

Brian Kieft Sorted By Project

300083 - DMO Support - LRAUV

- Supporting Daphne MBTS mission this week (Week 2)
- Supporting Ahi planktivore deployment this week (Week 5)
- Supporting Daphne and Ahi MBTS deployments this week. Issues with Ahi ground fault on the puck but otherwise good planktivore data. (Week 6)
- Wrapped up mbts deployments last week with Daphne/Ahi (Week 7)
- Daphne rescue into Santa Cruz following GPS failure and a bottoming near pleasure point. MBTS deployment was cancelled and we'll try again next month. (Week 12)
- Supporting Ahi Synchro and Makai deployments this week. (Week 16)
- Supported multiple deployments including Galene/chiton (Week 19)
- Localization and recovery support for Galene (Week 19)
- Lot's of deployments this past week! Opah, Ahi, Triton, Daphne, Galene (Week 21)
- Ahi is out for another planktivore i2map run (Week 22)
- Ahi, Daphne, and Triton were out last week. Acoustic tracking and traditional tracking DB tracking were used due to a configuration error on Triton. Successful data collection around the drifter. Daphne failed sample collection due to a clog. (Week 22)
- Recovered Tiny and Triton. (Week 22)
- Makai, Pontus, Ahi, Daphne all deployed this week! Lots of on call support. (Week 24)
- Piloted Galene for tollgate survey at 250 m to observe possible Siphonophore diel vertical migration (DVM). (Week 27)
- Supporting ongoing Pontus deployment with docking. (Week 27)
- All vehicles recovered last Thursday. Weekend is off! (Week 29)
- Supporting deployments for Daphne, Ahi, Brizo (CANON, MBTS, Synchro) (Week 30)
- De-fouled waveglider Tiny and relaunched Pontus following an entanglement issue. (Week 47)

901513 - Targeted Sampling by AUVs

- Supporting PAM mission testing on Pontus (Week 4)
- Reviewing some minor changes with Yanwu wrt transit back to station for PAM missions. (Week 5)
- Working with Yanwu on edge detect missions and behavior to keep vehicle in a feature of interest. (Week 6)
- Also fixing various sim issues related to his work. (Week 6)
- Working with Yanwu on edge detection behavior concepts (Week 7)
- Mission reviews for Yanwu's tests this week. (Week 14)
- Supporting work on ESP/CANON missions (Week 29)
- Tested Yanwu's new ROI informed sampling mission between two vehicles with Tiny as a gateway. Worked well! (Week 45)

- Supported test deployment of intravehicle ESP simulated sampling (Week 47)
- Met to discuss ESP sampling strategy for Brizo deployment. (Week 49)

901913 - Wet Wifi

902010 - Mesopelagic LRAUV

- Quick rough bringup check. Fixed power sync pins that were causing reset. (Week 8)
- 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 19)
- 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. (Week 21)
- Opah preliminary data analysis (Week 21)
- Fixed battery issue in the config code (Week 21)
- Fixed issue with battery configuration (Week 22)
- Tested cold oil transfer and duplicated issue observed offshore. (Week 22)
- Successful full depth dive and control testing. (Week 47)
- Issues with O2 sensor at depth being investigated. (Week 47)

902101 - LRAUV Technology Development

- Will run tests to diagnose light terminated yoyos (Week 2)
- Fixed missing data from last year's canon experiment (Week 4)
- Added timeout to TRN mission for approach depth (Week 4)
- Fixed up LRAUV cron jobs to deal with 2025 and removed old years (Week 4)
- Adding PAR to sample at depth (Week 4)
- Supporting Aku deployment for bioacc testing (Week 4)
- Meeting today on Dash 5 with subs. (Week 5)
- Troubleshooting GZ sim DVL issues. Getting closer to proper ingest in the application. (Week 5)
- Instrumented ThrusterHE component to test at sea for failed rpm diagnostics (Week 5)
- Met with WHOI to review their LRAUV plans for development for this year (Week 5)
- Lots of gazebo sim issues. Met with Akshay to discuss options and topic data fixes (Week 6)
- Met with our dash5 team here to prioritize issues in git. (Week 6)
- Met with Sliced Bread to plan for full team meeting week of 2/17. Goal is to have functional dash 5 in users hands by end of Q2 for beta and feedback. (Week 6)
- Aku engineering deployment. Cut short due to battery issue (Week 7)
- Deployed Aku yesterday from skiff to begin long list of sea trials for Feb release features. (Week 8)
- Dash 5 full team meeting scheduled for Thursday. (Week 8)
- Launched Aku last week for engineering tests. Lots of changes in Feb release. (Week 10)
- Lots of work this week with Sumo creations and Sliced Bread. Reviewing Figma changes and steering the project in the direction of an engineering lead versus design led.

Seeking >25% EV by end of Q1 and the team is finally coming onboard with the concept. Paid first invoice of 4 with nearly 0 EV on the project so far. (Week 10)

- Investigated strange thruster faults observed on Aku during last deployment that were quite disruptive. Able to reproduce on shore. Culprit is thrashing speed commands to the component. Will make HE component more tolerant of crazy missions. Also need to fix mission. (Week 10)
- Spent time troubleshooting mission GPS fixes coming back from Aku with new mission from Yanwu. Culprit was logging style and fix was checked in yesterday. (Week 10)
- Galene/Makai engineering deployment last week. Recovered Friday. Lots of prep on Galene especially. (Week 12)
- Refactored multiray lights to work with 1 or 2 lights. (Week 12)
- Lots of work managing Dash 5 progress. The good news is that there's progress. Q1 review meeting coming next week. (Week 12)
- Troubleshooting various issues with DAT MMP code. Found a memory leak on the host. (Week 12)
- Beginning to bring up subsystems on Opah. Starting with buoyancy. (Week 12)
- Looked into Thruster HE fix to allow for thrashing commands without breaking the component. (Week 12)
- Multiray debug/refactor (Week 14)
- Data review on various Galene issues from last week (Week 14)
- Shore launched Ahi on Monday for i2map and engineering work. Recovery planned Thursday (Week 14)
- Fixed up joystick a little on lab machine to enable recovery of Galene at the beach (Week 14)
- Wrote a new surface transit mission for shore launches. (Week 14)
- Added some debugging to MMP for testing offshore when available (Week 14)
- Confirmed cause for Galene dropweight incident. (Week 14)
- Working with dash5 team on automated deployments and various issues. Still planning on Q2 beta testing. (Week 14)
- Beginning bringup of Opah (1500m mesopelagic vehicle) (Week 14)
- Assisting Cole in writing new i2map mission (Week 14)
- Working on Opah bringup and instrument configuration (Week 16)
- Put in a fix for missing binned Wetlabs data. (Week 16)
- April release is here (Week 16)
- Troubleshooting Galene drop weight system (Week 19)
- UX project management and testing (Week 19)
- Added bearing recalc to waypoint behavior (Week 21)
- Went over i2map mission with Cole for next time out (Week 21)
- Ignore depth added for altitude envelope (Week 21)
- Fixed Tridente component issues (Week 21)
- Lots of UX work this week with the team. Focusing on state of comms (Week 21)
- Acoustic debug on Triton following deployment. Quick test with Tiny. (Week 22)
- Made a new feature in waypoint to deal with bearing correction (Week 22)
- Loaded up Pontus for docking missions next week. (Week 22)

- Met to discuss piscevore gen 3 integration (Week 24)
- Found issue with nav in sci2 and other regular science missions. (Week 24)
- Integrating GliderFET ph sensor (Week 27)
- Identified ground fault on Galene (which was unfortunately the antenna) (Week 27)
- Docking system checkout and debugging on Brizo. (Week 27)
- Prepping WG hotspot 3 and freshly upgraded tethyshub for acomms transfer to shore to support CANON 2025 with ESP. Deployment Thursday latest (Week 29)
- Updates for horizontal control during surfacing (Week 30)
- Docking arm power investigation (Week 30)
- Fixed sample volume bug for ESP (Week 30)
- Supporting Opah deep/nav deployment (Week 30)
- Lots of work last weekend running Ivan's tests for MARL. Tiny, Brizo, and Pontus were out to support that testing as well as docking. (Week 45)
- Opah did its first dive to full depth (1200m). (Week 45)
- Currently performing the first science dives and will continue to refine control. (Week 45)
- Met with Saab to reboot development. (Week 47)
- Supporting Brizo, Pontus, Triton, Tiny deployments this week. (Week 47)
- Met to decide on ESP sampling strategy for December deployment. (Week 47)
- Troubleshoot failed docking arm on Pontus and fixed (Week 47)
- Fixed issue with Tiny's hotspot to support Ivan's testing offshore. (Week 47)
- Brizo/Makai launched today to kick off ESP sampling and Arctic sim testing. (Week 49)
- Mission work for arctic demo (Week 49)
- Fixed issue with reliability plots (Week 49)

902106 - Niobicon-Based AUV Docking Development

- Supporting long duration LRAUV Pontus deployment that started yesterday (Week 2)
- Docking in full swing with Pontus this month. Had to defoul yesterday but going fairly well otherwise. (Week 24)

902405 - Precision Control Technologies

- Did a non-ingest TRN run on Pontus per Steve's request (Week 4)
- Meeting with Steve to review december data (Week 5)
- Attempting to get new sim run with single daemon for Steve. Currently the gz sim is broken (again) and this is a blocker for multiple tasks. (Week 10)
- Confirmed nav ingest issue resolved for gz sim. (Week 10)
- Gazebo sim is broken. Will rely on Michael's hours for fix at this point (Week 12)

Out of Office

- 12/05 (MST)
- 12/08 (MST)
- 12/20-01/02 (various)
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- 01/14-16 (MST)
- 02/06 - vacation (PST)
- 02/10-14 Open Ocean (PST)
- 02/25-28 (MST)
- Mid April - TBD
- 4/9-19 (MDT)
- 6/16-24 TBD (UTC+2)
- 9/15-30 (UTC+2)
- Mostly vacation this week. Working Mon/Wed at least. On call other days.
- 6/16-24
- 05/27-06/02 (MST)
- 6/16-24 (MST)
- 07/28-08/01 (MST)
- 07/23
- 08/25-29 (PDT)
- 11/24-12/2 (PST)

Overhead

- Wrapped up Oshen collaboration deployments yesterday following recovery of ASV Emperor. (Week 2)
- Coordinated rescue and berthing of Dorado mapper AUVs to Santa Cruz harbor this weekend due to fire in moss. (Week 4)
- Coordinating shipping of Oshen ASV back to UK (Week 4)
- Reviewing abstracts for Oceans Brest (Week 5)
- Coordinating shipping of Oshen ASV back (Week 5)
- Brief meeting with TNC collaborator (Week 6)
- Reviewed report on Oshen collaboration. Adding to collection of ASVs reviews. (Week 6)
- Visiting Open Ocean robotics to test their ASVs. Will add a report to Erik's folder upon return. Chilly but sunny ops with lots of vessel traffic to deal with. Today we'll focus on software and more application space. (Week 7)
- (Week 7)
- Met with Porto Ists to discuss potential collaborations (Week 8)
- Hyperion meetings (Week 10)
- OOR final report (Week 10)
- Shipping Oshen vessel (Week 10)
- SAP expense report (first one!) Took awhile but much better than the old way. (Week 10)
- Wrapped up shipping details for Oshen collaboration. That collaboration is done. (Week 12)
- Met with TNC to review software for whale tag. Renewed collaboration with TNC. (Week 12)
- Met with team and ran a streaming test for MPA South Pacific Costa Rica whale listening collaboration (Week 12)

- Met with legal to discuss AUV tutorial for invited lecture and future use. Updates required prior to Oceans. (Week 12)
- Collaboration agreement with TNC renewed. (Week 14)
- Beginning work on tutorial for Oceans. Paper review for Quinn (Week 14)
- Hiring committee work (Week 16)
- collabs (Week 16)
- Oshen shipping logistics continue (Week 21)
- Hiring committee work (Week 21)
- Met with Oshen team to discuss final test plan on their new vehicle. (Week 22)
- Some AUV tutorial work and collab work (Week 24)
- Met with LOC-NESS team to discuss deployment plans (Week 27)
- Finalizing plans for OSHEN testing during CANON experiment (Week 27)
- Got to run the Paragon for a crew transfer to the Packard (highlight of the week!) (Week 27)
- Hiring committee work (Week 27)
- MBA tour support 7/2 (Week 27)
- Proposals (Week 29)
- WHOI/LOC-NESS mission planning and sensor integration (Week 29)
- More LOC-NESS deployment planning (Week 30)
- 2 days of hotspot work to support CANON experiment. (Week 30)
- Met with WHOI to discuss under ice mission (Week 47)
- Hyperion meeting (Week 49)
- Met with Ivan/team to go over last deployment and discuss plans for this coming and final deployment (Week 49)