman
 - a. Testing ESPkoa

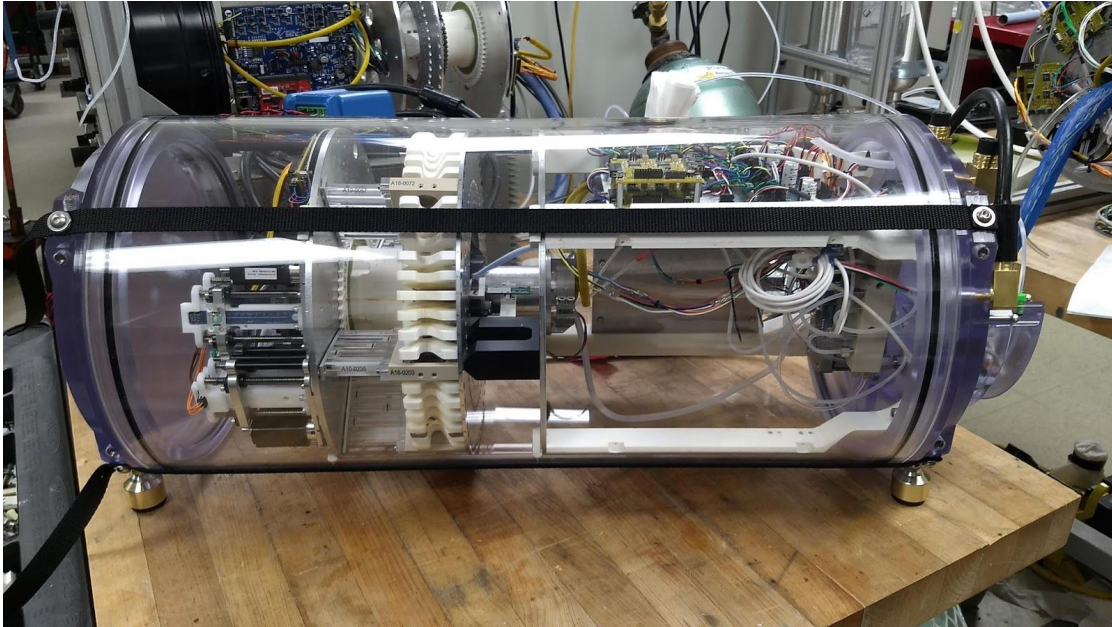
Week 38

1. Doug Pargett
 - a. ESP Koa is in final testing before going to Saildrone. Saildrone is not ready for the ESP.
2. Brent Roman

- a. Helped to repackage ESPkoa in polycarbonate housing for use on Saildrone

Week 37

1. Doug Pargett
 - a. Test assembled the FlowerPot housing with the Koa instrument.



- b.
- c. Requested a part from the shop to lock the subconn connectors in position.

Week 36

1. Doug Pargett
 - a. After a couple more rebuilds and part changes, the Koa instrument is fully setup with the new acrylic dome housing. A few tweaks to wiring and circuits are being looked at.

b.

Week 35

1. Scott Jensen
 - a. The sample pressure sensor currently installed in instrument Koa has too much offset. This usually means the sensor has been damaged. Drawings for bulkhead connectors have been delivered along with parts.
2. Doug Pargett

- a. This last week I have been building, rebuilding, and rebuilding again the G3 ESP in the acrylic housing for saildrone. Issues with the pressure sensors may be fixed now. (testing tomorrow)

Week 34

1. Doug Pargett
 - a. Building the FlowerPot housing and pump head. Moving the Koa ESP instrument to mount in it.

Week 33

1. Doug Pargett
 - a. Prepared the 3d printed FlowerPot housing for assembly.
 - b. Rebuilt a G3 pump for FlowerPot housing
 - c. Zoom Meeting
2. Brent Roman
 - a. Still waiting on their VPN tests

Week 31

1. Brent Roman
 - a. Conference call covering integration issues

Week 29

1. Brent Roman
 - a. Decided to interface ESP via Ethernet rather than serial PPP on the large Surveyor drone.

Week 28

1. Brent Roman
 - a. In a conference call we decided to interface with ethernet rather than PPP in large "Surveyor" saildrone.

Week 26

1. Brent Roman
 - a. Finally heard back from their lead software engineer.

Week 23

1. Doug Pargett
 - a. Adjusting the design of the 3d printed "FlowerPot" dome to need less machining work after printing.

Week 22

1. Brent Roman
 - a. Saildrone managed to bring up an ESP simulation environment
 - b. Fixing a Ruby Fixnum multiplication overflow bug due to new gcc-9.x optimizations

Week 21

1. Brent Roman
 - a. Sent detailed instructions on how they can bring up an ESP simulator on their Linux dev boxes

Week 20

1. Doug Pargett
 - a. I'm getting preliminary quotes for 3d printing "FlowerPot" domes.

Week 14

1. Brent Roman
 - a. Working with their software lead to arrange access our Github repo so they can simulate an ESP

Week 13

1. Doug Pargett
 - a. Started design of housing for the Saildrone 3G ESP.

Week 11

1. Doug Pargett
 - a. Had a meeting at Saildrone on Friday. Detailed out functional requirements and MBARI action items.
Design will merge well with the dock/river-side G3 ESP housing called "FlowerPot"
2. Brent Roman
 - a. Met Saildrone engineers in Alameda.
 - i. They use the same, slow Iridium links we do :-(
 - ii. The "surveyor" vehicle we'll be on produces 9Kw of electricity!
 1. Mostly for their advanced sonar package

Week 9

1. Brent Roman
 - a. Upcoming kickoff visit in Alameda, March 6th