

Denis Klimov Sorted By Project

300083 - DMO Support - LRAUV

901112 - Monterey Bay Time Series

- The repair/ update of IFCB with the bigger needle is underway. (Week 9)
- Working at diagnosing the leak in the IFCB and reviving the instrument for the upcoming deployment. (Week 12)
- Preparing for the upcoming deployment of Power Buoy. Also, ordering materials and spare parts. (Week 14)
- Running pre-deployment tests on IFCB; placed the order for spare parts (Week 17)
- We did a pre-deployment test of IFCB with Power Buoy in the Buoy Room, utilizing the second-level platform to lift the instrument up to the Power Buoy level; discovered the network issues controlling from UCSC while from inside the MBARI network things seem to be working ok; however, we need reliable data upload connectivity to UCSC server. (Week 19)
- The IFCB is closed/ buttoned up and prepared to deployment this week (Week 19)
- The IFCB instrument had been deployed on Power Buoy and so far performance had been good. (Week 21)
- So far, IFCB on Power Buoy is working; occasionally checking technical parameters (humidity etc) and Patrick at UCSC is monitoring imaging quality (Week 25)
- Power Buoy had been recovered and IFCB opened up. The instrument looks to be in a good shape, and in the lab, for cleaning and periodic operation (Week 41)
- IFCB is sitting happily in the lab; I am running the instrument every few days and performing system checks in order to keep the instrument clean and in shape. (Week 46)

901809 - Deep Sea Bioinspiration

- The air-bubbling setup for the Minions project, with bubbles to be used as the imaging objects was set and run in the Test Tank, but found inferior. We have some ideas for an improved setup, using a longer tube with micro-holes, but have not had a chance of testing this idea yet. (Week 9)
- Looked at the water leak issue on Minions project (with Fernanda Lecaros Saavedra) (Week 17)
- Participating in the job interview for OVAI MLOps position (Week 19)
- Provided feedback for 2 OVAI job applicants (Week 21)
- Discussions, scheduling, and assignments for Marine Imaging Workshop (Week 37)
- At the Marine Imaging Workshop this week. (Week 41)

902004 - Planktivore

- Evaluating the benthic battery pack reuse for Planktivore September deployment. Ordered replacement fuses and connectors (Week 31)
- Ordered and received the Subconn components for the battery pack modification for the upcoming Planktivore deployment, including 8-pin bulkhead and straight 8-pin cables, for the cross-compatibility with other Planktivore hardware and wiring. Figuring out the pack state and re-wiring for a new configuration. (Week 36)
- Figuring out balancing of the battery pack for the Planktivore benthic deployment; and mechanical components for closing the pressure can (Week 37)

902101 - LRAUV Technology Development

- The PAR sensor assembly procedure had been updated to include polishing of the sensor housing inside and outside, as well as rebuilding the front-end with optics base and two O-rings, since the sensors we have already have 'some miles' on them. This also required tooling for grinding and polishing. One sensor was rebuilt using the updated procedure and currently under testing. (Week 9)
- Updating assembly procedure and documentation for PAR sensor. (Week 37)

902401 - Geo-Sense

- Ordering a set of "black-hole" fiber-end terminators; we also have a series of discussions about the deployment and recovery strategy (Week 12)
- Ordering 'black hole' fiber optic terminators. (Week 14)
- Summarizing the data on density and other parameters for the optical cable for DAS instrument; preparing for the cable selection design review (Week 17)
- We conducted the cable selection review where we were able to collect useful feedback. Working on the system design review this week. (Week 19)
- We narrowed down the cable supplier (Winchester Interconnect, former Falmat) and had several rounds of discussions adjusting parameters of the cable. For the team, the cable selection for this unusual application had been quite an exercise. The good news, the cable is selected and order placed this week. (Week 21)
- Contacting Ametek for fiber optic penetrators, 28 weeks lead time does not sound too promising. (Week 25)
- We had a Zoom meeting with Patrick at Solifos who is describing an interesting options for the DAS (Distributed Acoustic Sensing) cable, including DTS (Distributed Temperature Sensing) and DST (Distributed Strain Sensing). (Week 31)
- We are trying to figure out configuration for test cable(s) for the DAS system; including possibly using thin test cable to do some in-situ measurements at the beach or the slough. The issue for now is to get the optical fiber in the tight buffer with same specs as the fiber in the cable assembly which is on order from Winchester Interconnect. (Week 36)
- Working on low-battery disconnect, and ordering test optical cables for the DAS system (Week 37)

- Ordering optical parts from Sintela (Week 41)
- Working on the low-voltage disconnect board (Week 46)

Out of Office

Overhead

- Holding a review for the battery pack design for Sinker (George Stern). (Week 12)
- Safety: Review for the Sinker Battery Pack design was held; compiled feedback. (Week 14)
- Looking at the laser safety issue for the laser used by a Falconry contractor working on-site (Week 17)
- Looking at the laser safety section for the new Test Tank warning poster (Week 21)
- Finalizing laser warning section of the sign for the Test Tank (Week 25)
- Safety: interviews for CSO this week (Week 41)
- Preliminary talks on the BBC filming in the Test Tank with the DeepPIV laser operation (Week 46)