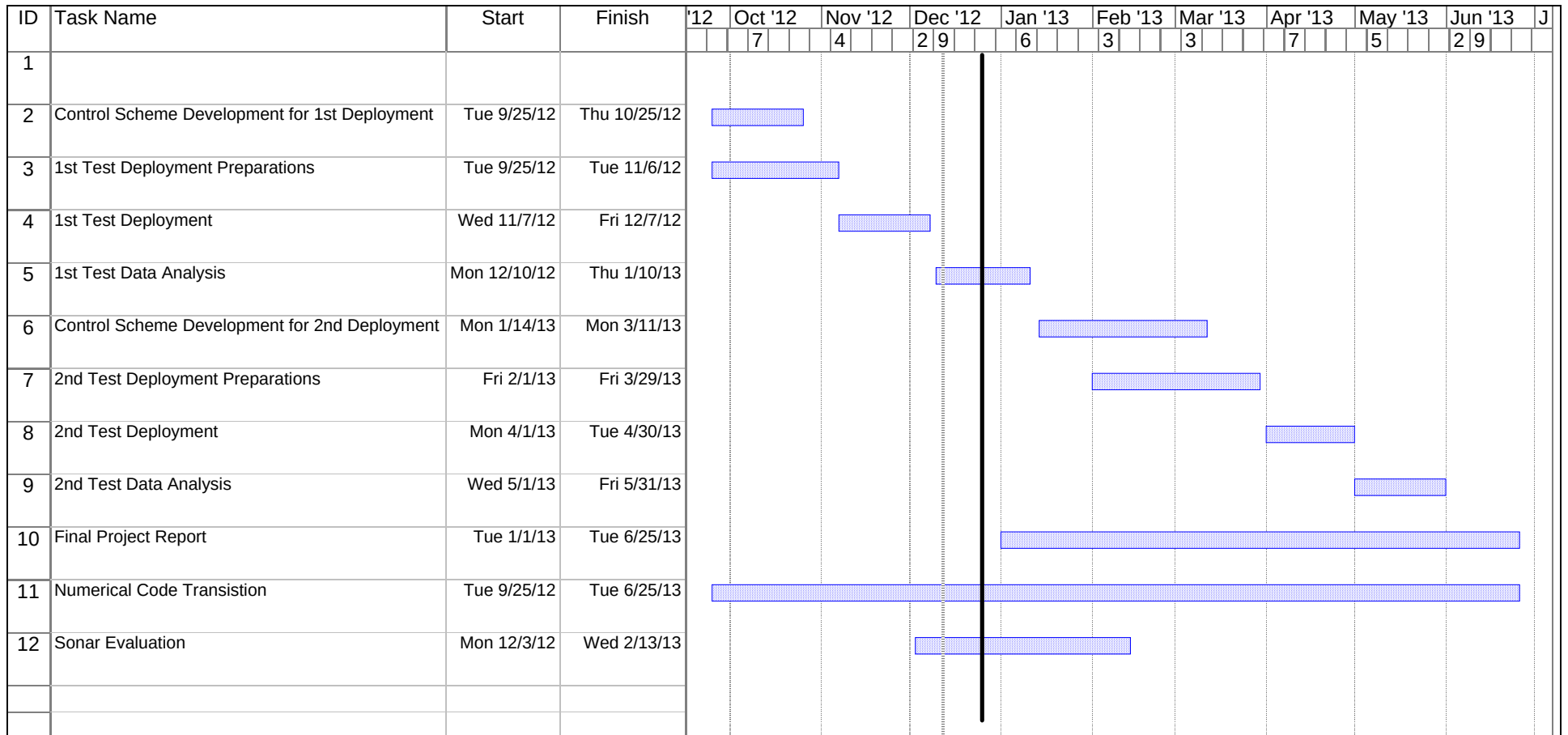




Updated: Dec 12, 2012

Activity	Dates		Costs			Budget (Burdened)		Percent Complete/Spent (Est)			Spent (Burdened)	Remaining	
	Sub-tasks	Start	End	Labor (Days)	Material	Ship		Labor (Days)	Material	Ship		Dollars	Percentage
Control Scheme Development for 1st Deployment		9/25/2012	10/25/2012									\$0	0%
	Implementation of PTO model into code	9/25/2012	10/1/2012	4			\$4,898	100%			\$4,898		
	Calibration of model w.r.t. previous deployments	9/25/2012	10/1/2012	4			\$4,898	100%			\$4,898		
	Development of gain-scheduling algorithm	9/25/2012	10/25/2012	6			\$7,348	100%			\$7,348		
	Development of latching algorithm	9/25/2012	10/25/2012	6			\$7,348	100%			\$7,348		
1st Test Deployment Preparations		9/25/2012	11/6/2012									\$0	0%
	Wave-energy converter maintenance	9/25/2012	10/31/2012	20	\$7,500		\$35,817	100%	100%		\$35,817		
	Add buoy submergence sensor	9/25/2012	11/2/2012	4	\$1,300		\$6,861	100%	100%		\$6,861		
	Implement control algorithms	10/8/2012	11/2/2012	10			\$12,246	100%			\$12,246		
	Final system testing	11/5/2012	11/6/2012	5			\$6,123	100%			\$6,123		
	Replace WaveRider Batteries	10/15/2012	11/6/2012	1	\$300		\$1,678	100%	100%		\$1,678		
1st Test Deployment		11/7/2012	12/7/2012									\$10,292	27%
	Mobilize all equipment to dock.	11/7/2012	11/7/2012	2			\$2,449	100%			\$2,449		
	Load boat	11/8/2012	11/8/2012	2		\$1,950	\$5,394	100%		100%	\$5,394		
	Deployment	11/9/2012	11/9/2012	4		\$1,950	\$7,843	100%		100%	\$7,843		
	System monitoring	11/9/2012	12/6/2012	10			\$12,246	100%			\$12,246		
	Recovery and Unload Boat	12/6/2012	12/6/2012	4		\$1,950	\$7,843	0%		0%	\$0		
	De-mobilization	12/7/2012	12/7/2012	2			\$2,449	0%			\$0		
1st Test Data Analysis		12/10/2012	1/10/2013									\$9,797	50%
	Correlation of test data and wave data	12/10/2012	12/12/2012	2			\$2,449	50%			\$1,225		
	Analysis of test data	12/13/2012	12/28/2012	10			\$12,246	50%			\$6,123		
	Test Report	1/1/2013	1/10/2013	4			\$4,898	50%			\$2,449		
Control Scheme Development for 2nd Deployment		1/14/2013	3/11/2013									\$36,738	100%
	Evaluation of buoy draft sensor performance	1/14/2013	1/18/2013	5			\$6,123	0%			\$0		
	Development of latching algorithm	1/21/2013	3/11/2013	25			\$30,615	0%			\$0		
2nd Test Deployment Preparations		2/1/2013	3/29/2013									\$55,863	100%
	Wave-energy converter maintenance	2/1/2013	3/8/2013	20	\$7,500		\$35,817	0%	0%		\$0		
	Implement control algorithms	3/11/2013	3/22/2013	10			\$12,246	0%			\$0		
	Final system testing	3/25/2013	3/29/2013	5			\$6,123	0%			\$0		
	Replace WaveRider Batteries	3/25/2013	3/29/2013	1	\$300		\$1,678	0%	0%		\$0		
2nd Test Deployment		4/1/2013	4/30/2013									\$38,224	100%
	Mobilize all equipment to dock.	4/1/2013	4/1/2013	2			\$2,449	0%			\$0		
	Load boat	4/2/2013	4/2/2013	2		\$1,950	\$5,394	0%	0%		\$0		
	Deployment	4/3/2013	4/3/2013	4		\$1,950	\$7,843	0%	0%		\$0		
	System monitoring	4/3/2013	4/28/2013	10			\$12,246	0%			\$0		
	Recovery and Unload Boat	4/29/2013	4/29/2013	4		\$1,950	\$7,843	0%	0%		\$0		
	De-mobilization	4/30/2013	4/30/2013	2			\$2,449	0%			\$0		
2nd Test Data Analysis		5/1/2013	5/31/2013									\$22,043	100%
	Correlation of test data and wave data	5/1/2013	5/3/2013	2			\$2,449	0%			\$0		
	Analysis of test data	5/6/2013	5/17/2013	12			\$14,695	0%			\$0		
	Test Report	5/20/2013	5/31/2013	4			\$4,898	0%			\$0		
Final Project Report		1/1/2013	6/25/2013									\$80,823	100%
	Data collection and analysis	1/1/2013	5/31/2013	30			\$36,738	0%			\$0		
	Journal Paper Preparation	1/1/2013	5/31/2013	20			\$24,492	0%			\$0		
	Final Data Analysis and Report Writing	6/3/2013	6/21/2012	15			\$18,369	0%			\$0		
	Report Submission	6/24/2013	6/24/2013	1			\$1,225	0%			\$0		
Numerical Code Transistion		8/1/2012	6/25/2013									\$16,021	37%
	Users manual and examples	8/1/2012	11/30/2012	15			\$18,369	100%			\$18,369		
	Transition to web server	12/3/2012	12/4/2012	2			\$2,449	100%			\$2,449		
	Carderock/DC Visit	12/5/2012	12/7/2012	5	\$2,500		\$9,898	100%	0%		\$6,123		
	Support as needed.	6/24/2013	6/24/2013	10			\$12,246	0%			\$0		
Sonar Evaluation		12/1/2012	2/15/2013									\$15,920	62%
	DAT Performance Evaluation (alone)	12/1/2012	12/31/2012	10			\$12,246	80%			\$9,797		
	DAT In-Vehicle Performance Evaluation	1/1/2013	1/21/2013	10			\$12,246	0%			\$0		
	Report	1/12/2013	2/1/2013	1			\$1,225	0%	0%		\$0		

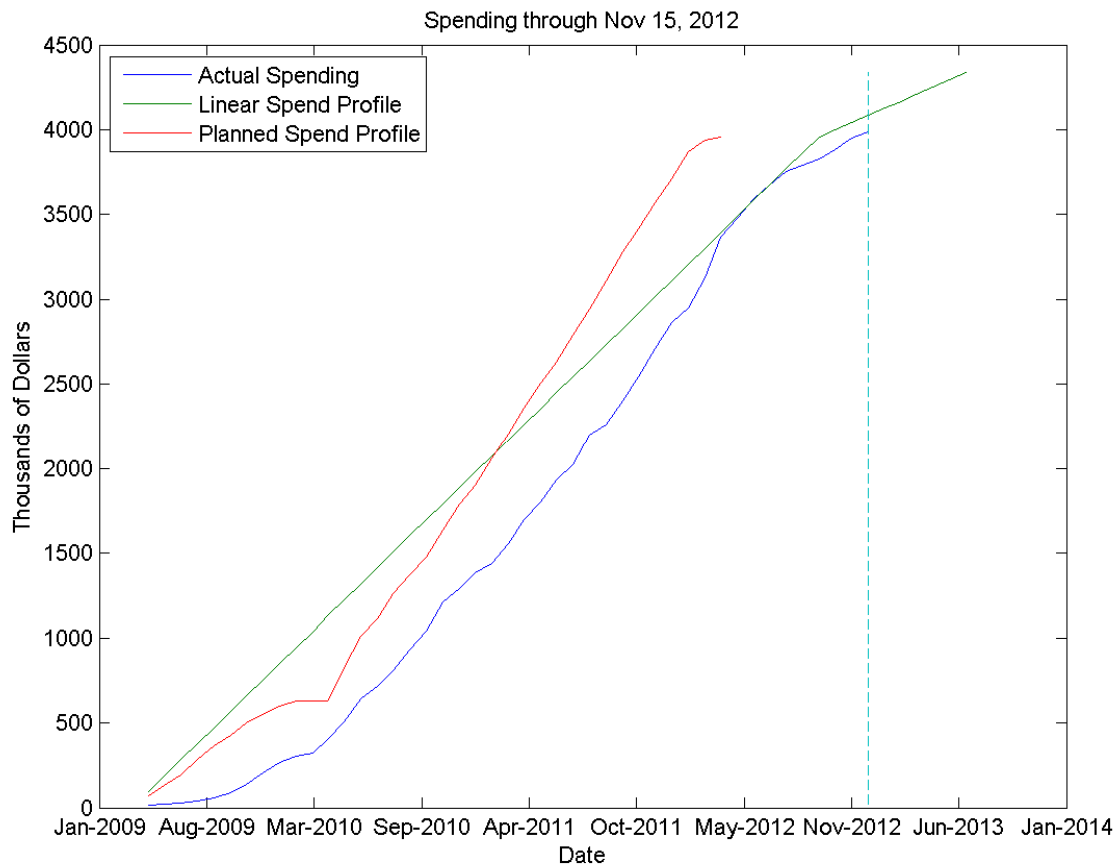
Totals:

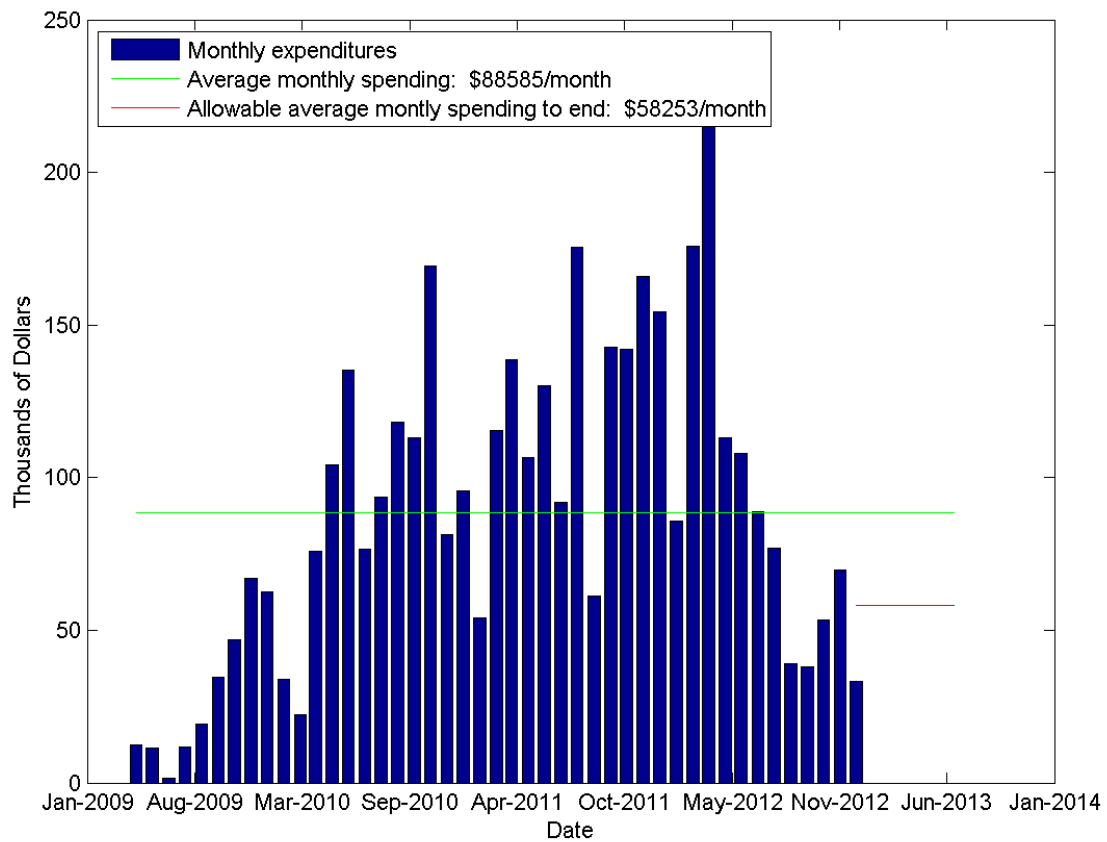
\$447,400

\$285,718

Financial Progress through Dec 12, 2012

The graph below shows the projects spend profile through Dec 12, 2012. The red line shows the original spending plan (from the original proposal), the green line shows the linear spend rate from the project inception to an end date that reflects a six month extension in the original period of performance. After September 2012 a second extension is represented by the change in slope of the green line. The blue line shows the actual spend rate.





\$353,855 Remains unspent

\$285,718 Allocated for tasks to be done

\$68,137 Remains unallocated