

MOOS mooring system 9/4/02 meeting notes

Present: Lance, Tim, Ed, Jon, Duane E., Duane T., Keith, Andrew, Wayne, Mark C. (notes).

1. Schedule update. *Getting power distribution board to layout, solar panel mount fabrication and the getting the instrument drivers to the integration stage are all critical for this period of the mooring build. Design of the umbilical termination and completion of the coilcords are critical for the final mooring build.*
2. Budget update. *Project is currently slightly overbudget. Important that all team members submit known expenses for through the end of the year so they can be accommodated in the supplemental budget request.*
3. Special action items:
 - Check power-on state of MOOS instruments (non-volatile configuration retention). - Mark C. *In progress.*
 - In-lab GPS reception. - Lance/Duane T. *No progress.*
 - Programming guide/software functional specification. - Lance *Waiting on data from Mark C. on heave sensor requirements.*
 - Anchor weight calculations. - Andrew H. *Needs update on mooring location. Will propose running model with several anchor weights to examine tradeoffs.*
4. Current task status:
 - Driver scrub issues. *DPA bug: Current trip due to pulse noise on power bus when radio turns on. Problem exposed when operating with relatively high impedance DC source when switched from OASIS mooring. Scott working on hardware fix. Not a critical item for test mooring deployment. One possible workaround is to disable current trip for test deployment.*

Plan is still to not have any power management capabilities on the test mooring. Current power usage of 15W is getting to the level of concern for Ed who estimated an absolute maximum of 20W potentially available. Any updates to power figures should be forwarded to Ed.

Wayne reports current power figures for the controller are about 2.3W for CERF and Sidekick + 1DPA. Add 100mW for each additional DPA. This is without any power management.

ID	Task Name	Duration	Start	Finish	Resource Names	% Complete
8	fabricate and wire battery housing <i>Waiting for cables to arrive.</i>	8.33 days	Mon 7/1/02	Thu 9/5/02	Mellinger Ed[60%],Erickson Jon[60%]	80%
11	design panel mounts and tower access <i>Design complete except for specification of bonding material. Ed finalizing.</i>	5 days	Fri 2/22/02	Wed 9/4/02	Mellinger Ed[60%],Erickson Jon[60%]	95%
16	solar panel mount fabrication <i>Fabrication went to shop 9/3/02. Expected 9/13/02.</i>	13 days	Wed 9/4/02	Mon 9/23/02	shop[50%]	0%
25	power system distribution board schematic <i>Critical path for power system. 50% complete, seawater battery connection an obstacle.</i>	16.67 days	Wed 8/21/02	Fri 9/13/02	Mellinger Ed[60%]	63%
27	power system housing specification/design <i>Length will be fixed by Ed tomorrow, 9/5/02.</i>	5 days	Thu 4/25/02	Wed 9/4/02	Mellinger Ed[60%]	80%
28	power system housing fabrication <i>Pending length specification.</i>	15 days	Thu 9/5/02	Wed 9/25/02	shop[75%]	0%
44	fiber test card design <i>Complete, CDR pending.</i>	20 days	Thu 6/20/02	Mon 9/9/02	Scott Jensen[20%]	80%
45	fiber test card fabrication and test <i>Fabrication 95% complete.</i>	15 days	Tue 9/10/02	Mon 9/30/02	Scott Jensen[20%],Duane Thompson[40%]	0%
46	controller housing and chassis fabrication <i>Chassis complete, housing waiting on power housing specification so they go in the shop together.</i>	20 days	Tue 8/20/02	Thu 9/26/02		15%

48	compass software driver <i>In progress.</i>	10 days	Tue 8/20/02	Tue 9/10/02	Tom O'Reilly[50%]	50%
49	heave sensor software driver <i>In progress.</i>	15 days	Fri 7/26/02	Fri 9/13/02	Rich Henthorn	50%
50	GPS software driver <i>In progress, 50% complete..</i>	10 days	Tue 8/20/02	Tue 9/10/02	Kent Headley[50%]	50%
51	Globalstar modem software driver <i>In progress.</i>	15 days	Tue 8/20/02	Fri 9/13/02	Tim Meese[50%]	50%
52	Z-Star sampling software driver <i>Working in the lab.</i>	15 days	Tue 6/25/02	Fri 9/6/02	Mike Risi	80%
53	SSDS instrument metadata plan <i>John Graybeal working with Tom on incorporating a metadata packet in at least one sensor data stream.</i>	3 days	Tue 8/20/02	Wed 9/4/02	John Graybeal[20%]	75%
58	riser cable termination socket design <i>No progress.</i>	8.33 days	Fri 4/19/02	Wed 8/28/02	Chaffey Mark[60%],Erickson Jon[60%]	20%
70	snubber hose fabrication <i>In progress.</i>	83 days	Tue 6/25/02	Thu 10/17/02		63%
71	snubber union/instrument cage assembly design <i>In progress</i>	4 days	Tue 6/11/02	Thu 9/5/02	Erickson Jon[15%]	50%
72	snubber union/instrument cage assembly fabrication	10.67 days	Fri 9/6/02	Fri 9/20/02	shop[75%]	0%
74	coilcord core cable fabrication <i>Test piece #3 completed, sent to coilcord manufacturer.</i>	35 days	Mon 4/1/02	Mon 9/9/02		90%
75	coilcord fabrication <i>In progress for test piece #3.</i>	15 days	Mon 9/9/02	Mon 9/30/02		0%
86	tower fabrication <i>Local welding and</i>	35 days	Tue 6/25/02	Wed 9/4/02		98%

finishing complete. Shipping for heat treat.

87	bridle fabrication <i>In progress, due next week.</i>	35 days	Wed 6/26/02	Mon 9/9/02		90%
91	anchor system preliminary design <i>no progress</i>	8.33 days	Tue 8/20/02	Thu 9/12/02	Erickson Jon[60%],Chaffey Mark[60%]	25%
98	Design and model test mooring configuration <i>No progress.</i>	50 days	Tue 8/20/02	Mon 10/28/02	Chaffey Mark[20%]	25%
99	Design and Fab. of stand-up support <i>In progress</i>	20 days	Tue 8/20/02	Mon 9/16/02	Erickson Jon	25%