

300078 - DMO Support - AUV

Week 51

1. Justin Tucker
 - a. Released revised INS drawings to shop

Week 50

1. Justin Tucker
 - a. Incorporate updates to INS housing design
 - b. Working through 2D drawing updates

Week 47

1. Kent Headley
 - a. Used qemu emulation/virtualization to set up a QNX (Intel) VM that runs on an M1 mac.
Includes an NFS file share with the host, so that repo and editing can take place on the host, and build and run takes place on the guest VM.
This provides a development environment for upcoming Dorado work.
 - b. Reviewing the state of code to support TRN in the loop for Dorado sim. Rob and I worked on that, though it's been a while; there is a pending pull request, and currently syncing with the main branch.
 - c. Reviewing layered control for 2025 work to enable remote commands in support of tow-out missions.

Week 43

1. Justin Tucker
 - a. Completed a successful 6000m pressure test on the INS housing at DSPL.

Week 42

1. Justin Tucker
 - a. Travel booking for DSPL trip

Week 41

1. Justin Tucker
 - a. INS pressure test trip scheduling

Week 40

1. Justin Tucker
 - a. INS Housing 6000m pressure test scheduling at DeepSea Power & Light

Week 39

1. Scott Jensen
 - a. Evaluated a power supply IC along with a custom transformer
2. Justin Tucker
 - a. INS measurement center lever arms

Week 36

1. Scott Jensen
 - a. Working on transformer for logic power of the drive
 - b. Located core

Week 35

1. Scott Jensen
 - a. Determining pin usage
 - b. Design of logic and isolated power supply
2. Justin Tucker
 - a. INS housing preliminary “low pressure” 5300psi test completed with no issues.
 - b. Further pressure testing planned using DeepSea Power & Light’s facility for full working depth certification.
 - c. INS electronics bracketry completed and handed off for integration.

Week 33

1. Scott Jensen
 - a. Time spent deciding upon DC-Link capacitance with regard to value, pressure tolerance and prototyping

Week 31

1. Justin Tucker
 - a. Reanalysis of INS housing to fine tune safe hydrostatic test pressure.
 - b. Searching for test facility availability for housing.

Week 30

1. Justin Tucker
 - a. Lower INS housing end cap made it through the shop and is ready for electronics integration.

Week 29

1. Scott Jensen
 - a. Looking into options for bulk capacitors

Week 27

1. Irene Hu
 - a. Erik's Dorado meeting
2. Thom Maughan
 - a. Dorado emergency systems design review. Suggested use of single pair ethernet.

Week 26

1. Rich Henthorn
 - a. i2MAP section power management
 - b. Proposal research
2. Justin Tucker
 - a. INS Housing, minor updates to metric fastener specs

Week 25

1. Rich Henthorn
 - a. Better power management options for i2MAP
2. Justin Tucker
 - a. INS housing - minor updates for internal cable clearances.

Week 23

1. Scott Jensen
 - a. Putting some thought into how to protect the motor through electronics of the new drive in the case of excessive towing speed.

Week 20

1. Kent Headley
 - a. review Erik T scheme for layered control dynamic tasking
2. Rich Henthorn
 - a. Discussed multi-mission processing with Erik Trauschke
3. Scott Jensen
 - a. First pass design of Bridge has been entered.
 - b. Utilizing previous design for isolated communications path
 - c. Working on power supply and over voltage protection

Week 16

1. Kent Headley
 - a. Though charging to overhead, got a qemu/virt-manager QNX VM for (Intel) MacOS running. Hopefully, this may provide a path for supporting QNX on Apple silicon Macs and/or linux.
2. Thom Maughan
 - a. Reading thru Erik's Dorado design diagram

Week 14

1. Kent Headley
 - a. studying layered control part of codebase, with any eye towards some updates to enable towed operation use cases
2. Rich Henthorn
 - a. CARL setup program
3. Eric Martin
 - a. Brief consult on Erik about ethernet adaptors
 - b. Discussion on MVC next steps

Week 12

1. Kent Headley
 - a. Studying behavior code related to tow-out ops

Week 10

1. Irene Hu
 - a. Sat in on meeting re: updated electronics
2. Eric Martin
 - a. Meeting last week on new INS connector

Week 9

1. Rich Henthorn
 - a. Multi/Sequential mission use-cases
2. Eric Martin
 - a. Phins INS connector plan with ASO
 - b. MVC discussion
 - c. Valvecontroller SW consult

Week 8

1. Rich Henthorn
 - a. Researching Multi/Sequential mission support

Week 7

1. Irene Hu
 - a. Met with Jenny Paduan and Dave Caress for more project background

Week 6

1. Kent Headley
 - a. Studying Dorado behavior code; hoping to help with behaviors to support I2MAP tow-out capability
2. Irene Hu
 - a. Met with Erik and Alana to discuss project; initial googling

Week 5

1. Rich Henthorn
 - a. Investigating some multi-queue strategies for OTH missions
2. Scott Jensen
 - a. A little searching for possible bridge solutions

Week 3

1. Kent Headley
 - a. met w/ Erik re various planning topics
2. Eric Martin
 - a. D4 Integration testing help with ASO group