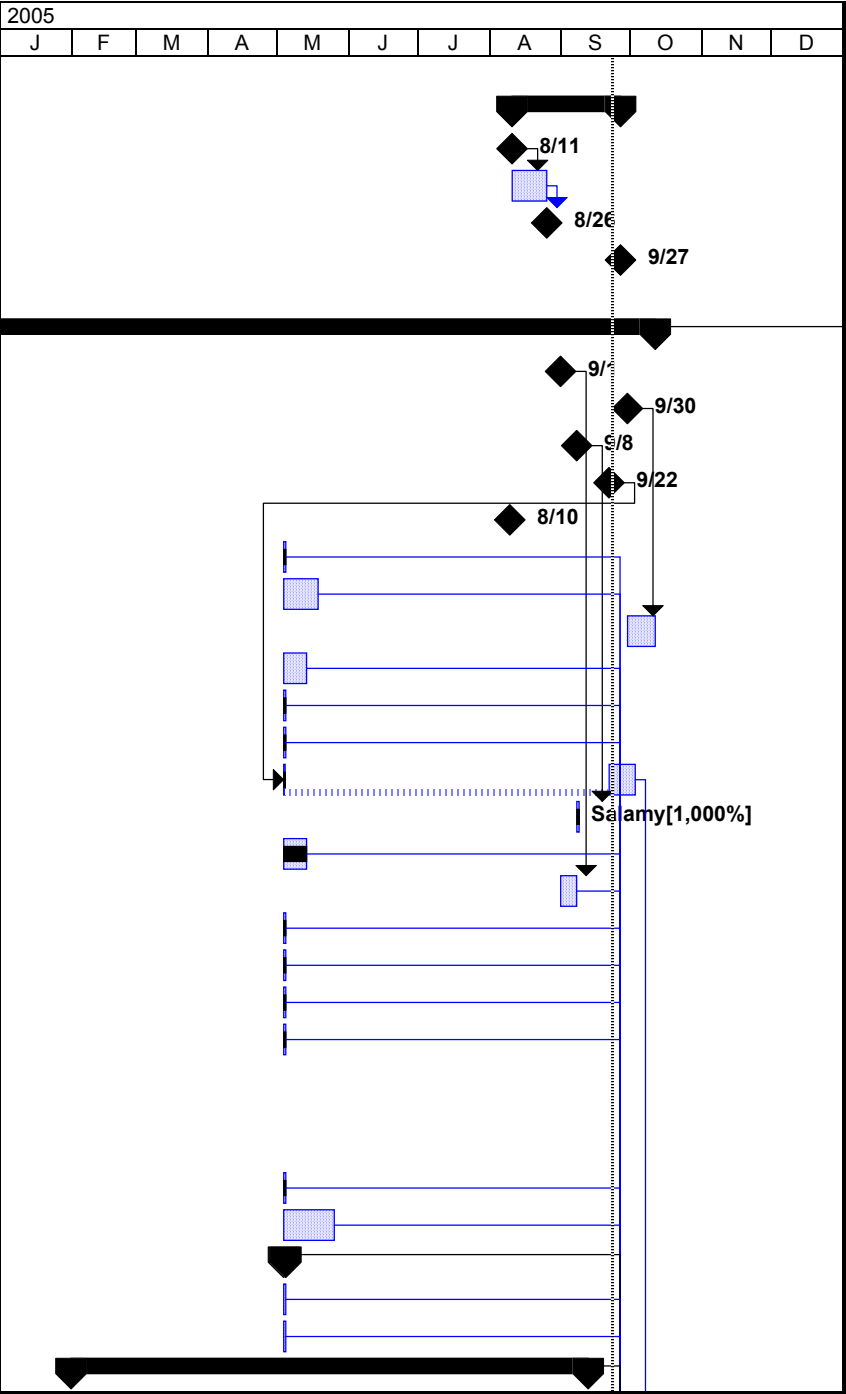
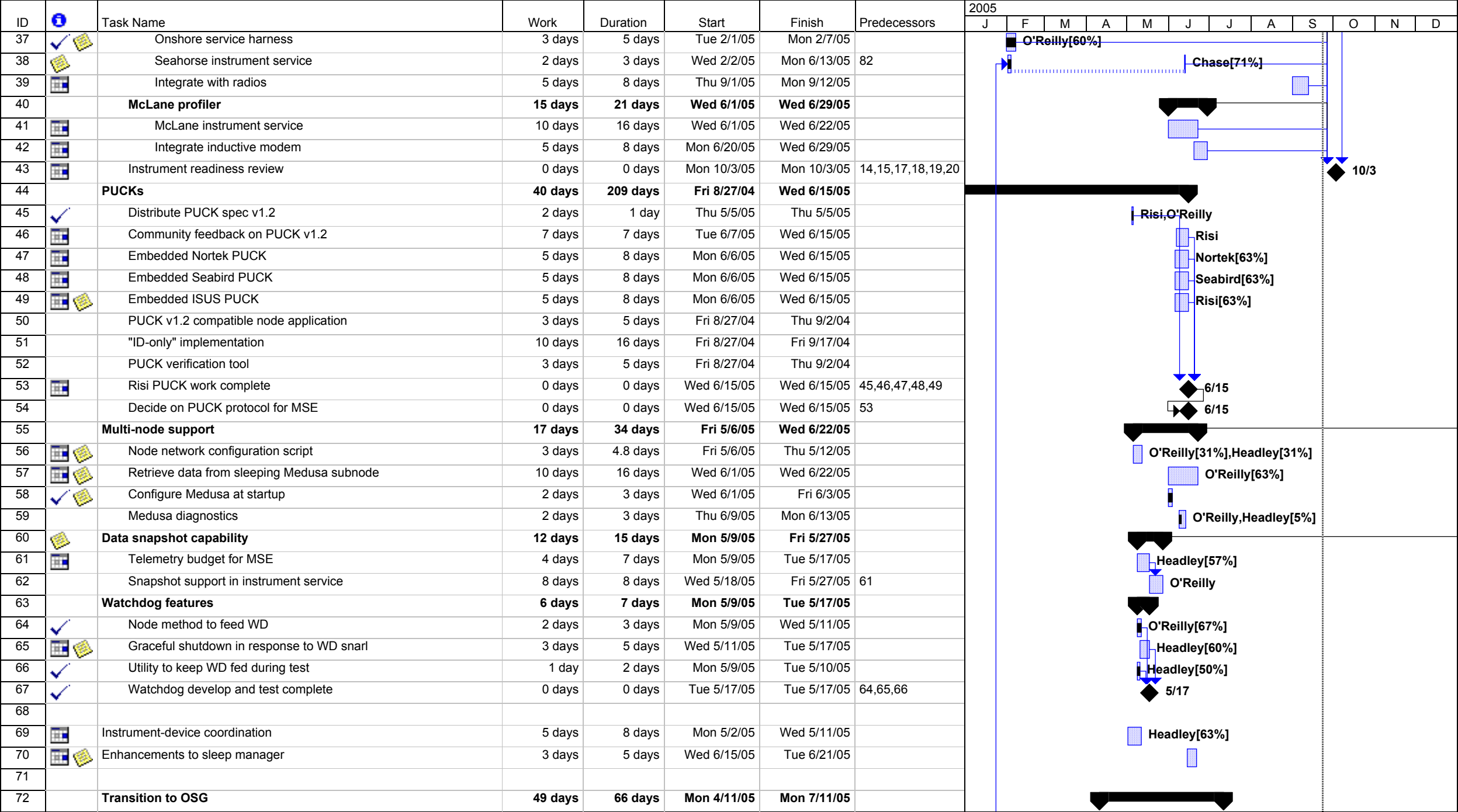
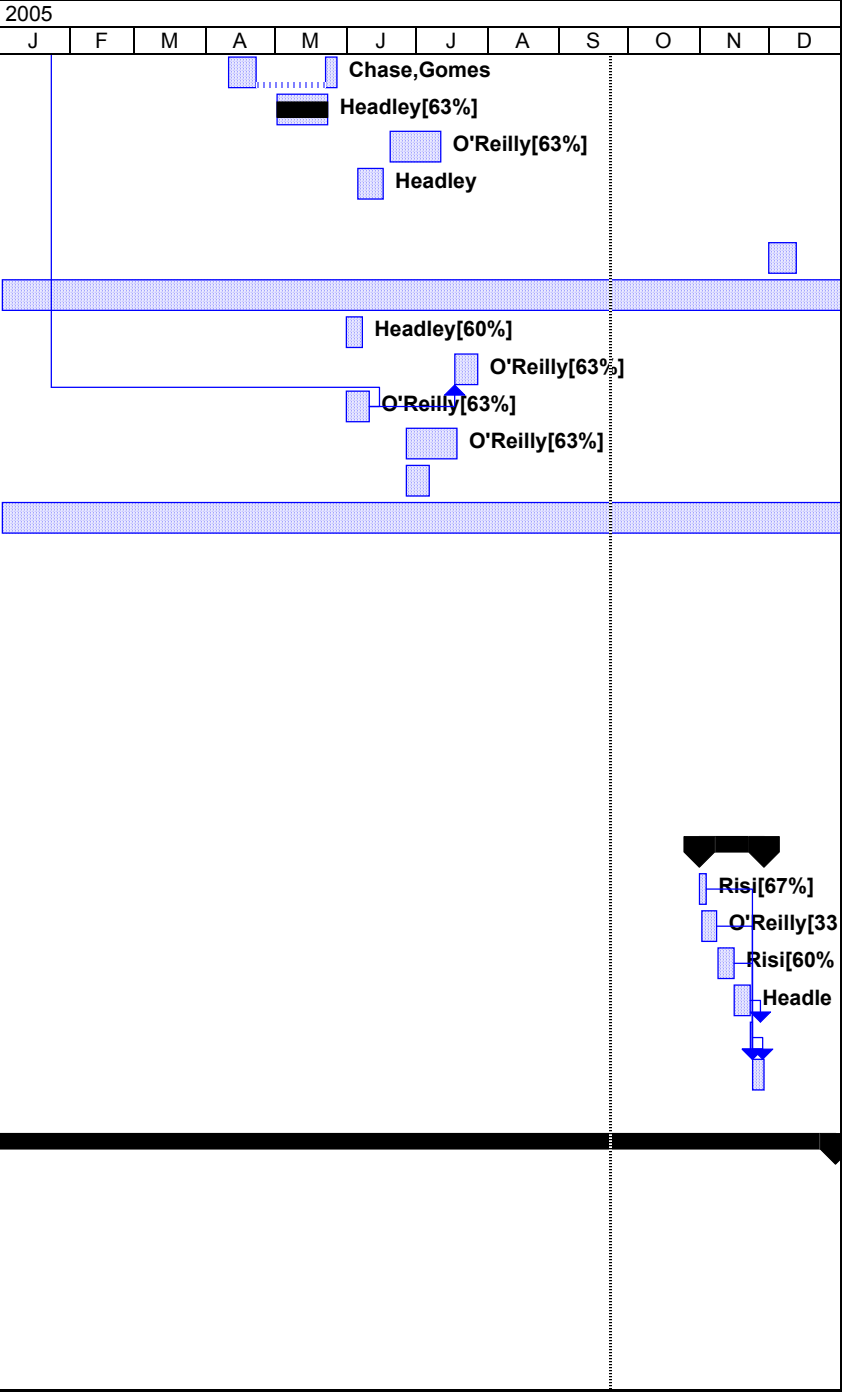


ID		Task Name	Work	Duration	Start	Finish	Predecessors	2005											
								J	F	M	A	M	J	J	A	S	O	N	D
1																			
2		MTM-3	15 days	33 days	Thu 8/11/05	Tue 9/27/05													
3	 	All MTM-3 hardware integrated in Building G	0 days	0 days	Thu 8/11/05	Thu 8/11/05													
4		MTM-3 integration and test	15 days	11 days	Thu 8/11/05	Thu 8/25/05	3												
5		MTM-3 instrument readiness review	0 days	0 days	Fri 8/26/05	Fri 8/26/05	4												
6		MTM-3 deployment	0 days	0 days	Tue 9/27/05	Tue 9/27/05													
7																			
8		MSE Instrument services	80 days	293 days?	Fri 8/27/04	Tue 10/11/05													
9		ASIMET pressure instrument delivery	0 days	0 days	Thu 9/1/05	Thu 9/1/05													
10		Nortek Aquadopp delivery	0 days	0 days	Fri 9/30/05	Fri 9/30/05													
11		Aanderra oxygen optode instrument delivery	0 days	0 days	Thu 9/8/05	Thu 9/8/05													
12		Wetlabs ECO instrument delivery	0 days	0 days	Thu 9/22/05	Thu 9/22/05													
13		pCO2 SOON instrument delivery	0 days	0 days	Wed 8/10/05	Wed 8/10/05													
14		Seabird SBE 37SM	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
15	 	Seabird SBE-16+	7 days	11 days	Wed 5/4/05	Wed 5/18/05													
16		Nortek Aquadopp service	5 days	8 days	Fri 9/30/05	Tue 10/11/05	10												
17	 	Hobilabs HS-2	5 days	8 days	Wed 5/4/05	Fri 5/13/05													
18		RDI Workhorse Long Ranger	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
19		RDI Workhorse Sentinel	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
20	 	Wetlabs ECO service	5 days	8 days	Wed 5/4/05	Mon 10/3/05	12												
21		Aanderra oxygen optode service	10 days	1 day?	Thu 9/8/05	Thu 9/8/05	11												
22	 	MBARI pCO2	5 days	8 days	Wed 5/4/05	Fri 5/13/05													
23	 	ASIMET pressure service	3 days	5 days	Thu 9/1/05	Wed 9/7/05	9												
24		ASIMET LWR	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
25		ASIMET SWR	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
26		ASIMET humidity	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
27		ASIMET WND	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
28	 	Satlantic ISUS -2	5 days	1 day?	Fri 8/27/04	Fri 8/27/04													
29		Triaxys heave sensor	0 days	1 day?	Fri 8/27/04	Fri 8/27/04													
30		Garmin GPS	0 days	1 day?	Fri 8/27/04	Fri 8/27/04													
31		Satlantic HyperOCR (Es, Ed-W, Lu-W, shutter)	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
32	 	Digital camera	10 days	16 days	Wed 5/4/05	Wed 5/25/05													
33	 	Analog instruments	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
34	 	Wetlabs C-star transmissometer/nephelometer	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
35	 	Seapoint optical backscatter	0 days	1 day?	Wed 5/4/05	Wed 5/4/05													
36		Seahorse profiler	10 days	160 days	Tue 2/1/05	Mon 9/12/05													

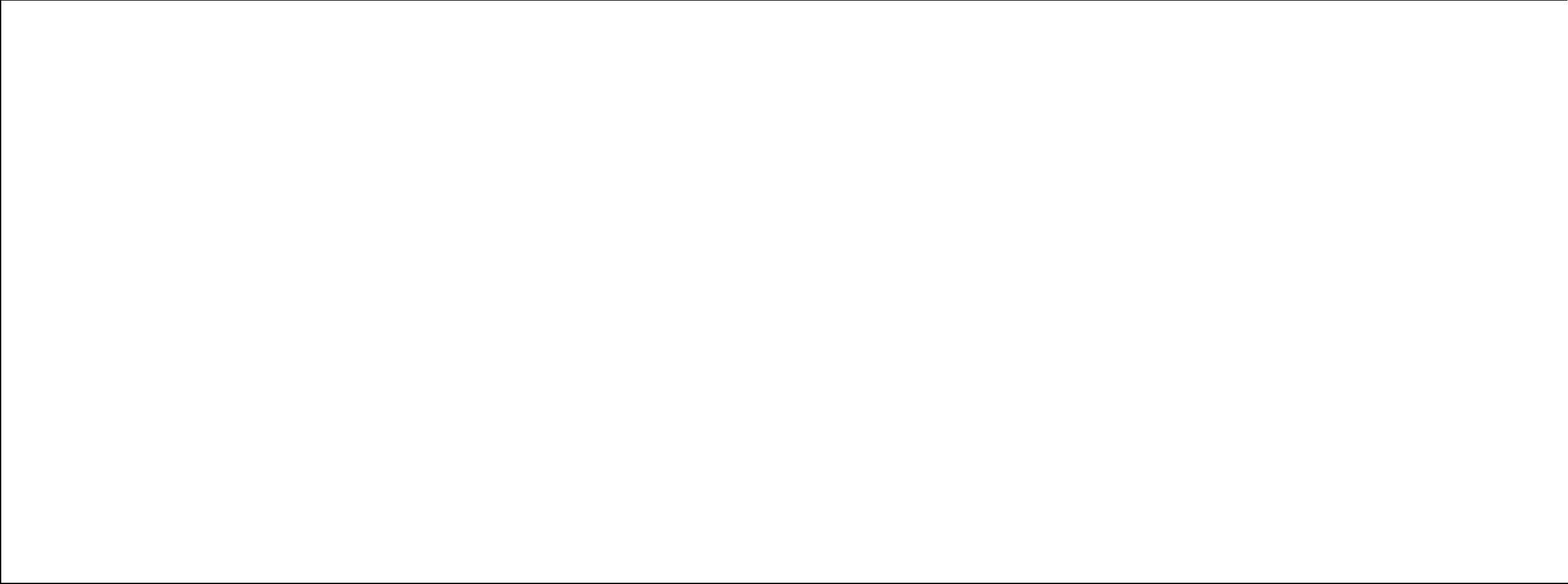




ID		Task Name	Work	Duration	Start	Finish	Predecessors	2005												
								J	F	M	A	M	J	J	A	S	O	N	D	
73		Puck configuration GUI	20 days	15 days	Mon 4/11/05	Fri 5/27/05		Chase,Gomes Headley[63%] O'Reilly[63%] Headley												
74		Node configuration GUI	10 days	16 days	Mon 5/2/05	Mon 5/23/05														
75		Node GUI upgrades	10 days	16 days	Mon 6/20/05	Mon 7/11/05														
76		Troubleshooting document	9 days	9 days	Mon 6/6/05	Thu 6/16/05														
77																				
78		RFIO diagnostics	5 days	8 days	Thu 12/1/05	Mon 12/12/05														
79		PUCK consortium activities	12 days	380 days	Mon 1/3/05	Fri 6/16/06														
80		Overcurrent handling	3 days	5 days	Wed 6/1/05	Tue 6/7/05														
81		Instrument state tracking	5 days	8 days	Mon 7/18/05	Wed 7/27/05	82													
82		Streaming instrument service	5 days	8 days	Wed 6/1/05	Fri 6/10/05														
83		Simplify service software development	10 days	16 days	Mon 6/27/05	Mon 7/18/05														
84		Globalstar efficiency	5 days	8 days	Mon 6/27/05	Wed 7/6/05														
85		Misc bug fixes/enhancements	30 days	365 days	Mon 1/3/05	Fri 5/26/06														
86																				
87		MMC tasks	0 days	1 day?	Fri 8/27/04	Fri 8/27/04														
88		EXT3 filesystem for CFLASH	0 days	1 day?	Fri 8/27/04	Fri 8/27/04														
89		Ethernet driver reliability	0 days	1 day?	Fri 8/27/04	Fri 8/27/04														
90																				
91		MSE integration and test	21 days	21 days	Wed 2/1/06	Wed 3/1/06	8,55,60													
92		MSE deployment	0 days	0 days	Wed 3/15/06	Wed 3/15/06														
93																				
94		Support for RS-422 subnode	15 days	20 days?	Tue 11/1/05	Mon 11/28/05														
95		Link functionality test	2 days	3 days	Tue 11/1/05	Thu 11/3/05														
96		RS422 configuration tool	3 days	4.5 days	Wed 11/2/05	Tue 11/8/05														
97		Parent node software	3 days	5 days	Wed 11/9/05	Tue 11/15/05														
98		Wakeup RS-422 node	3 days	5 days	Wed 11/16/05	Tue 11/22/05														
99		Retrieve data from sleeping RS422 subnode	2 days	1 day?	Wed 11/23/05	Wed 11/23/05	98													
100		Integrate and test RS422 subnode	2 days	3 days	Thu 11/24/05	Mon 11/28/05	95,96,97,99													
101																				
102		NSF Sensors project	53 days	350 days?	Fri 8/27/04	Fri 12/30/05														
103		SIAM instrument service "harness" for MARS	4 days	6 days	Fri 8/27/04	Fri 9/3/04														
104		MARS implementation of instrument port interface	10 days	7 days	Fri 8/27/04	Mon 9/6/04														
105		MARS_InstrumentPort	5 days	7 days	Fri 8/27/04	Mon 9/6/04														
106		Instrument power switch hardware	5 days	7 days	Fri 8/27/04	Mon 9/6/04														
107																				
108		Web service interface to SIAM instrument service	24 days	16 days	Fri 8/27/04	Fri 9/17/04														



ID		Task Name	Work	Duration	Start	Finish	Predecessors	2005											
								J	F	M	A	M	J	J	A	S	O	N	D
109		Web services training/research	9 days	12 days	Fri 8/27/04	Mon 9/13/04													
110		Service iterface definition	5 days	7 days	Fri 8/27/04	Mon 9/6/04													
111		Implementation and testing	10 days	16 days	Fri 8/27/04	Fri 9/17/04													
112																			
113		PUCK	15 days	23 days	Fri 8/27/04	Tue 9/28/04													
114		"Scan" serial port via terminal server	10 days	16 days	Tue 9/7/04	Tue 9/28/04	106												
115		PUCK contents	5 days	7 days	Fri 8/27/04	Mon 9/6/04													
116																			
117		Test on SIIM testbed (Building D)	0 days	0 days	Fri 12/30/05	Fri 12/30/05													
118																			
119		O'Reilly vacation	0 days	15 days?	Mon 9/26/05	Fri 10/14/05													



- 3

All MTM-3 hardware integrated in Building G
Includes all hardware to be deployed on MTM-3, instruments, cables and PUCKs.
- 15

Seabird SBE-16+
Note that SBE-16 may include analog instruments (Wetlabs C-star, Seapoint OBS) - does SIAM service reflect this? Perhaps included somehow in instrument metadata?
- 17

Hobilabs HS-2
Software interface similar to HydroRad?
- 20

Wetlabs ECO service
Does current WetLabsECO service implement this?
- 22

MBARI pCO2
Full integration with MMC/SIAM
- 23

ASIMET pressure service
Extend WhoiAsimet class
- 28

Satlantic ISUS -2
Must upgrade CIMT ISUS service, as command set has changed.
- 32

Digital camera
Coolpix?
- 33

Analog instruments
These will be hosted by SBE16+ and/or Nobska MAVS3
- 34

Wetlabs C-star transmissometer/nephelometer
ANALOG
- 35

Seapoint optical backscatter
ANALOG - this is on vertical profiler (Hamilton will handle)
- 37

Onshore service harness
Service harness manages instrument services that are not necessarily deployed on a MMC node. Eg the McLean service communicates with the profiler through RF serial interface, and the service may in fact be running on a shore node. The service harness launches the service, publishes its data, etc.
- 38

Seahorse instrument service
Improve fault-tolerance, exception handling?
- 49

Embedded ISUS PUCK
Fallback if Seabird and/or Nortek don't pan out
- 56

Node network configuration script
Network host naming and address conventions needed for multiple subnodes, including RS422 subnodes.
- 57

Retrieve data from sleeping Medusa subnode
Requires Medusa wakeup feature. Portal wakes up subnodes and retrieves their data.
- 58

Configure Medusa at startup
SIAM Medusa service configures Medusa card via serial port during initializeInstrument; sends IP address of host SideARM to Medusa.
- 60

Data snapshot capability
Likely required for at least some MSE services. Issues include packet numbering for summary packets.

- 65

Graceful shutdown in response to WD snarl
What is required for graceful shutdown? Do we need to run 'exitNode' or is it ok to just kill j9?
- 70

Enhancements to sleep manager
MMC should have opportunity to sleep if waiting a long time for sample return (e.g. for Triaxys sample).
- 80

Overcurrent handling
Need to define requirements. E.g. could log time at which overcurrent trips.
- 82

Streaming instrument service
Streaming instrument service will be base class for instruments that do not follow the "polled" model - i.e. instruments that asynchronously supply data to the host node (e.g. ADCP). Requires MMC "wakeup on UART traffic" feature.
- 83

Simplify service software development
Perhaps implement service whose behavior is specified entirely by properties file.
- 91

MSE integration and test
All nodes and instruments. Not final cable and snubber
- 94

Support for RS-422 subnode
Need for RS-422 support on MSE depends on network connection selected for 20-meter cage; use Medusa interface or RS-422?
- 95

Link functionality test
Test multiple subnodes case
- 96

RS422 configuration tool
Node configuration tools ('config', GUI) should support RS422 subnode
- 97

Parent node software
Provides power to subnode through DPA, establishes parent side of ppp link. Might use "RS422 subnode" service on parent node, or might be separate from SIAM node application.
- 98

Wakeup RS-422 node
Parent wakes up subnode by sending traffic via RS422. Requires MMC wakeup-on-serial UART feature
- 103

SIAM instrument service "harness" for MARS
Harness executes on shore station, contains SIAM instrument service, which communicates with instrument device via network "terminal server". Uses SIAM instrument service "as is".
- 104

MARS implementation of instrument port interface
Implement SIAM InstrumentPort interface
- 106

Instrument power switch hardware
Simulate MARS power switch for bench testing
- 110

Service iterface definition
Perhaps based on CIMA work
- 111

Implementation and testing
Test with SSDS and RoadNET clients
- 115

PUCK contents
Does PUCK contain web service interface?