

Commiss

ID	Task Name	Duration	Start	Finish	Predecessors
1	Upgrade Commissioning	131.8 w	Thu 5/21/98	Tue 1/16/01	
2	Silicon Tracker	42.6 w	Wed 1/5/00	Mon 10/30/00	
3	<i>Twelve Ladder Test Complete</i>	<i>0 w</i>	<i>Wed 1/5/00</i>	<i>Wed 1/5/00</i>	
4	<i>First barrel/disk test</i>	<i>10 w</i>	<i>Tue 1/25/00</i>	<i>Mon 4/3/00</i>	
5	<i>M1-Central Silicon Complete</i>	<i>0 w</i>	<i>Mon 9/18/00</i>	<i>Mon 9/18/00</i>	
6	Install silicon high mass cables	5 w	Mon 7/17/00	Fri 8/18/00	20
7	Install central silicon in fiber tracker	1 w	Tue 9/19/00	Mon 9/25/00	5,20
8	Hookup central silicon	3 w	Tue 9/26/00	Fri 10/13/00	7
9	Checkout silicon detector	5 w	Tue 9/26/00	Fri 10/27/00	8SS
10	Install/hookup silicon H-disk north	1 w	Tue 10/10/00	Mon 10/16/00	8SS+2 w
11	Install/hookup silicon H-disk south	1 w	Tue 10/17/00	Mon 10/23/00	10
12	Hookup and survey beam pipe	1 w	Tue 10/24/00	Mon 10/30/00	11
13	Fiber Tracker	59.4 w	Thu 7/1/99	Fri 9/8/00	
14	Cosmic ray test	28 w	Thu 7/1/99	Tue 2/1/00	
15	Produce FT Waveguides	18.4 w	Mon 2/28/00	Thu 7/6/00	
16	<i>Waveguide production 50% complete</i>	<i>0 w</i>	<i>Mon 2/28/00</i>	<i>Mon 2/28/00</i>	
17	<i>Waveguide production complete</i>	<i>0 w</i>	<i>Thu 7/6/00</i>	<i>Thu 7/6/00</i>	
18	<i>M2-Fiber Tracker Assembly Complete</i>	<i>0 w</i>	<i>Thu 5/4/00</i>	<i>Thu 5/4/00</i>	
19	Install fiber tracker in solenoid	2 w	Thu 5/4/00	Wed 5/17/00	18
20	Hookup fiber tracker	8 w	Thu 5/18/00	Fri 7/14/00	19,16
21	Commission fiber tracker	14 w	Fri 6/2/00	Fri 9/8/00	20SS+2 w
22	VLPCs	42.4 w	Thu 11/4/99	Wed 9/13/00	
23	Assemble VLPC cassettes	37.2 w	Thu 11/18/99	Tue 8/22/00	
24	Cassette assembly	37 w	Thu 11/18/99	Fri 8/18/00	
25	<i>VLPC Cassette Assembly 50% Complete</i>	<i>0 w</i>	<i>Wed 4/12/00</i>	<i>Wed 4/12/00</i>	
26	<i>VLPC Cassette Assembly Complete</i>	<i>0 w</i>	<i>Tue 8/22/00</i>	<i>Tue 8/22/00</i>	
27	Test cassettes	37 w	Mon 12/6/99	Fri 9/1/00	24SS+2 w
28	Fabricate 1st VLPC cryostat	20 w	Thu 11/4/99	Fri 4/7/00	
29	<i>M3-1st VLPC Cryostat Installed</i>	<i>0 w</i>	<i>Fri 4/14/00</i>	<i>Fri 4/14/00</i>	
30	Fabricate 2nd VLPC cryostat	20 w	Thu 11/4/99	Fri 4/7/00	
31	Cryostat installation/hookup	3 w	Mon 4/10/00	Thu 4/27/00	28,30
32	Cryo system installation/test	8 w	Mon 4/17/00	Mon 6/12/00	29
33	<i>M3-VLPC Cryo System Operational</i>	<i>0 w</i>	<i>Mon 6/12/00</i>	<i>Mon 6/12/00</i>	
34	Install 50 cassettes in first cryostat	5 w	Wed 4/26/00	Thu 6/1/00	27SS+50 %,29
35	Install next 50 cassettes in second cryostat	5 w	Wed 8/9/00	Wed 9/13/00	27FF+1 w,30,34
36	Central and Forward Preshowers	129.8 w	Thu 5/21/98	Tue 1/2/01	
37	<i>Central Preshower Installed On Solenoid</i>	<i>0 w</i>	<i>Thu 5/21/98</i>	<i>Thu 5/21/98</i>	
38	Produce CPS waveguides	13 w	Thu 9/16/99	Fri 12/17/99	
39	Hookup central preshower	8 w	Thu 5/18/00	Fri 7/14/00	16,19,38SS+50 %
40	<i>Commission central preshower</i>	<i>14 w</i>	<i>Fri 6/2/00</i>	<i>Fri 9/8/00</i>	
41	Install FPS-South	2 w	Thu 1/20/00	Wed 2/2/00	
42	Install FPS-North	2 w	Thu 3/16/00	Wed 3/29/00	
43	Produce FPS waveguides	17 w	Mon 1/3/00	Thu 4/27/00	
44	Hookup FPS-North	3 w	Mon 2/7/00	Mon 2/28/00	43SS+30 %

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45	Hookup FPS-South	3 w	Fri 11/3/00	Mon 11/27/00	43,80
46	Commission FPS	30 w	Tue 5/30/00	Tue 1/2/01	44SS+3 w
47	Tracking Electronics	45 w	Mon 11/1/99	Wed 9/27/00	
48	VRBs/VTMs ready to install	0 w	Mon 11/1/99	Mon 11/1/99	
49	Commission SVXII emulator	4 w	Mon 11/1/99	Tue 11/30/99	
50	Install/commission VRBs/VTMs	28 w	Thu 12/2/99	Wed 6/28/00	
51	Install/commission sequencers	28 w	Thu 12/2/99	Wed 6/28/00	
52	System install and test	7 w	Thu 12/2/99	Wed 2/2/00	51SS
53	First readout crate installed and working	0 w	Thu 12/2/99	Thu 12/2/99	52SS
54	Low mass cables designed, procured, and tested	0 w	Thu 7/6/00	Thu 7/6/00	
55	High mass cables designed, procured, and tested	0 w	Wed 3/29/00	Wed 3/29/00	
56	Transition cards available	0 w	Fri 2/25/00	Fri 2/25/00	
57	Interface cards available	0 w	Tue 4/18/00	Tue 4/18/00	
58	Install/test transition cards, interface cards, high mass cables	12 w	Thu 7/6/00	Wed 9/27/00	20SS+60 %,55,54,57
59	Fiber Tracker Trigger Electronics	46.2 w	Thu 12/16/99	Thu 11/16/00	
60	Final production of multi-chip modules	8 w	Thu 12/16/99	Wed 2/23/00	
61	10 Analog Boards Available	0 w	Wed 4/19/00	Wed 4/19/00	
62	Analog Boards Completed and Tested	0 w	Fri 7/28/00	Fri 7/28/00	
63	10 Digital Boards Available	0 w	Wed 3/22/00	Wed 3/22/00	
64	Digital Boards Complete/Tested	0 w	Fri 7/14/00	Fri 7/14/00	
65	Fabricate mixer boards	8 w	Thu 4/27/00	Thu 6/22/00	
66	Mixer boards ready	0 w	Thu 6/22/00	Thu 6/22/00	
67	Install/commission final FEB with external tester	16 w	Fri 7/28/00	Thu 11/16/00	62,34
68	System installation/commissioning	8 w	Mon 7/31/00	Mon 9/25/00	
69	Install/commission CFT electronics in-situ	8 w	Mon 7/31/00	Mon 9/25/00	62,34,63,66
70	First crate operational	0 w	Wed 5/3/00	Wed 5/3/00	
71	Calorimeter	57.3 w	Thu 11/11/99	Wed 1/10/01	
72	Install/debug calibration system	12 w	Thu 11/11/99	Fri 2/18/00	
73	Install CC, ECN preamps	10 w	Mon 1/24/00	Fri 3/31/00	
74	Install BLS system	8 w	Tue 8/15/00	Mon 10/9/00	
75	Checkout BLS system	8 w	Tue 8/29/00	Mon 10/23/00	
76	Four CC quadrants available for cosmic rays	0 w	Wed 9/20/00	Wed 9/20/00	75SS+40 %
77	Final checkout	1 w	Wed 10/25/00	Tue 10/31/00	75
78	CC, ECN Calorimeter Systems Checked Out	0 w	Tue 10/31/00	Tue 10/31/00	77
79	Four ECN quadrants available for cosmic rays	0 w	Mon 10/23/00	Mon 10/23/00	75
80	Move ECS Calorimeter onto Platform	0.6 w	Tue 10/31/00	Thu 11/2/00	9
81	Recable ECS Calorimeter	3 w	Fri 11/3/00	Mon 11/27/00	80
82	Install ECS Preamps	5 w	Tue 11/14/00	Thu 12/21/00	81SS+50 %
83	Checkout ECS Preamp system	5 w	Thu 11/30/00	Wed 1/10/01	82SS+2 w
84	Four ECS quadrants available for cosmic rays	0 w	Thu 12/21/00	Thu 12/21/00	82
85	Intercryostat Detector	45.4 w	Wed 12/15/99	Thu 11/9/00	
86	Install ICD -North	1 w	Wed 12/15/99	Tue 1/4/00	
87	Install ICD-South	1 w	Wed 1/26/00	Tue 2/1/00	
88	Hookup ICD-North	2 w	Wed 1/5/00	Tue 1/18/00	

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89	Hookup ICD-South	1 w	Fri 11/3/00	Thu 11/9/00	80
90	Commission ICD	30 w	Wed 1/19/00	Tue 8/15/00	
91	Muon System	78 w	Mon 5/3/99	Fri 11/17/00	
92	Move platform west	1 w	Fri 11/3/00	Thu 11/9/00	80
93	End Toroids Installed On Platform	0 w	Wed 11/15/00	Wed 11/15/00	92
94	Move platform east	0.4 w	Thu 11/16/00	Fri 11/17/00	93
95	Central Muon System	60.4 w	Mon 5/3/99	Tue 7/18/00	
96	WAMUS	54.6 w	Mon 6/14/99	Tue 7/18/00	
97	Modify MCH3 crates	10 w	Mon 6/14/99	Mon 8/23/99	
98	Commission 2% of WAMUS PDTs	10 w	Tue 8/24/99	Tue 11/2/99	97
99	Install/commission production MRC, MFC	12 w	Tue 4/25/00	Tue 7/18/00	
100	Commission remaining WAMUS PDTs	20 w	Fri 1/21/00	Thu 6/8/00	
101	Read out muon crate with full DAQ	0 w	Thu 8/26/99	Thu 8/26/99	
102	Perform system test - 2nd prototype MFC	6 w	Fri 11/5/99	Mon 1/3/00	
103	Central muon system available for multi-crate readout	0 w	Mon 1/3/00	Mon 1/3/00	102
104	A-Layer Scintillation Counters	54.6 w	Tue 6/1/99	Thu 7/6/00	
105	Fabricate/install 10% of cables	2 w	Tue 6/1/99	Mon 6/14/99	
106	Install calibration system	2 w	Tue 10/12/99	Mon 10/25/99	
107	CFA Installation Complete	0 w	Wed 11/24/99	Wed 11/24/99	
108	Commission 10% of A-layer counters	8 w	Fri 10/15/99	Mon 12/13/99	
109	Install production SFE, SRC	12 w	Thu 1/20/00	Wed 4/12/00	
110	Commission remaining 90% of A-layer counters	24 w	Thu 1/20/00	Thu 7/6/00	109SS
111	B- and C-Layer Scintillation Counters	46.6 w	Mon 5/3/99	Wed 4/12/00	
112	Fabricate/test/install calibration system	24 w	Mon 5/3/99	Wed 10/20/99	
113	Commission B,C counters	12 w	Thu 1/20/00	Wed 4/12/00	
114	Forward Muon System	23.2 w	Thu 4/13/00	Fri 9/22/00	
115	A-layer North MDT Octants onto Supports	2 w	Thu 4/13/00	Tue 4/25/00	
116	A-layer North Pixel Octants onto Supports	2 w	Thu 5/4/00	Wed 5/17/00	
117	A-layer South MDT Octants onto Supports	2 w	Thu 4/27/00	Wed 5/10/00	
118	A-layer South Pixel Octants onto Supports	2 w	Thu 5/18/00	Thu 6/1/00	
119	M3-Muon Forward A-layer MDTs and Pixels Installed/Surveyed	0 w	Thu 6/8/00	Thu 6/8/00	
120	B-layer North MDT Octants onto Supports	2 w	Thu 5/11/00	Wed 5/24/00	
121	B-layer North Pixel Octants onto Supports	2 w	Fri 6/2/00	Thu 6/15/00	
122	B-layer South MDT Octants onto Supports	2 w	Thu 5/25/00	Thu 6/8/00	
123	B-layer South Pixel Octants onto Supports	2 w	Fri 6/16/00	Thu 6/29/00	
124	Muon Forward B-layer MDTs and Pixels Installed/Surveyed	0 w	Thu 6/29/00	Thu 6/29/00	
125	C-layer North MDT Octants onto Supports	2 w	Fri 6/9/00	Thu 6/22/00	
126	C-layer North Pixel Octants onto Supports	2 w	Fri 6/30/00	Fri 7/14/00	
127	C-layer South MDT Octants onto Supports	2 w	Mon 7/17/00	Fri 7/28/00	
128	C-layer South Pixel Octants onto Supports	2 w	Mon 8/7/00	Fri 8/18/00	
129	Muon Forward C-layer MDTs and Pixels Installed/Surveyed	0 w	Fri 8/25/00	Fri 8/25/00	
130	Commission Forward MDTs and Pixels	19 w	Thu 4/13/00	Wed 8/23/00	115SS
131	Commission Forward MDTs and Pixels (Cosmic Rays)	17 w	Thu 5/25/00	Fri 9/22/00	
132	Luminosity Monitor	48.6 w	Thu 2/3/00	Tue 1/16/01	

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ID	Task Name	Duration	Start	Finish	Predecessors
133	Install south luminosity monitor	1 w	Thu 2/3/00	Wed 2/9/00	
134	Install north luminosity monitor	1 w	Thu 3/30/00	Wed 4/5/00	
135	Hookup north luminosity monitor	1 w	Tue 5/30/00	Mon 6/5/00	44,134
136	Hookup south luminosity monitor	1 w	Tue 11/28/00	Mon 12/4/00	45,133
137	Commission luminosity monitor	31 w	Tue 6/6/00	Tue 1/16/01	135
138	Trigger	71.2 w	Wed 6/2/99	Tue 10/31/00	
139	Level 1 Trigger	56.4 w	Thu 9/16/99	Tue 10/31/00	
140	Commission L1 framework for first user	6 w	Thu 9/16/99	Wed 10/27/99	
141	Commission L1 calorimeter trigger	12 w	Mon 2/14/00	Thu 5/4/00	
142	Assemble/commission L1 CTT system	12 w	Wed 8/9/00	Tue 10/31/00	
143	Muon Level 1 Trigger	24.2 w	Wed 3/8/00	Wed 8/23/00	
144	Test/install/commission MTCxx	8 w	Wed 6/28/00	Tue 8/22/00	
145	Test/install/commission MTFB	8 w	Wed 6/28/00	Tue 8/22/00	
146	Test/install/commission MTCM	8 w	Wed 3/8/00	Mon 5/1/00	
147	Test/install/commission MCEN	8 w	Wed 6/28/00	Tue 8/22/00	
148	Test/install/commission MCPB	8 w	Wed 6/28/00	Tue 8/22/00	
149	Test/install/commission MCCM	8 w	Thu 6/29/00	Wed 8/23/00	
150	Level 2 Trigger	44.6 w	Thu 10/28/99	Thu 9/21/00	
151	Commission L2 framework at Fermilab for 1st user	4 w	Thu 10/28/99	Wed 11/24/99	
152	Build/commission final global processor system	8 w	Tue 5/16/00	Wed 7/12/00	
153	Commission Global/Calpp Combination	4 w	Tue 8/22/00	Tue 9/19/00	
154	Commission L2 Muon	6 w	Thu 7/27/00	Thu 9/7/00	
155	Commission L2 with CTT, CPS, FPS	6 w	Thu 8/10/00	Thu 9/21/00	
156	Level 3 Trigger	53.8 w	Wed 6/2/99	Fri 6/30/00	
157	M3-Level 3 Online Operational Software Complete	0 w	Thu 11/18/99	Thu 11/18/99	
158	Perform first hardware system test at DZero	7 w	Thu 1/6/00	Wed 2/23/00	
159	Perform second hardware system test at DZero	8 w	Thu 2/24/00	Tue 4/18/00	
160	Install full system	6 w	Thu 4/20/00	Thu 6/1/00	
161	Implement subdetector unpacking	8 w	Mon 10/4/99	Tue 11/30/99	
162	Develop first downloadable executable	6 w	Wed 6/2/99	Wed 7/14/99	
163	Develop first cosmic ray executable	12 w	Tue 2/1/00	Fri 4/21/00	
164	Runtime executable available	4 w	Mon 6/5/00	Fri 6/30/00	
165	Online System	45.5 w	Mon 11/1/99	Sun 10/1/00	
166	Expert Mode - Integrated DAQ	0 w	Mon 11/1/99	Mon 11/1/99	
167	User Mode - Integrated DAQ	0 w	Wed 3/1/00	Wed 3/1/00	
168	Steady DAQ Running	0 w	Fri 3/31/00	Fri 3/31/00	
169	Full DAQ Rate Achieved	0 w	Wed 5/31/00	Wed 5/31/00	
170	Commissioning Activities (controls, evt monitoring, calibration, DAQ path)	26 w	Mon 4/3/00	Sun 10/1/00	
171					
172	Cosmic Ray Commissioning - Phase I	36 w	Tue 8/24/99	Wed 5/17/00	
173	3-crate WAMUS readout, RECO, event display, muon trigger integration	36 w	Tue 8/24/99	Wed 5/17/00	98SS
174	Goal 1: silicon front-end installed/commissioned	0 w	Wed 2/2/00	Wed 2/2/00	
175	Goal 2: integrated DAQ/online system running in user mode	0 w	Wed 3/1/00	Wed 3/1/00	
176	Goal 3: multi-crate system integration using central muon PDTs	0 w	Wed 3/15/00	Wed 3/15/00	

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177	<i>Goal 4: multi-crate readout of full central muon system</i>	0 w	Sat 4/15/00	Sat 4/15/00	
178	Cosmic Ray Commissioning - Phase II	17 w	Thu 5/18/00	Fri 9/15/00	
179	FT, preshowers, VLPCs, CFT front-end being hooked up/commissioned	17 w	Thu 5/18/00	Fri 9/15/00	34SS,53SS,19
180	<i>Goal 5: half of CFT, CPS hooked up, checked out</i>	0 w	Sat 7/15/00	Sat 7/15/00	
181	<i>Goal 6: forward muon A&B layer MDTs/pixels installed/commissione</i>	0 w	Tue 8/15/00	Tue 8/15/00	
182	<i>Goal 7: begin integrating Central Muon, CFT, CPS</i>	0 w	Fri 9/1/00	Fri 9/1/00	
183	Cosmic Ray Commissioning - Phase III	14.2 w	Wed 9/20/00	Wed 1/3/01	
184	Add TRIG, CAL, SMT - all systems being commissioned	14 w	Thu 9/21/00	Wed 1/3/01	76SS,7SS
185	<i>Goal 8: being integrating CC into commissioning stream</i>	0 w	Wed 9/20/00	Wed 9/20/00	
186	<i>Goal 9: forward muon C layer MDTs/pixels installed/commissioned</i>	0 w	Sun 10/1/00	Sun 10/1/00	
187	<i>Goal 10: begin integration of SMT, CC, CFT, CPS, FPS, Central Muon</i>	0 w	Wed 11/1/00	Wed 11/1/00	
188	<i>Goal 11: steady-state cosmic ray commissioning</i>	0 w	Fri 12/15/00	Fri 12/15/00	