

Agenda

Mesobot Planning meeting at MBARI September 21, 22 2017

Dana Yoerger and Daniel Gomez-Ibanez are visiting from WHOI, arriving late Wednesday evening and departing Saturday morning and will be staying in Monterey. Dana's phone number is (508) 725-8304. Brett will be the primary host and his cell is (831) 601-5499. Kakani Katija, Brian Kieft, Ed Mellinger and Mike Risi will be participating.

Thursday

9:00: Dana and Daniel arrive at MBARI front desk and check in

9:30 -11: Dana and Daniel to join Brett and Brian for a LRAUV deployment on the R/V Paragon

11-12: Project management

1. Who's responsible for what, and how does information flow between MBARI and WHOI, including EAR concerns
2. Resource allocations to expedite information transfer to WHOI.

12:00 – 1:00: MBARI BBQ

1-2: Video tracking update – Mike Risi and Steve Rock

2-5: Technical discussion

1. Vehicle design update
 - a. Thruster/body configuration
 - b. How many lights, is 2 enough?
 - c. How many thrusters? More than four?
 - d. CAMERAS/TRACKING
Synchronization or not. Lighting arrangement and color choices. Imaging- tank testing, facilities, schedule. Tracking development and testbed.
2. Motherboard overview
 - a. Including: Basic block diagram, what each part does and who owns it. Sensor logging, storage format, media, offload, display? Thruster control, what is the interface to the tracker. Mission executive, how does it work. Emergency functions, abort conditions and responses. ROV mode communication pathway and transition to tracking.
3. Load Control system
 - a. Including: Battery bus voltage (28V lights, 28V thrusters) -- for power >100W?
Can we use LCB for lights @28V, (36V max)? Wet connector choices/ wiring principles and conventions.

Dinner on your own

Friday

9:00 -12:00: Technical discussion

1. RF Antenna fabrication/ordering information.
2. SCIENCE SENSORS:
Triplet, Transmissometer, PAR, Optode vs GliderCTD+O2, CTD, Spare.
Do we need to buy all of these and fit them all? What can we defer or make optional/external?
3. COMMUNICATION RF / ACOMMS: Select RF recovery aids- which ones are necessary? which Iridium antenna/flasher/Argos? Battery pack Iridium beacon, or powered from vehicle? (compact live GPS, vs redundant power) Do we need USBL or just LBL? Select Acomms configuration - LBL/USBL/topside/gateway/waveglider. What is the minimal topside for operations? Benthos modem model? Do we need a Altimeter? Do we need a compass? Does it need to be outside main housing?

12-1 Lunch TBD

1-4: Final hand off

1. Get a complete solid model and drawings BOMs and fab quotes for Justin.
Including: Get complete drawings, schematics of boards, OrCad layouts, Gerbers and BOMs. How to manage WHOI versions?
2. Schedule for build of motherboard, load control boards.
Supply chain for RF antennas.
BOMs for all other parts.

Dinner TBD in Monterey