

901803 - Carbon Wave Glider Development

Week 44

1. Paul McGill
 - a. Team members met to discuss transfer of hardware and software to NOAA PMEL.

Week 42

1. Paul McGill
 - a. Reviewed budget so that accounting can allocate remaining project funds to discretionary account.

Week 35

1. Kent Headley
 - a. Wrap up work
 - b. Refactored I2C code to accommodate bit-banged and/or MCC peripherals
 - c. Updated doc to include GUI
 - d. Generated tag and release

Week 33

1. Craig Okuda
 - a. Misc clean up

Week 32

1. Craig Okuda
 - a. Misc admin overhead

Week 31

1. Paul McGill
 - a. Made labor estimates for different scenarios depending on what resources we're given this year and next.

Week 30

1. Kent Headley
 - a. 2022 planning meeting
2. Paul McGill
 - a. Coming up with new labor estimates for next year's proposal in light of unforeseen delays in this year's progress
 - b. Team met with Francisco and Yui about state of project and how it might be useful to Francisco's lab
3. Craig Okuda
 - a. Misc project management

Week 28

1. Kent Headley
 - a. Proposal input

Week 27

1. Kent Headley
 - a. Planning 2022
 - b. Lab testing, adding GUI features

Week 26

1. Kent Headley
 - a. Adding GUI features to support lab testing
 - b. Initial lab testing with Craig Okuda, to exercise IO mapping and electrical functions
 - c. Proposal input
2. Craig Okuda
 - a. Bring up instrument electrical systems
 - b. Redesign gas inlets
 - c. Deal with manifold fab problems

Week 25

1. Craig Okuda
 - a. Assemble test stands
 - b. Rev manifolds
 - c. Instrument build

Week 24

1. Kent Headley
 - a. Working with Paul and Craig on relative humidity/temp sensor. We've made use of the micro's pins, and are working out the best way to shoehorn in this sensor.
2. Paul McGill
 - a. Helped Craig O. with assembly of manifolds
 - b. Ordered many parts for DIC analyzers
3. Craig Okuda
 - a. Assemble chassis and fluid manifolds

Week 23

1. Paul McGill
 - a. Ordered more parts for Craig O.
2. Craig Okuda
 - a. Assemble new fluid manifold

Week 22

1. Kent Headley
 - a. Attended PMEL planning telecon; we hope to deliver a test instrument in the next month or so.
 - b. Meanwhile, we are building our first article for the lab
 - c. Continue bench testing firmware
 - d. RH sensor hardware on order
2. Paul McGill
 - a. Had Zoom meeting with PMEL to discuss DIC analyzer testing strategy

Week 21

1. Kent Headley
 - a. Abstract prep
 - b. SW Testing
2. Paul McGill
 - a. Met with Andrea F. and worked on project abstract for Monday's presentation

Week 20

1. Kent Headley
 - a. Found and fixed a couple of issues in logging and timing (new firmware release)
 - b. Bench testing

Week 19

1. Kent Headley
 - a. Finished and distributed a firmware release (6.2.0b0) and chased around a couple of post-release bugs in the GUI - now running on Mac, Windows, Cygwin and Linux
 - b. Iterating on the proposal abstract with Andrea and Paul

Week 18

1. Kent Headley
 - a. Firmware updates and bug fixes
 - b. Matlab record loader
 - c. Software testing
 - d. Abstract content

Week 16

1. Kent Headley
 - a. Data structure updates for simpler alignment between raw and summary record logs
 - b. Syntax changes for consistency/simplification
 - c. Bug fixes
2. Craig Okuda
 - a. Assemble test stand and instrument

Week 15

1. Kent Headley
 - a. Starting an O5 driver for the instrument
2. Craig Okuda
 - a. Assemble fluid manifold

Week 14

1. Kent Headley
 - a. Quarterly status meeting w/ PMEL to discuss steps forward
 - b. Installed firmware updates

Week 13

1. Kent Headley
 - a. Team meeting

- b. Firmware updates for lab systems
- 2. Paul McGill
 - a. Had meeting with Andrea and team to decide how to move forward this year and next.
- 3. Craig Okuda
 - a. Assemble test stand

Week 12

- 1. Paul McGill
 - a. Ordered parts for work stand.
- 2. Craig Okuda
 - a. Assemble test stand
 - b. Redesign fluid manifold
 - c. Design test wiring

Week 11

- 1. Paul McGill
 - a. Ordered more parts for work stands.
- 2. Craig Okuda
 - a. Test stand wiring

Week 10

- 1. Paul McGill
 - a. Ordered sheet metal parts for test stands
- 2. Craig Okuda
 - a. Update Dririte box design

Week 9

- 1. Kent Headley
 - a. Posted new major code/doc release with refactored log utilities that include full-binary record logs and some search/filter capabilities. The code was repartitioned to use generic utility front-ends with content-specific back ends, significantly reducing redundant code, and making the utilities extensible to multiple file formats.
 - b. Added crude filter capability (substring match) to directory listings
- 2. Craig Okuda
 - a. Test assemble new Dririte/Nafion adsorber box
 - b. Update Dririte box design

Week 8

- 1. Kent Headley
 - a. Refactor of logging to reduce redundant code nearly complete
 - b. Sketching out download file queue implementation

Week 7

- 1. Kent Headley
 - a. Refactoring log utils to support multiple log formats with minimal code duplication.
 - b. Adding support for binary observation record log
 - c. Adding support for (B85-encoded) download queues

Week 6

1. Kent Headley
 - a. Adding support for record streaming and formatting options
 - b. Working on strategy for host platform APIs to balance computational loading and real time data return
2. Paul McGill
 - a. Inventoried and delivered more parts to Craig O.

Week 5

1. Kent Headley
 - a. Getting back into client protocol
 - b. Figuring out testing of bitbanged I2C primary interface w/o any I2C sensors using what I have on hand; maybe can use arduino
2. Paul McGill
 - a. Inspected last of parts received from end-of-year orders

Week 4

1. Kent Headley
 - a. Refactored i2c bus primary, testing now
 - b. Writing i2c secondary, untested

Week 3

1. Kent Headley
 - a. Status meeting w/ PMEL
 - b. I2C and RH sensor drivers: picking up

Week 2

1. Craig Okuda
 - a. Misc purchasing

Week 1

1. Craig Okuda
 - a. Test assembly of CWG instrument