

902004 - Planktivore

Week 50

1. Brent Jones
 - a. Investigating power consumption on Orin
2. Thom Maughan
 - a. Brent is working to lower the power consumption on the Orin. We also have found that 3 to 4w could be saved by switching to a different machine vision camera.

Week 49

1. Thom Maughan
 - a. Housings are on track for fab by end of year
 - b. Planktivore V2 assembly has been delayed, plan is to resume mid-December

Week 48

1. Denis Klimov
 - a. I had been designing and printing several parts for the Planktivore assembly. Namely, LED ring spacers. Several parts of different thickness are typically needed. For easy identification, making the 0.100" thick part without the notch, 0.110" with one notch, 0.120" with two notches, and so on.
 - b. Also, organizing parts stock for this and future builds.

Week 47

1. Paul Roberts
 - a. Optics pod production coordination

Week 46

1. Thom Maughan
 - a. Working on DeepRip2 purchasing. Thanks to Kent for the budget bump to cover increased hardware costs.
 - b. Working imaging tube design updates with Aaron, looking at various options for spares.
2. Paul Roberts
 - a. Production support
 - b. Shadowgraph illumination testing

Week 45

1. Thom Maughan
 - a. Review of mechanical design, feedback and review again. Aaron is on the home stretch for submitting the imaging tubes and ends to the shop.
 - b. Looking at options for Planktivore v3 mods to the camera controller board.

Week 44

1. Thom Maughan
 - a. Planktivore V2b build
 - b. Planning meeting, budget, project mgmt
 - c. Working on spend forward DeepRip replacement. Prices have gone up since the budget request.
2. Paul Roberts
 - a. Synchro deployment

Week 42

1. Denis Klimov
 - a. We are working on a V3 build. This week, designing and printing new retainer rings for the glass ball ring. The challenge is, those rings need to be different sizes for a particular unit, so making a set of different rings with identification features.
2. Thom Maughan
 - a. In progress on the build of Planktivore V2B. Ethernet switch is mounted and wired. Denis is in progress on the strobes.

Week 40

1. Thom Maughan
 - a. Working with Denis on assembly of Planktivore V2 B for deep LRAUV

Week 39

1. Thom Maughan
 - a. Working on 2nd build of Planktivore V2

Week 38

1. Thom Maughan
 - a. Working on Planktivore V2 B build, impacted by other projects.

Week 36

1. Thom Maughan

- a. Camera controller and strobe boards tested. Denis is working the assembly in his lab.
- b. Parts ordering for shadowgraph, bench development setups and spares.
- c. Proposal feedback

Week 35

- 1. Paul Roberts
 - a. Hardware procurement

Week 34

- 1. Thom Maughan
 - a. In progress on second build. Denis has made good progress on assembly and improvements to jigs for optical alignment.
 - b. Board checkout delayed by focus on LRAUV.

Week 33

- 1. Thom Maughan
 - a. Met with Chad, discussed feedback on camera controller schematics. Discussed next task as power control for long term deployments.
 - b. Working with Brent on camera controller, strobe board and cable testing.
- 2. Paul Roberts
 - a. V2B build

Week 32

- 1. Brent Jones
 - a. Pilot Ahi in support of I2MAP
- 2. Denis Klimov
 - a. We are assembling the new Planktivore, first in a series of three. I am working on the strobe assembly and started with modifying the camera mount with insulating / heat transfer gasket, as well as designing/ printing parts to check optics alignment.
 - b. Found there is 1 mm offset, that is, in order to be fixed, requires parts modification. Modifying and re-printing parts look to be easiest.
- 3. Thom Maughan
 - a. Planktivore v2 build is in progress. Orin's are all programmed, Denis is fine tuning the optics chassis and alignment, camera controller electronics are ready to go.
 - b. Working with Aaron on housings.
- 4. Paul Roberts
 - a. V2B build support
 - b. Data processing support

Week 31

1. Thom Maughan
 - a. Assemble and test of cables, camera controller and strobe boards for spares and development setups.
 - b. Working with Paul and Denis on 2nd planktivore V2 build.
 - c. Lab cleanup
 - d. Slide prep for ML workshop on Aug 4.

Week 30

1. Paul Roberts
 - a. V2B build

Week 29

1. Thom Maughan
 - a. Chris BB. finished the assembly of boards and cables
 - b. Camera controller and strobe board bringup

Week 28

1. Brent Jones
 - a. Prepped and deployed Ahi for I2MAP mission
2. Thom Maughan
 - a. 2026 Planktivore Proposal
 - b. DMO is managing the Ahi deployment for I2MAP, recovery is on Thursday
 - c. Open house prep

Week 26

1. Thom Maughan
 - a. Proposal

Week 25

1. Denis Klimov
 - a. The battery pack for benthic deployment was charged to the max last week, and should be coming back this week.

Week 24

1. Thom Maughan
 - a. Ahi+Planktivore V2 was deployed for Plankton Proxies along with MBTS mission
 - b. Benthic Planktivore V1 is charged and being readied for deployment next week by the Barry Lab for deep-sea coral and sponge community observatory.

Week 23

1. Thom Maughan
 - a. Weekly meeting
 - b. Begin of second planktivore V2 assembly for deep LRAUV
 - c. Planktivore v1 is headed for another benthic deployment week after next
 - d. Cole wrote an LRAUV mission for following I2MAP. Makes the deployment push button.
2. Paul Roberts
 - a. V2 Unit 2 build

Week 22

1. Thom Maughan
 - a. Weekly meetings
 - b. Ongoing deployments
2. Paul Roberts
 - a. i2MAP/Planktivore deployment

Week 21

1. Paul Roberts
 - a. Data management
 - b. Planktivore deployment on LRAUV Ahi

Week 20

1. Brent Jones
 - a. meetings

Week 19

1. Denis Klimov
 - a. Charging and equalizing the battery for Planktivore benthic deployment
2. Paul Roberts
 - a. Low-mag samples for clustering and model training
 - b. Shadowgraph illumination design

Week 16

1. Thom Maughan
 - a. Ahi+Planktivore V2 is deployed running the Synchro mission which takes Ahi well past M2. Paul and Brent supporting Jason and team.
2. Paul Roberts
 - a. Ahi 27 Deployment, Synchro OWF

Week 15

1. Brent Jones
 - a. Prepped Ahi for MBTS run
2. Thom Maughan
 - a. Weekly Meeting
 - b. MBTS was this week, Synchro next week. Brent and Paul are supporting the deployments.
3. Paul Roberts
 - a. MBTS deployment support

Week 14

1. Thom Maughan
 - a. Paul and Brent have been carrying the load on Planktivore.

Week 12

1. Thom Maughan
 - a. Ahi deployment for I2MAP following mission was affected by Paragon repair.

Week 11

1. Thom Maughan
 - a. Weekly meeting

Week 9

1. Thom Maughan
 - a. Weekly meeting. April deployment schedule is very busy.
2. Paul Roberts
 - a. Weekly meeting
 - b. Coordinating development of classification models

Week 7

1. Paul Roberts
 - a. Coordinating with CFE lab on planktivore data pipelines using aidata and sdcats

Week 6

1. Brent Jones
 - a. meeting
2. Paul Roberts
 - a. Ahi 24 deployment
 - b. Data management

Week 5

1. Brent Jones
 - a. Prepped, deployed, and flying ptvr ahi in support of I2MAP mission
2. Paul Roberts
 - a. Ahi 23 I2MAP deployment

Week 4

1. Thom Maughan
 - a. Setup recurring meeting.
 - b. Met with some of the team 1:1
 - c. Sent request to ASO group for I2MAP following mission. Monique had already coordinated the following weeks MBTS Plankton Proxies
 - d. Planning to meet with Kevin / Carlos to see if we can get minor bugs fixed on ODSS Planning

Week 3

1. Brent Jones
 - a. Troubleshooting BME 280 env sensor
2. Paul Roberts
 - a. Instrument and data documentation
 - b. Deployment planning

Week 1

1. Thom Maughan
 - a. Finished test and debug of the camera controller hardware
 - b. Assembly into housing and prep for Denis to do his magic on final assembly for second build of Planktivore V2 for the Deep LRAUV.