

ID	Task Name	Duration	Start	Finish	Predecessors
1	Elevator stuff	106.5 hrs	Fri 3/20/09	Wed 4/8/09	
2	Mount Foam to Elevator Ring	1.94 days	Mon 4/6/09	Tue 4/7/09	
3	Ball ring	18 hrs	Mon 4/6/09	Wed 4/8/09	
4	design & manufacture	2 days	Mon 4/6/09	Wed 4/8/09	
5	mount	18 hrs	Mon 4/6/09	Wed 4/8/09	
6	RF beacon on spar buoy	18 hrs	Mon 4/6/09	Wed 4/8/09	
7	Elevator Hardware	105.5 hrs	Fri 3/20/09	Tue 4/7/09	
8	Mounting foam ring	36 hrs	Mon 3/30/09	Fri 4/3/09	
12	Mounting feet	34.02 hrs	Tue 3/24/09	Mon 3/30/09	
17	Battery Issues	70.73 hrs	Wed 3/25/09	Tue 4/7/09	
18	design & fabricate battery hold-downs	1 day	Mon 3/30/09	Tue 3/31/09 16	
19	grind gussets so batteries fit elevator	1 day	Mon 3/30/09	Tue 3/31/09 16	
20	mount batteries	1 day	Tue 3/31/09	Wed 4/1/09 19	
21	charge batteries	2.05 days	Wed 4/1/09	Fri 4/3/09 20	
22	complete battery combiner box & mount	1.94 days	Wed 3/25/09	Tue 4/7/09	
23	Drop weight	43 hrs	Wed 4/1/09	Tue 4/7/09	
26	DWSM	53.5 hrs	Fri 3/20/09	Tue 3/31/09	
27	purchase oil reservoir bag & mount	3 days	Wed 3/25/09	Tue 3/31/09	
28	check availability of beacon/spar	1 day	Fri 3/20/09	Mon 3/23/09	
29	decide on which acoustic modem to order	4.83 days	Mon 3/30/09	Fri 4/3/09	
30	order acoustic modem	43.5 hrs	Mon 3/30/09	Fri 4/3/09	
31	order modem connectors and cable	43.5 hrs	Mon 3/30/09	Fri 4/3/09	
32	wet-mate whip	16.2 hrs	Fri 3/20/09	Mon 3/23/09	
33	double-check w/ FOCE about borrowing	0.8 days	Fri 3/20/09	Fri 3/20/09	
34	talk to ROV pilots about design	1 day	Fri 3/20/09	Mon 3/23/09 33	
35	Sphere stuff	123.42 hrs	Fri 3/20/09	Thu 4/9/09	
36	finish wiring sphere/ test power supply	2.83 days	Fri 3/20/09	Tue 3/24/09	
37	mount MACK in web	1 day	Tue 3/24/09	Wed 3/25/09	
38	connect wires from sphere to core	1.94 days	Wed 3/25/09	Thu 3/26/09 36,37	
39	test electrical connections of core within sphere	1 day	Mon 3/30/09	Tue 3/31/09 38	
40	test wet-mate simm can interface	1 day	Tue 4/7/09	Wed 4/8/09	
41	assemble sphere halves together	0.94 days	Wed 4/8/09	Wed 4/8/09 40	
42	leak test sphere	0.94 days	Wed 4/8/09	Thu 4/9/09 41	
43	DWSM stuff	140 hrs	Fri 3/20/09	Sat 4/11/09	
44	order SS jacket bolts	1 day	Wed 3/25/09	Thu 3/26/09	
45	finish dPress CPLD	0.89 days	Fri 3/20/09	Fri 3/20/09	
46	test pressure sensors and switches	3 days	Mon 3/23/09	Thu 3/26/09 45	
47	wire stirrer pumps and switches	0.89 days	Thu 3/26/09	Thu 3/26/09 46	
48	Install	89 hrs	Mon 3/23/09	Tue 4/7/09	
49	order extra Swageloc	9 hrs	Mon 4/6/09	Tue 4/7/09	
50	Min-K's & wiring	3 days	Mon 3/23/09	Thu 3/26/09	
51	water sensors	8.5 hrs	Thu 3/26/09	Thu 3/26/09 59,50	
52	cap all ports	9 hrs	Wed 3/25/09	Thu 3/26/09 50FS-8 hrs	
53	put DWSM into base bells (no bags)	7 hrs	Thu 3/26/09	Thu 3/26/09 52	
54	He leak test	7 hrs	Thu 3/26/09	Thu 3/26/09 52	
55	water lines to the bags	7 hrs	Thu 3/26/09	Thu 3/26/09 52	
56	install bag assembly & air compensator	7 hrs	Thu 3/26/09	Thu 3/26/09 52	
57	fill wool and vent air	7 hrs	Thu 3/26/09	Thu 3/26/09 52	
58	test	140 hrs	Fri 3/20/09	Sat 4/11/09	
59	pressure & cold test fittings & valves	0.89 days	Fri 3/20/09	Fri 3/20/09	
60	tighten sample can swagloc	0.89 days	Fri 3/20/09	Fri 3/20/09	
61	close HP motor and test sensor position	1.89 days	Fri 3/20/09	Thu 3/26/09 50	
62	I2C connection b/w cans	0.94 days	Thu 3/26/09	Thu 3/26/09	
63	He leak test oil bell (both)	1 day	Wed 3/25/09	Thu 3/26/09	
64	fill w/ oil and seal cans	1 day	Mon 3/30/09	Tue 3/31/09 63	
65	Brent comes in for initial DWSM running	42.5 hrs	Tue 4/7/09	Sat 4/11/09 64	

ID	Task Name	Duration	Start	Finish	Predecessors	Thu Mar	Fri Mar	Sat Mar	Sun Mar	Mon Mar	Tue Mar	Wed Mar	Thu Mar	Fri Mar	Sat Mar	Sun Mar	Mon Mar	Tue Mar	Wed Mar	Thu Mar	Fri Mar	Sat Mar	Sun Mar	Mon Mar	Tue Mar	Wed Mar	Thu Mar	Fri Mar	Sat Mar	Sun Mar	Mon Mar	Tue Mar	Wed Mar	Thu Mar
66	reflash DWSM dvarves	4 hrs	Tue 4/7/09	Tue 4/7/09																														
67	Peek & Poke	4 hrs	Tue 4/7/09	Tue 4/7/09																														
68	work out low-level board configuration	8 hrs	Wed 4/8/09	Wed 4/8/09	67,66																													
69	test limit switches	8 hrs	Wed 4/8/09	Wed 4/8/09	68SS																													
70	move/tune mdors	8 hrs	Thu 4/9/09	Thu 4/9/09	68,69																													
71	test load on High Pressure pump	8 hrs	Fri 4/10/09	Fri 4/10/09	70																													
72	scale&gain from pressure sensors (calibrate)	8 hrs	Sat 4/11/09	Sat 4/11/09	71																													
73	high-level mission code	8 hrs	Sat 4/11/09	Sat 4/11/09	4/11/09																													
74	fill and empty bags	8 hrs	Sat 4/11/09	Sat 4/11/09	64																													
75	100 psi operational test	8 hrs	Sat 4/11/09	Sat 4/11/09	64																													
76	can we maintain differential pressure	8 hrs	Sat 4/11/09	Sat 4/11/09	64																													
77	segmented high pressure test	8 hrs	Sat 4/11/09	Sat 4/11/09	64																													
78	Elevator Integration stuff	61 hrs	Mon 4/6/09	Tue 4/14/09																														
79	mount sphere to elevator assembly	52 hrs	Tue 4/7/09	Tue 4/14/09																														
80	cut/bend tubing connecting DWSM-DWSM	8 hrs	Wed 4/8/09	Wed 4/8/09																														
81	cut/bend tubing connecting DWSM-Reservoir	8 hrs	Wed 4/8/09	Wed 4/8/09	80SS																													
82	cut/bend tubing connecting DWSM-Sphere	8 hrs	Wed 4/8/09	Wed 4/8/09	81SS																													
83	zip tie all cabling	8 hrs	Fri 4/10/09	Fri 4/10/09																														
84	design drop wt. bumpers	4 hrs	Tue 4/7/09	Tue 4/7/09																														
85	manufacture drop wt. bumpers	4.5 hrs	Tue 4/7/09	Tue 4/7/09	84																													
86	install drop wt. bumpers	4 hrs	Wed 4/8/09	Wed 4/8/09	85																													
87	route drop wt. release through batteries	9 hrs	Mon 4/13/09	Tue 4/14/09																														
88	design whip coil holder	8 hrs	Thu 4/9/09	Thu 4/9/09																														
89	manufacture/mount whip coil holder & dummy wet-mate	8 hrs	Thu 4/9/09	Thu 4/9/09	88SS																													
90	Mount DWSM to Elevator	17.73 hrs	Mon 4/6/09	Wed 4/8/09																														
91	Drill holes in frame (6 total)	9 hrs	Mon 4/6/09	Tue 4/7/09																														
92	Doug to decide if old top bracket to be used	9 hrs	Mon 4/6/09	Tue 4/7/09																														
93	make top bracket to hold bells	9 hrs	Mon 4/6/09	Tue 4/7/09																														
94	match drill holes in frame	9 hrs	Mon 4/6/09	Tue 4/7/09																														
95	modify oil reservoir bag caps	9 hrs	Mon 4/6/09	Tue 4/7/09																														
96	webbing strap to hold reservoir bags	9 hrs	Mon 4/6/09	Tue 4/7/09																														
97	mount battery combiner box	9 hrs	Tue 4/7/09	Wed 4/8/09	22																													
98	pre-test of DWSM--is it still alive?	1 day	Mon 4/13/09	Tue 4/14/09	21																													
99	Test Tank	8 hrs	Mon 4/13/09	Mon 4/13/09 11,25,90																														
100	in test tank/weight balance	8 hrs	Mon 4/13/09	Mon 4/13/09 4.5,6,42,77,76,75,																														
101	drop weight testing	8 hrs	Mon 4/13/09	Mon 4/13/09																														
102	MOB	17 hrs	Mon 4/13/09	Tue 4/14/09																														
103	Brent starts ROV comms	1 day	Mon 4/13/09	Tue 4/14/09	72																													
104	check ROV connection	1 day	Mon 4/13/09	Tue 4/14/09																														
105	MOB Lobos for first deployment (load elevator on ship)	0.89 days	Tue 4/14/09	Tue 4/14/09	22																													

Brent
Doug
doug/mike
Brent
All