

Brent Roman

Week 51

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 50

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
 - Supporting GLERL in their efforts to divorce their ESPs from the locked down NOAA lab networks
- 901205 - ESP SURF Center
 - Calibrated 7 new 3G ESP heater boards' temperature sensors
 - Before discovering that none of the boards heating elements worked
 - Returned them for rework.
 - Finished calibrating reworked heater boards
 - Supporting Nadia at NOAA in Charleston by phone
- 901913 - Wet Wifi
 - Lots of work learning the intricacies of gstreamer
 - Managed to get RTSP's AVPF profile working so client can request retransmission of lost packets
 - Forked the standard gst-launch-1.0 utility to allow specification of critical, but hidden, properties
 - Testing very low-power LTE Cat 1.bis USB dongle based on SIMCOM 7672G
 - <https://www.aliexpress.us/item/3256805723538488.html>
 - Works with Verizon sims!
 - Costs all of \$20!
 - Draws average of .15W
 - No GPS 😞
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 49

- 708143 - CA Current HABS
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- DQ2210 - READI-net
- Overhead
- Out of Office

Week 48

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Step up tools to calibrate the new ESP 3G heater boards
- 901913 - Wet Wifi
 - Got Gstreamer's RTSP RTCP working only to discover that their gst-launch tool does not allow access to all the parameters needed to configure it.
 - Created a revised "gst-rtsp-client" from gst-launch that includes the necessary config magic
 - Hardcoded for now, plan to shape it into something more versatile soon.
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 47

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Helping to support Nadia in her efforts to build up 2G and 3G ESPs
 - Answered few support queries from WHOI
- 901913 - Wet Wifi
 - Put Galene and waveglider into the tank again.
 - Chris Wahl improved mounts for H150 modem under the sub body
 - Stable networking in tank, however video only works a few seconds without breakup
 - Learned much more than I ever wanted to about video streaming protocol
 - Finally got GStreamer's RTSP with RTCP error feedback working!
 - (At least in a network simulating 10% dropped packets)
 - Need to get Galene back into the tank to verify this!
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 46

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
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- 771131 - Great Lakes PCM/HAB
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- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 45

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 44

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Supporting Nadia in her struggle to debug updated ESPkoa with modified parts
- 901913 - Wet Wifi
 - More reliable video streaming between Waveglider and Galene in test tank
 - Switching H.265 encoder from omc to nvidia proprietary module helps a lot.
 - H150 moved to hang below the Waveglider's sub section
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 43

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 42

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 41

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Continuing to investigate ESP 3G pump pulsations
- 901913 - Wet Wifi
 - Implemented systemd services for recording the Optim camera on Galene
 - And simultaneously streaming (lower resolution) video
- DQ2210 - READI-net
 - Attended Ready-Net meeting at MBARI
- Overhead
- Out of Office
- 300078 - DMO Divisional Support - AUV
- 300083 - DMO Divisional Support - LRAUV
- 901009 - CANON
- 901101 - Seafloor Mapping
- 901502 - Passive Acoustic Sensing
- 901513 - Targeted Sampling by AUVs
- 902101 - LRAUV Technology Development and Fleet Operations
- 902204 - Scalable Robotics
- 902302 - DEI
- Overhead
- Out of Office
 - Oct 16-19: 1-2 days working remotely (school break)
 - Nov 15: (virtual) Generative AI (AI Barcelona)
 - Nov 20–22: vacation

Week 40

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Identified that one of our 3G sampling pumps DOES NOT pulsate!
 - Older pumps seem to work better. What changed?
 - Automated 3G firmware update procedure.
 - Improved lysate recovery protocol so better detects and corrects a stuck plunger.
- 901913 - Wet Wifi
 - Added RSTP server to LRAUV galene's backseat cpu and camera
 - Stitched together a series of router forwarding rules to make this video stream available on MBARI network via WetWifi when galene is deployed.
- DQ2210 - READI-net
 - Attended conference call
- Overhead
- Out of Office
- 300078 - DMO Divisional Support - AUV
- 300083 - DMO Divisional Support - LRAUV
- 901009 - CANON

- 901101 - Seafloor Mapping
 - Some exchanges re MB-System docker image status
- 901502 - Passive Acoustic Sensing
 - Group meeting in preparation for NCEI workshop
- 901513 - Targeted Sampling by AUVs
 - Possibly a new wave glider front tracking exercise coming up(?)
- 902101 - LRAUV Technology Development and Fleet Operations
 - TethysDash backend now [4.54.0](#)
 - Dash4 frontend now [4.54.2](#)
 - TethysL: significant additions in TethysL [3.2.3](#)!
- 902204 - Scalable Robotics
 - Struggling a bit setting up lcm-webserver+websockets locally for development/testing purposes. (All good on [atuncita](#) and [compaslabdev](#) though)
- 902302 - DEI
- Overhead
 - DEIA focus group mtg
 - /etc/sudoers (and other files) corrupted on my Mac (thanks IS for the assistance to fix!)
 - Ocean Visions seminar
 - IE meeting (reviewing change management/cybersecurity document)
 - Started migrating tethystest from CentOS to Ubuntu
- Out of Office
 - Oct 16-19: 1-2 days working remotely (school break)
 - Nov 15: (virtual) Generative AI (AI Barcelona)
 - Nov 20–22: vacation

Week 39

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Optimized PID gains for improved pressure control in the face of pump pulsations
- 901913 - Wet Wifi
 - Successfully connected to LRAUV galene @30m depth from Paragon
 - Reconfigured router so it would work without an upstream internet connection
 - Added forwarding rules to access backseat computer more conveniently
 - Built cable to bypass modems for (dry) lab tests
- DQ2210 - READI-net
- Overhead
- Out of Office
- 300078 - DMO Divisional Support - AUV
- 300083 - DMO Divisional Support - LRAUV
- 901009 - CANON
- 901101 - Seafloor Mapping
- 901502 - Passive Acoustic Sensing
 - Adjustments to [PBP](#) software
- 901513 - Targeted Sampling by AUVs
- 902101 - LRAUV Technology Development and Fleet Operations
 - [TethysL](#) significant updates (now [v3.0.3](#)). Very productive session with Yanwu, including a complete migration exercise going over the main steps in general. Thank you, Yanwu!

- TethysDash/dash4 updates as usual. Trying to revisit the modernization goal and see what could be advanced this year.
- Some assistance to Karen re Dash5.
- 902204 - Scalable Robotics
 - Set up CompasWebUi on Atuncita: pretty straightforward: just installed/config'ed apache, and launched the services with the usual docker-compose.
- 902302 - DEI
- Overhead
 - DEIA
 - Tentatively exploring Fathomnet tasks for possible effort dedication this year
 - Addressed vulnerabilities in two repos, reported by Dependabot
 - ACM TechTalk
 - IE mtg – one more cybersecurity (preliminary) discussion. Some input to “change” document.
- Out of Office
 - ~~Oct 23–27: GOTO Chicago~~ (event has been postponed!)
 - Nov 20–22: vacation

Week 38

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- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
- 300078 - DMO Divisional Support - AUV
- 300083 - DMO Divisional Support - LRAUV
- 901009 - CANON
- 901101 - Seafloor Mapping
- 901502 - Passive Acoustic Sensing
- 901513 - Targeted Sampling by AUVs
- 902101 - LRAUV Technology Development and Fleet Operations
- 902204 - Scalable Robotics
- 902302 - DEI
- Overhead
- Out of Office
 - Oct 2–4: [QCon](#) (tentative)
 - Nov 20–22: vacation

Week 37

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Rewrote lowest-level byte oriented Ruby numeric conversions in ‘C’
 - Rewrote lowest-level byte oriented serial port input parsing in ‘C’
 - Removed Ruby support for extinct Dwarf firmware.

- Ruby ESP app can (finally!) log servo motor status at their full 64hz sample rate!
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
- 300078 - DMO Divisional Support - AUV
- 300083 - DMO Divisional Support - LRAUV
- 901009 - CANON
- 901101 - Seafloor Mapping
- 901502 - Passive Acoustic Sensing
- 901513 - Targeted Sampling by AUVs
- 902101 - LRAUV Technology Development and Fleet Operations
- 902204 - Scalable Robotics
- 902302 - DEI
- Overhead
- Out of Office
 - Oct 2–4: [QCon](#) (tentative)
 - Nov 20–22: vacation

Week 36

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - Aug 21 - Sept 1 (Aug 24 - Sept 31 off the net in the Grand Canyon)

Week 35

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - Aug 21 - Sept 1 (Aug 24 - Sept 31 off the net in the Grand Canyon)

Week 34

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi

- DQ2210 - READI-net
- Overhead
- Out of Office
 - Aug 21 - Sept 1 (Aug 24 - Sept 31 off the net in the Grand Canyon)

Week 33

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
 - Supported 3 ESPs deployed in the Lake Erie
 - Including first deployment on autonomous boat
- 901205 - ESP SURF Center
 - Improved PID pressure servo to better cope with 3G ESP's pump pulsations
 - Coding enhancements to support new Function 3G ESP cartridges
- 901913 - Wet Wifi
 - With Bret Hobson, designed experiment to test wetWiFi link to LRAUV loitering under Paragon
- DQ2210 - READI-net
- Overhead
- Out of Office
 - Aug 21 - Sept 1 (Aug 24 - Sept 31 off the net in the Grand Canyon)

Week 32

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 31

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 30

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP

- Continuing to support ESP off LaPush WA and prep for the swap next month
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
 - Added support for a water sensor so ESP3G can be deployed without an LRAUV
 - Strategizing on how best to handle new Function cartridges
 - Because they define actuators differently depending on the type of cartridge loaded
- 901205 - ESP SURF Center
 - Support for WHOIs upcoming deployments
 - Added Integral and Derivative gain to ESP 3G's pressure control
 - This seems to be effective at reducing the amplitude of the pump's pressure spikes
- 901913 - Wet Wifi
 - Demonstrated sustained, reliable ssh sessions to galene in the test tank
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 29

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Helping NWFSC diagnose ESP syringe failures.
 - Monitoring long running deployment off La Push
- 708175.50 - SURF task
 -
- 771131 - Great Lakes PCM/HAB
 - Tweaking Honu's configuration in preparation for next month's deployments
- 901205 - ESP SURF Center
 - Added shared, non-volatile command history to espclients
 - Measured 3G ESP pump control instabilities
 - Added derivative control to pressure pump motor servo in attempt to address them
 - Began testing to measure effectiveness (or lack thereof :-)
- 901913 - Wet Wifi
 - Preparing to use modem deck box with LRAUV in test tank
- DQ2210 - READI-net
 - Attended meeting on mechanical design
- Overhead
- Out of Office
 - May 26 - June 6

Week 28

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - ESPfriday deployed since May off La Push had a stuck hand.
 - Managed to recover and continue mission
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Prepared laptop and WiFi hotspot for away team headed to GLERL
 - Provided lots of support to ESP intern Samarth so he could analyze filter rate data from old logs
 - Determined that much of the 3G's pump oscillation is self excited

- Intend to improve control law in firmware
- Added first cut a non-volatile command history storage
 - Complicated by fact that there are multiple simultaneous espclients on a given server
- 901913 - Wet Wifi
 - Submitted Phase I proposal for 2024
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 27

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 26

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Took part in conference call discussing project plans for upcoming 3 years
- 708175.50 - SURF task
 - Wrote script to extract water sampling events as a .CSV file
 - Working with intern (Samarth) to help him create graphs from these raw data
- 771131 - Great Lakes PCM/HAB
 - Readyng comms: a router and a macbook for Ussler
- 901205 - ESP SURF Center
 - Working with Nadia to debug problems with Sampler Pump stalling
 - Working with Scott to ensure new cooling system for ASV does not destabilize puck heating
- 901913 - Wet Wifi
 - Built cheapo “deck box” for testing OceanComms modems
 - Got them communicating reliably in the test tank by turning output down and limiting speed to 166kbs
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 25

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net

- Overhead
- Out of Office
 - May 26 - June 6

Week 24

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 23

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 22

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 21

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead

- Out of Office
 - May 26 - June 6

Week 20

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 19

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 18

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - May 26 - June 6

Week 17

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
 - Documented our concerns about SeaTrans battery to GLERL
- 901205 - ESP SURF Center
 - Wrote fireAll script to eventually replace processAll
 - with more flexible sampler parameter overrides
 - Helped Ussler work through post deployment SPR issues

- Helped Nadia diagnose position sensor error on ESPmv1
 - Added support for “blank” cartridges at Preston’s request
- 901913 - Wet Wifi
 - Dealt with ITAR issue again
 - OceanCom is already offering an improved “gen 2” modem.
- DQ2210 - READI-net
 - Helped Birch interview prospective embedded systems contractor
- Overhead
- Out of Office
 - May 26 - June 6

Week 16

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Helping Nick Admas refine NWFSC’s ESP missions for this season.
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
 - Installed OpenSSH on the Windows 10 machine in GLERL’s SeaTrac autonomous boat.
 - A startup script holds open a tunnel to ESPshore allowing secure remote access
 - Of course, since its Windoze, everything is done graphically via VNC
 - Windoze has “PowerShell” now, which is vaguely POSIX-like.
 - Configured a Remmina client on Linux to provide one click remote screen access
- 901205 - ESP SURF Center
 - Updated the last of GLERL’s 3 ESP
 - Shipped GLERL a firmware programmer to update their ESP’s “sleepy” I2C gateways
 - Updated the “sleepy” boards in our spares inventory (3 of 5 worked)
 - Discovered that I need to move bufilehead from 32-bit to 64-bit linux
- 901913 - Wet Wifi
- DQ2210 - READI-net
 - Attended zoom call with Elecia White, who will likely be writing the firmware
- Overhead
- Out of Office

Week 15

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Helping NWFSC with prepare for upcoming deployments of their 2 x 2G ESPs
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Supporting ESPs in ECOHAB
 - Configured 3G ESP for integration into SeaTrac
 - Working with GLERL to remotely access the SeaTrac Autonomous Surface Vessel
 - Battery failure on SeaTrac is complicating this
 - Installed SeaTrac’s windows only GUI under WINE
 - Testing and remotely updating GLERL’s 3 x 2G ESPs to reconfigure for USB cell modems
 - Created a new variant of “daily” scheduler that supports time-limited sampling
 - Terminates sampling early if the next sampling time scheduled will otherwise be missed
- 901913 - Wet Wifi
- DQ2210 - READI-net

- Overhead
- Out of Office

Week 14

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Zoom meeting to discuss particulate residue on inside of Collection Syringe of their 2G ESPs
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
 - First test deployment of ESP in SeaTrac autonomous boat
 - Coded new set of high level methods to facilitate driving the 3G ESP on surface vessels
- 901205 - ESP SURF Center
 - Supporting Nadia, Ussler and Preston in their struggle to prep ESPs for ECOHAB
 - Iterated with Ussler on real-time reporting of toxin concentrations derived from SPR results
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 13

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Trying to solve mystery of sludge and particulate found inside Collection Syringe at NWFSC
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Got ESP's SPR real-time analysis working with Bill Ussler's help
 - Helped Nadia diagnose numerous ESP 3G pump problems
 - Configured and tested cell communications in GLERL's ESP 3G autonomous boat
 - Debugged time limited sampling with help from Kevan Yamahara
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office

Week 12

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
 - Starting work on ESP comms issues in the Sea-trac boat
- 901205 - ESP SURF Center
 - Added ability to time limit ESP sampling so we could run rapid-fire EDNA archives
 - Coded Ussler's formulas to derive ng/L toxin from raw SPR data
 - Arranged for them to be uploaded acoustically
 - Updated software on at least 7 ESPs
- 901913 - Wet Wifi
 - Preparing tiny WiFi router to operate in modem test box on the MBARI dock
- DQ2210 - READI-net
 - Participated in call discussing UI and low-level command protocol design

- Overhead
- Out of Office

Week 11

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 10

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 9

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 8

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Updated NOAA NWFSC's two ESPs in anticipation of spring deployments
 - Researched, coded and tested improved heater temperature calibration procedure for 2G ESPs
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Updated >5 ESPs
 - Created simplified framework for Kevan Yamahara's delta smelt 2G ESP deployments

- 901913 - Wet Wifi
- DQ2210 - READI-net
 - Helped evaluate prospective ARM processor board from Taradex
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 7

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Experimenting with snaking thermocouples through ESP 2G puck clamp tops to make thermal calibration more repeatable.
 - Updating decade old scripts to automate thermal calibration using new model thermometers.
 - Updated ESPfriday and ESPeddie with new ESP root filesystem and Linux kernel
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
 - Updated their 3 ESPs with Linux kernel that fixes long standing serial driver bug.
- 901205 - ESP SURF Center
 - Improved logic in ESP OS and kernel for detecting and reacting to Ethernet cable plug/unplug events.
- 901913 - Wet Wifi
- DQ2210 - READI-net
 - Starting looking at potential SOC from Toradex
 - Read over initial proposal for controller serial protocol design
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 6

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Working with Steph's lab to help diagnose trouble during recent ESP deployment off Navy pier
 - Likely bitten by serial driver bug
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Found and fixed very long-standing bug in ESP's low-power ARM CPU board's XR16L788 octal serial port driver
 - Shared edge-triggered interrupts are a royal PITA!
 - Working with NOAA GLERL to verify this fix in the field before pushing new kernel to all ESPs
- 901913 - Wet Wifi
- DQ2210 - READI-net
 - Participated in Zoom call with Bad Wolf consulting.
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 5

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Helped explain ESP 2G Fluid tracking to NOAA NorthWest Fisheries

- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Working with Preston to develop a reliable protocol for extracting Lysate from Function 3G Cartridges
 - Managed to replicate ESP serial modem failure that plagues GLERL in my lab
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 4

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
- 901913 - Wet Wifi
- DQ2210 - READI-net
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 3

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
 - Supporting NWFS effort to field a 2G ESP on a Navy Base
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Characterized ESP 3G stepper motors' power use
 - USB modem sent to GLERL fixed their comms issue
 - Original issue still a mystery. Recommending they ship problem modem to us.
- 901913 - Wet Wifi
- DQ2210 - READI-net
 - Continuing exchange with consulting firm regarding compute hardware choices
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 2

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Coded improvement to 3G Lysate Recovery procedure suggested by Preston
 - Helping Nadia characterize higher torque stepper motors
 - Found and fixed some file permissions issues in our ESP Linux "distro"
- 901913 - Wet Wifi

- Received OceanComms H150 modems back after faulty SDcard replaced
- DQ2210 - READI-net
 - Continuing discussion of various comms and processing options including Certus 100
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL

Week 1

- 708143 - CA Current HABS
- 708165 - MERHAB19:ESP
- 708175.50 - SURF task
- 771131 - Great Lakes PCM/HAB
- 901205 - ESP SURF Center
 - Helping bring up new ESP portable for Docuette's lab "ESPmarin"
 - Helping Preston improve ESP 3G Lysate recovery algorithm
 - Working with Kyle Beadle@GLERL and John Mickett@APL to diagnose ESP cell comms failures
- 901913 - Wet Wifi
 - Modems shipped back to MBARI
- DQ2210 - READI-net
 - Investigated various Iridium satcomms options
 - Investigated various CPU board options
- Overhead
- Out of Office
 - March 8-15 visiting my dad in Sarasota, FL