

902010 - Mesopelagic LRAUV

Week 48

1. Justin Tucker
 - a. Composite tube testing plan
 - i. Endring and endcap design and analysis

Week 47

1. Brian Kieft
 - a. Successful full depth dive and control testing.
 - b. Issues with O2 sensor at depth being investigated.

Week 46

1. Justin Tucker
 - a. Carbon tube scaled test sample order

Week 34

1. Justin Tucker
 - a. Continuing composite tube analysis and design of experiment for scaled test samples

Week 30

1. Justin Tucker
 - a. Amalga composite tube order for destructive testing

Week 27

1. Justin Tucker
 - a. OpenProp propeller design investigation

Week 23

1. Justin Tucker
 - a. CFD analysis of planktivore at yaw angles

Week 22

1. Brian Kieft
 - a. Fixed issue with battery configuration

- b. Tested cold oil transfer and duplicated issue observed offshore.
- 2. Justin Tucker
 - a. Propeller scaling and drag analysis.
 - i. ANSYS fluent training

Week 21

- 1. Brian Kieft
 - a. Opah's first deployment was last week. Down to 500m, did i2map tests, nav tests, etc. Planning to deploy again to 900m with larger prop testing.
 - b. Opah preliminary data analysis
 - c. Fixed battery issue in the config code
- 2. Justin Tucker
 - a. Planktivore fairing design for 1500m vehicle

Week 20

- 1. Justin Tucker
 - a. DAT cover
 - b. Propeller scaling
 - c. Planktivore nose fairing design and analysis

Week 19

- 1. Brian Kieft
 - a. Wrapped up rotation matrix for AHRS and initial ballast. Opah is ready for a sea trial following oil valve fix and ballast weight installation.

Week 9

- 1. Justin Tucker
 - a. DVL housing assembly and modifications

Week 8

- 1. Brian Kieft
 - a. Quick rough bringup check. Fixed power sync pins that were causing reset.

Week 6

- 1. Justin Tucker
 - a. DVL housing assembly and rework troubleshooting

Week 4

- 1. Justin Tucker
 - a. Organized priority list for next steps.

Week 3

1. Justin Tucker
 - a. Model updates to CTD cover
 - b. Hovering module familiarization