

MOOS mooring system 9/18/02 meeting notes

Present: Ed, Jon, Keith, Duane E., Andy, Tim, Duane T., Mike K., Mark C. (notes)

1. Schedule update. *Power system distribution board design/layout/test schedule slip cutting into the available test and integration time for this subassembly. Software drivers on track, schedule to move to deployed hardware next Wednesday. Coilcord fabrication and riser cable termination design and fabrication are increasing in technical and schedule risk by not progressing more rapidly.*
2. Budget update. *Project is over budget and request for additional funds will go to Keith this week. Last chance to submit planned expenses not already purchase ordered or forwarded to Mark C. is TODAY!*
3. Special action items:
 - Check power-on state of MOOS instruments (non-volatile configuration retention). - Mark C. *Smartstar and wave heave sensor OK, compass turns counter still a possible issue.*
 - In-lab GPS reception. - Lance/Duane T. *Cost \$1800. Will budget for next year in EE budget.*
 - Programming guide/software functional specification. - Lance *Document released Wed.. 9/11/02. Software group has written comments, will set up meeting Monday 9/23/02 and discuss functional requirements.*
 - Anchor weight calculations. - Andrew H. *Exact calculation of anchor holding power difficult due to too many unknowns in bottom friction characteristics. Range of weights will be modeled.*
4. Current task status:

ID	Task Name	Duration	Start	Finish	Resource Names	% Complete
1	Mooring test deployment	212 days	Mon 2/11/02	Tue 12/3/02		72%
8	fabricate and wire battery housing <i>Wiring pending receiving lugs and in-line fuse holders. Parts due this week.</i>	8.33 days	Mon 7/1/02	Thu 9/5/02	Mellinger Ed[60%],Erickson Jon[60%]	80%

16	solar panel mount fabrication <i>In progress. Critical that cement gets ordered and received so fabrication can proceed.</i>	13 days	Wed 9/4/02	Mon 9/23/02	shop[50%]	0%
25	power system distribution board schematic <i>Distribution board CDR planned for next Tuesday, 9/24/02.</i>	16.67 days	Wed 8/21/02	Fri 9/13/02	Mellinger Ed[60%]	75%
28	power system housing fabrication <i>Housing in shop, due 9/25/02. Chassis and bulkhead should go in the shop tomorrow, 9/19/02.</i>	15 days	Thu 9/5/02	Wed 9/25/02	shop[75%]	0%
30	layout and fab power system board <i>Pending CDR above.</i>	15 days	Wed 9/18/02	Wed 10/9/02	Mellinger Ed[20%],Duane Thompson[80%]	0%
45	fiber test card fabrication and test. <i>CDR on design took place Friday, 9/13.Fabrication nearing completion. Test and calibration verification pending.</i>	15 days	Tue 9/10/02	Mon 9/30/02	Scott Jensen[20%],Duane Thompson[40%]	50%
46	controller housing and chassis fabrication <i>Chassis done, housing in shop and due out 9/25/02.</i>	20 days	Tue 8/20/02	Thu 9/26/02		75%
48	compass software driver <i>In progress. Possible issue with data persistence that will be discussed at Monday meeting.</i>	10 days	Tue 8/20/02	Tue 9/10/02	Tom O'Reilly[50%]	90%
49	heave sensor software driver <i>In progress, currently being tested.</i>	15 days	Fri 7/26/02	Fri 9/13/02	Rich Henthorn	90%
50	GPS software driver <i>In progress, currently being tested.</i>	10 days	Tue 8/20/02	Tue 9/10/02	Kent Headley[50%]	90%
51	Globalstar modem software driver <i>Problem with MBARI firewall still not resolved.</i>	15 days	Tue 8/20/02	Fri 9/13/02	Tim Meese[50%]	75%

Duane and Tim working with IS on solution. Fallback is to use outside ISP.

52	Z-Star sampling software driver <i>In progress, currently being tested.</i>	15 days	Tue 6/25/02	Fri 9/6/02	Mike Risi	95%
53	SSDS instrument metadata plan <i>In progress, instrument data stream will return "metadata" packets on initialization but not support XML notation for this deployment. SSDS will be able to provide file based archival for telemetered data.</i>	3 days	Tue 8/20/02	Wed 9/4/02	John Graybeal[20%]	75%
54	temporary controller final assembly, test and software integration <i>Software integration and test currently underway.</i>	16.67 days	Fri 9/13/02	Tue 10/8/02	McBride Lance[60%]	0%
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>Factory on track for 10/17/02 completion.</i>	83 days	Tue 6/25/02	Thu 10/17/02		75%
71	snubber union/instrument cage assembly design <i>Complete except for internal bosses for mounting fiber and wire splice housekeeping hardware. Mark C. will meet with Jon on Thursday and finalize boss locations.</i>	4 days	Tue 6/11/02	Thu 9/5/02	Erickson Jon[15%]	75%
74	coilcord core cable fabrication <i>Waiting for new specialized optical cable to be received by Cortland. Concurrently MBARI setting up to test optical attenuation of coilcord test piece at 220PSI. Gary</i>	35 days	Mon 4/1/02	Mon 9/9/02		90%

Burkhart machining optical penetrator.

- 75 coilcord fabrication *Test piece looked very good, manufacturing problems have been solved.* 15 days Mon 9/9/02 Mon 9/30/02 0%
- 76 snubber electro-optical connectors delivery time *Test samples of cable material sent to SeaCon Monday. Still waiting on CF material from MBARI to complete order.* 131 days Mon 4/22/02 Tue 10/22/02 60%
- 86 tower fabrication *First tower has completed heat treat, shipping Thursday.* 35 days Tue 6/25/02 Wed 9/4/02 98%
- 91 anchor system preliminary design. *Range of weights being modeled as shown below. Stack height from 6 to 9 wheels.* 8.33 days Tue 8/20/02 Thu 9/12/02 Erickson Jon[60%], Chaffey Mark[60%] 25%

MOOS test mooring anchor weights 9/12/02 mark C. rev. 1.5					
air weight lbs.	water weight lbs.	water weight kg	number of 840lb wheels	Stack diameter meters	Stack height meters
5040	4381.07	1986.88	6.0	0.96	1.1
5880	5111.25	2318.03	7.0	0.96	1.2
6720	5841.43	2649.17	8.0	0.96	1.4
7560	6571.61	2980.32	9.0	0.96	1.6

- 92 anchor system PDR *Pending.* 0 days Thu 9/12/02 Thu 9/12/02 0%

98	Design and model test mooring configuration <i>Package of material forwarded to Mark Grosenbaugh on Thursday 9/12/02. Mark C., will follow up with phone call.</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	35%
100	final assembly of surface float mechanical components <i>In progress. Some delay waiting for top plate to return from heat treater. Jon E., leaning on vendor to make sure plate received ASAP.</i>	10 days	Mon 9/23/02	Mon 10/7/02	Chaffey Mark[60%],Erickson Jon[60%],Mellinger Ed[60%],observatory support[200%],Etech[80%],Mtech[80%],shop[80%]	0%
101	Mooring stood up in highbay <i>Behind schedule, see top plate delay above.</i>	0 days	Tue 9/17/02	Tue 9/17/02		0%
102	Wire mooring and tower <i>Pending mooring stood up with tower bolted on.</i>	5 days	Wed 9/18/02	Tue 9/24/02	Chaffey Mark[60%],Kelley Mike,Mellinger Ed,observatory support,Etech[75%],Duane Thompson	0%