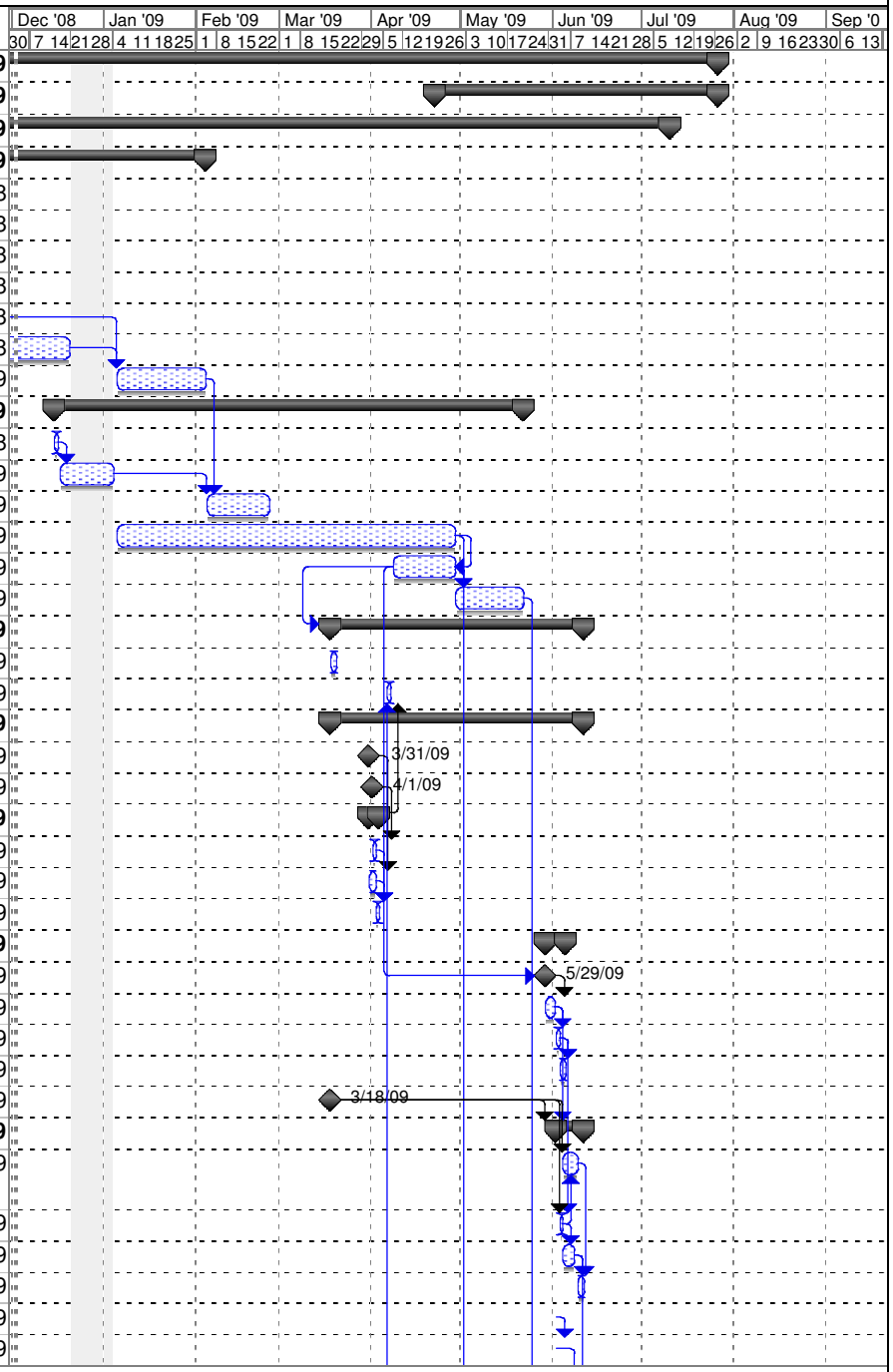
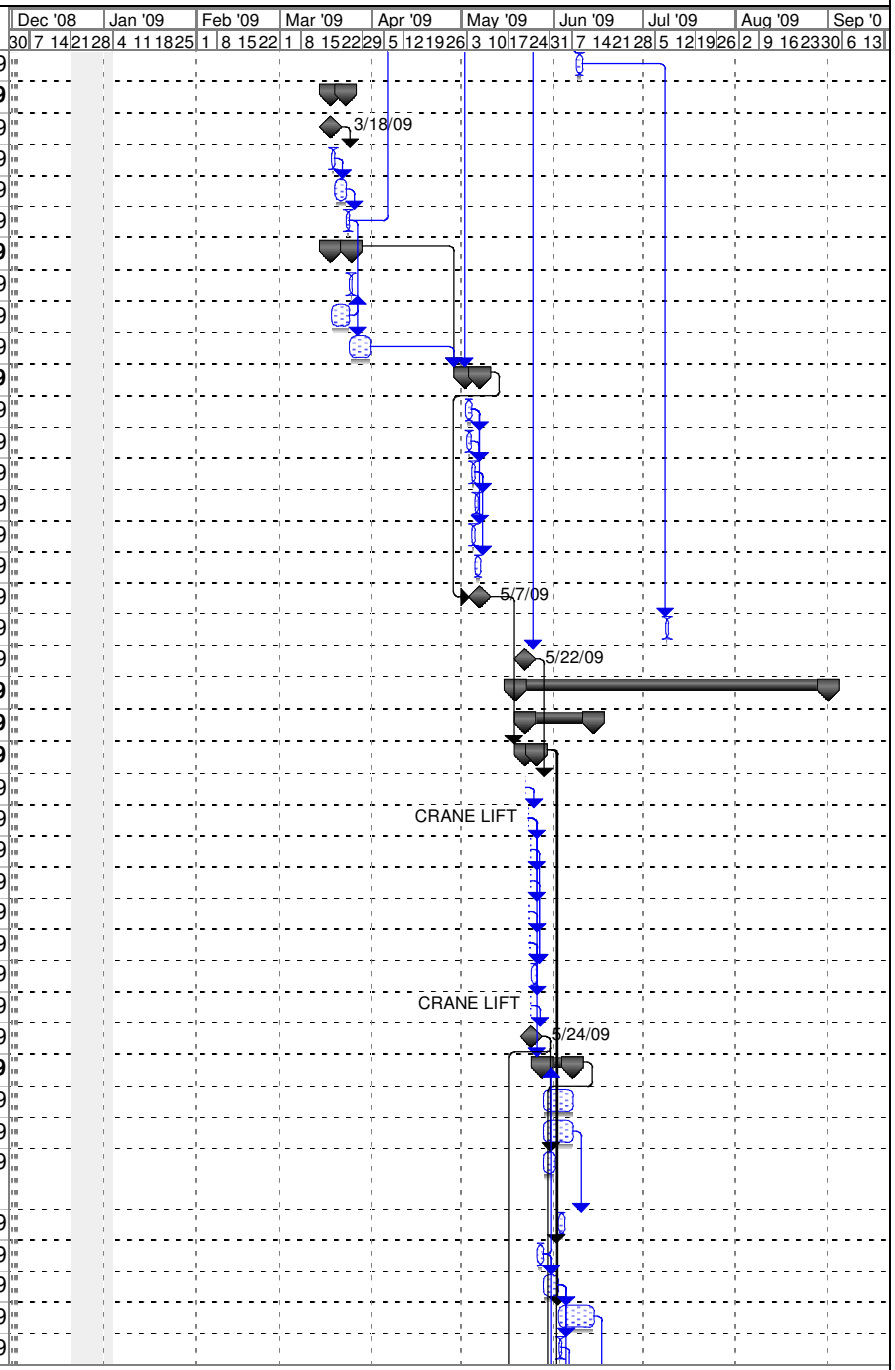
AMS CERN Flight Integration Schedule 12/2/08

ID	Task Name	Duration	Start	Finish
1	**Plan 1A**	**469 days**	**4/14/08**	**7/26/09**
2	**ADP**	**95.25 days**	**4/22/09**	**7/26/09**
11	**Upper Experiment Off Line work**	**409.88 days**	**5/27/08**	**7/10/09**
47	**CGSE Setup at CERN**	**296 days**	**4/14/08**	**2/4/09**
54	Transfer Lines	129 days	4/21/08	10/20/08
56	Set up Outside Equipment	2 ewks	10/6/08	10/20/08
57	Set up inside equipment	2 ewks	10/20/08	11/3/08
58	Set up L-He Valve Box	1 ewk	11/3/08	11/10/08
59	Testing of L-He Valve Box in system	1 ewk	11/10/08	11/17/08
60	Subsystem Testing (leak and control tests)	1.5 emons	11/5/08	12/20/08
61	System testing (Cooldown with Simulator)	1 emon	1/5/09	2/4/09
62	**Magnet work at CERN**	**158.25 days**	**12/15/08**	**5/22/09**
64	Flight Cryomagnet Shipping to CERN	2 days	12/15/08	12/16/08
66	Vacuum Pumping in B867	18 edays	12/17/08	1/4/09
67	Cool Down	3 ewks	2/4/09	2/25/09
69	MAGNET A'ssy & TESTING (B867 WORK)	114.25 days	1/5/09	4/29/09
70	MAGNET WARMUP	3 ewks	4/8/09	4/29/09
71	MAGNET WELDING & TESTING (B185 WORK)	23 days	4/29/09	5/22/09
72	**Pre Testing Flight Integration**	**85.38 days**	**3/18/09**	**6/11/09**
73	Install Inner Crate MLI (last chance)	2 days	3/18/09	3/20/09
75	Jig Installation (no other work)	2 days	4/6/09	4/7/09
78	**Magnet Electronics / Hardware / Cables**	**85.38 days**	**3/18/09**	**6/11/09**
79	FM BSE at CERN	0 days	3/31/09	3/31/09
81	CCEB AT CERN	0 days	4/1/09	4/1/09
82	**INSTALL CCEB, BSE Cables**	**4 days**	**3/31/09**	**4/3/09**
83	Install flight CCEB	1 day	4/1/09	4/2/09
84	Install FM BSE	3 days	3/31/09	4/2/09
85	Test BSE, CCEB	2 days	4/2/09	4/3/09
86	**INSTALL FLT CAB**	**6.63 days**	**5/29/09**	**6/5/09**
88	Flight Cab delivered after Mods	0 days	5/29/09	5/29/09
90	Install CAB Heaters / CAB AGHP	3 edays	5/29/09	6/1/09
92	Install Flight CAB / cable	1.5 days	6/2/09	6/3/09
93	Test CAB	4 days	6/3/09	6/5/09
96	FM UPS at CERN	0 days	3/18/09	3/18/09
98	**INSTALL CDD, UPS, Discharge Cables**	**9.63 days**	**6/2/09**	**6/11/09**
99	Install CDD (flight)/ Manufacture Discharge Cables	3 days	6/4/09	6/9/09
100	Install Flight UPS	1 day	6/3/09	6/4/09
101	Install UPS Cables	2 days	6/4/09	6/8/09
102	Test CDD/UPS	4 days	6/9/09	6/11/09
103	Rework IPA	0.25 days	6/2/09	6/2/09
104	ReMount IPA	0.25 days	6/2/09	6/2/09



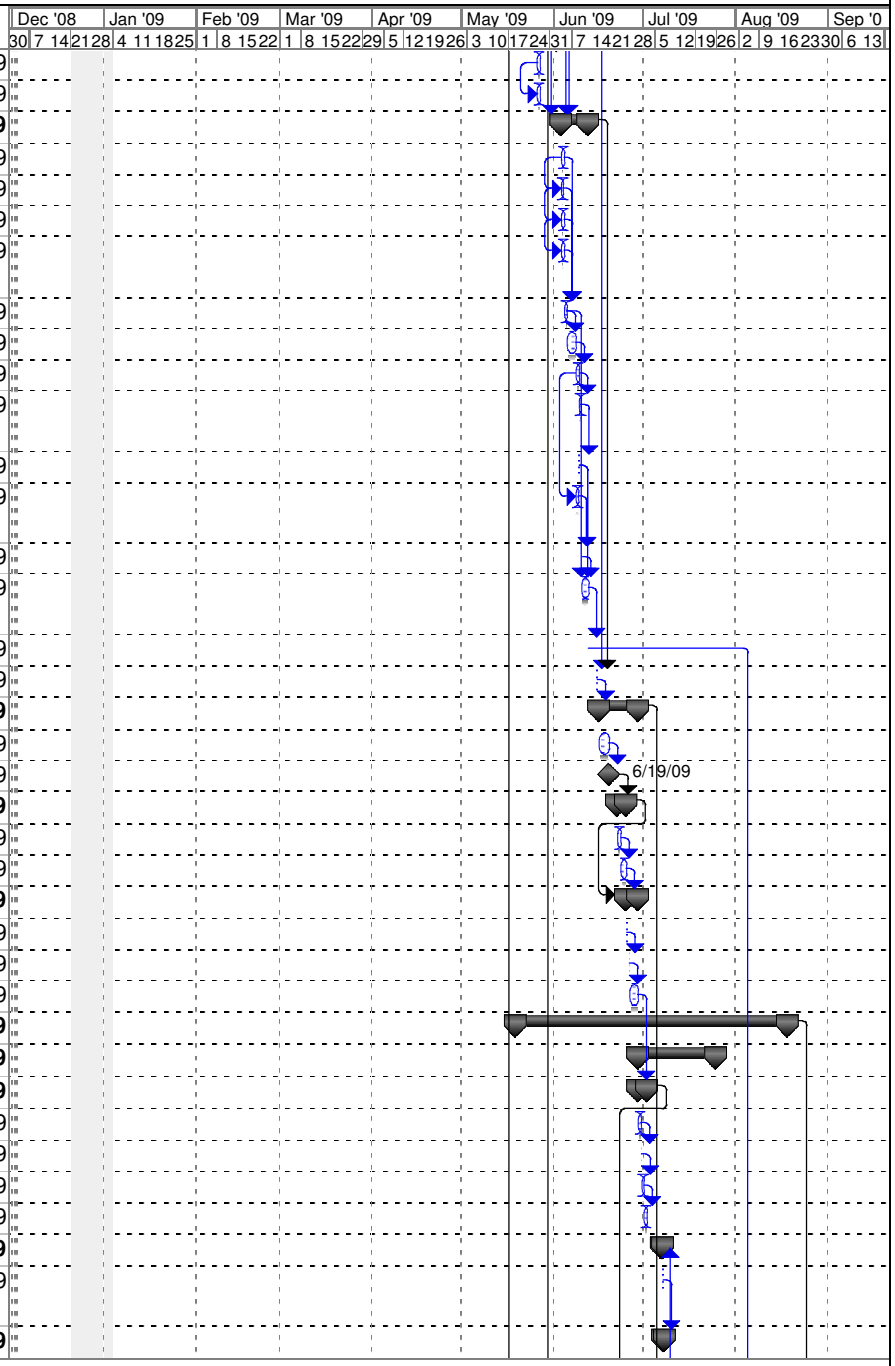
AMS CERN Flight Integration Schedule 12/2/08

ID	Task Name	Duration	Start	Finish
105	MLI Test Fit UPS/CAB	2 days	6/8/09	6/10/09
107	**INSTALL AND TEST FLIGHT PDS**	**5 days**	**3/18/09**	**3/23/09**
109	Flight PDS at CERN	0 days	3/18/09	3/18/09
110	Install Flight PDS	1 day	3/18/09	3/19/09
111	Test PDS	2 days	3/19/09	3/23/09
113	Install PDS MLI	1 day	3/23/09	3/24/09
116	**Install Crate MLI**	**7 days**	**3/18/09**	**3/25/09**
117	CCEB MLI Installation	1 day	3/24/09	3/25/09
121	External Crate MLI	4 days	3/18/09	3/24/09
124	Cable / Test Experiment I.F. HW	5 days	3/24/09	3/31/09
126	**Prep USS for Flight in PSS**	**5.25 days**	**5/2/09**	**5/7/09**
127	Clean and Prep PSS for Cleanroom	2 days	5/2/09	5/4/09
128	Install ISFs	0.5 days	5/2/09	5/4/09
129	Transfer USS to PSS and remove STA VC	2 days	5/4/09	5/5/09
130	Clean and prep USS for Flight Cryomagnet	2 days	5/5/09	5/6/09
131	Clean VC Shipping Fixture	1 day	5/4/09	5/5/09
132	Store STA VC for Spare Flight use (B887)	2 days	5/5/09	5/7/09
133	Pre Experiment Preparations Complete	0 days	5/7/09	5/7/09
135	Install UPS MLI	1 day	7/8/09	7/9/09
139	Magnet Arrives at Cleanroom	0 days	5/22/09	5/22/09
140	**AMS-02 Integration**	**105.5 days**	**5/19/09**	**9/1/09**
141	**Magnet Integration**	**22.75 days**	**5/22/09**	**6/14/09**
144	**Magnet Installed in USS, moved to RAS**	**3.75 days**	**5/22/09**	**5/26/09**
145	Remove legs from Magnet	0.25 days	5/22/09	5/22/09
146	Mechanically Install Cryomagnet in USS/PSS	1 day	5/23/09	5/23/09
148	Install VC MLI	0.5 days	5/24/09	5/24/09
150	Remove ISF's	0.5 days	5/24/09	5/24/09
151	Adjust Crate Jig Wake	0.25 days	5/23/09	5/23/09
152	Adjust Crate Jig Ram	0.25 days	5/23/09	5/23/09
153	Install Inter Radiator Cabling	1 day	5/24/09	5/26/09
154	Upper USS +Cryomagnet placed into RAS	1 day	5/24/09	5/24/09
155	Magnet in RAS	0 days	5/24/09	5/24/09
156	**Cryomagnet Hardware Integration**	**10 days**	**5/28/09**	**6/7/09**
157	SM Hardware / Magnet Cabling	10 days	5/28/09	6/7/09
158	M L I fit check (USR/LSR)	10 days	5/28/09	6/7/09
161	Cryomagnet Current Lead / Routing / VSB Bracket/VC Grounds	2 days	5/28/09	6/1/09
162	Attach up Vacuum Pumping Hardware	2.4 days	6/2/09	6/4/09
163	Tracker Feet Photogrammetry Measurement	2 days	5/26/09	5/28/09
164	shear pin transfer, feet shimming and remachining	3 days	5/28/09	6/2/09
165	Final Leak Test - PUMP DOWN	12 days	6/2/09	6/14/09
166	Tracker Photogrammetry Measurement VACUUM	1 day	6/2/09	6/3/09



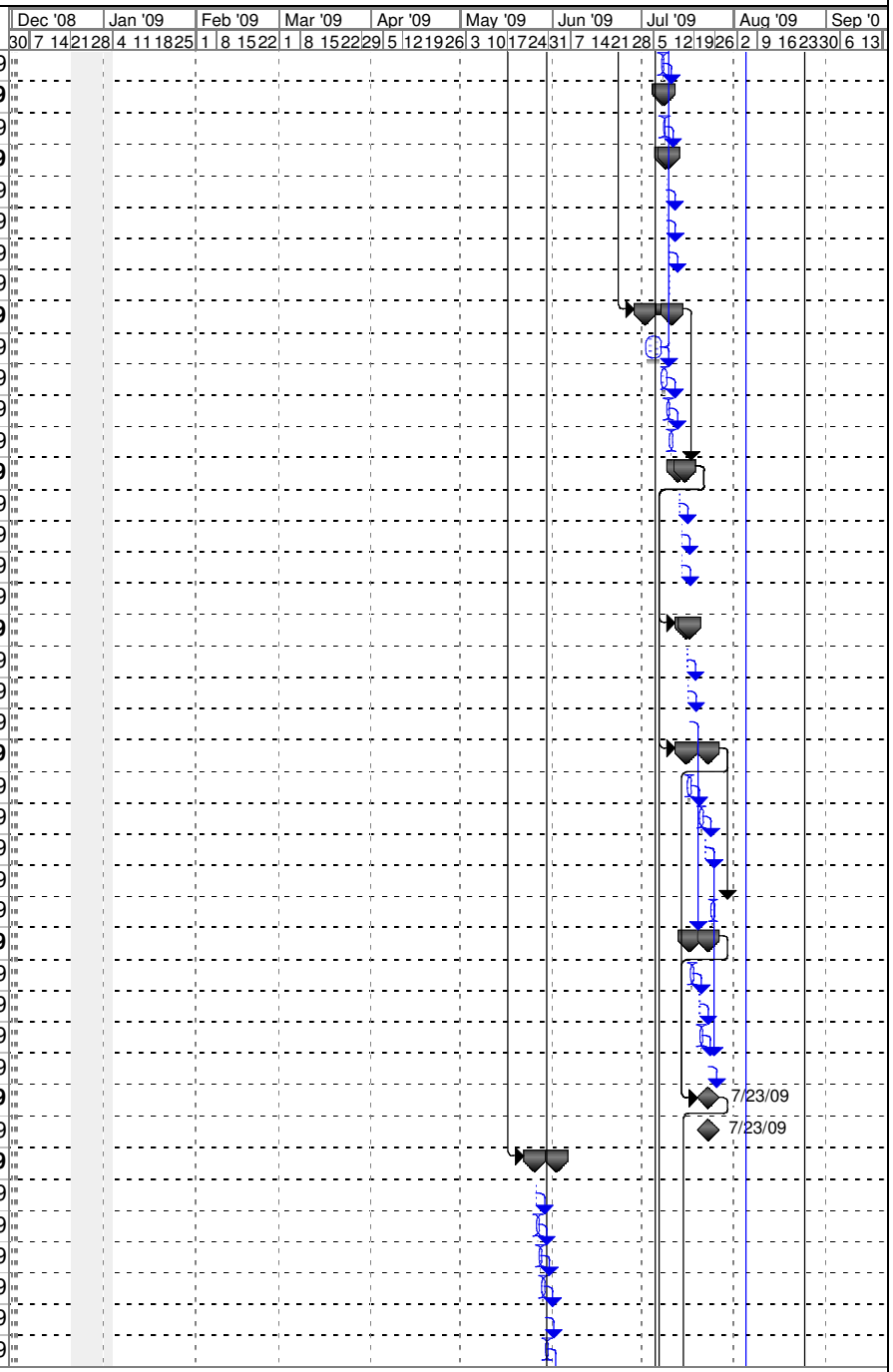
AMS CERN Flight Integration Schedule 12/2/08

ID	Task Name	Duration	Start	Finish
167	Prepare ACC hardware for installation	1 day	5/26/09	5/27/09
168	set-up ACC-Electronic Ground Support Equipment	1 day	5/26/09	5/27/09
170	**ACC On Line Ops**	**9.25 days**	**6/3/09**	**6/12/09**
171	mount connector support	1 day	6/3/09	6/4/09
172	mount temporary Z- clamps	1 day	6/3/09	6/4/09
173	mount PMT-boxes and optical fibers	1 day	6/3/09	6/4/09
174	glue patch panels and fiber fixations to lower and upper VC	1 day	6/3/09	6/4/09
175	place 16 scintillator panels in inner bore	1 day	6/4/09	6/5/09
176	Route TAS fibers along ACC panels	1 day	6/5/09	6/8/09
177	connect fibers to patch panel on lower VC	1 day	6/8/09	6/9/09
178	Install Carbon composite support cylinder and replace temporary Z- clamps with flight ones	1 day	6/9/09	6/10/09
179	mount Z+ clamps	1 day	6/9/09	6/9/09
180	Connect optical fibers with WLS fibers from ACC panel and mounting to VC	1 day	6/8/09	6/9/09
181	Light tightness gluing of PMT boxes	1 day	6/10/09	6/10/09
182	Individual counter tests with ACC-EGSE per ACC provided test procedure	5 days	6/10/09	6/12/09
183	Temporary HV- and Signal cable fixation	1 day	6/12/09	6/12/09
185	Repress W/ N2	1 day	6/15/09	6/15/09
186	**Inner Tracker System Installation**	**13.33 days**	**6/16/09**	**6/29/09**
187	CABLE BRACKETRY INSTALLATION ONTO VC	4 days	6/16/09	6/19/09
188	No more pipe welding allowed near tracker	0 hrs	6/19/09	6/19/09
189	**INNER TRACKER INSERTION**	**3.33 days**	**6/22/09**	**6/25/09**
190	mounting the feet covers	1.67 days	6/22/09	6/23/09
191	lower inner evaporator installation	1.66 days	6/23/09	6/25/09
192	**INNER TRACKER CABLE UNFOLDING**	**4 days**	**6/25/09**	**6/29/09**
193	Cables stored at VC edge	0.67 days	6/25/09	6/25/09
194	temporary connection of the B field sensors	0.67 days	6/26/09	6/26/09
195	installation of protections	0.66 days	6/26/09	6/29/09
197	**Experiment Integration**	**92 days**	**5/19/09**	**8/18/09**
199	**Tracker Planes 1&5 Integration**	**26.67 days**	**6/29/09**	**7/25/09**
200	**MOUNT P1**	**3 days**	**6/29/09**	**7/2/09**
201	Includes light tightness inst.	1 day	6/29/09	6/30/09
202	Connection outer to inner evaporators	0.5 days	6/30/09	6/30/09
203	Leak test of top evaporator	0.5 days	6/30/09	7/1/09
204	Pressure test	1 day	7/1/09	7/2/09
205	**STAR TRACKER**	**0.67 days**	**7/7/09**	**7/7/09**
206	Install Star Trk. top support and connect thermal link to cooling loop	1 day	7/7/09	7/7/09
207	**QVIT**	**0.45 days**	**7/7/09**	**7/8/09**



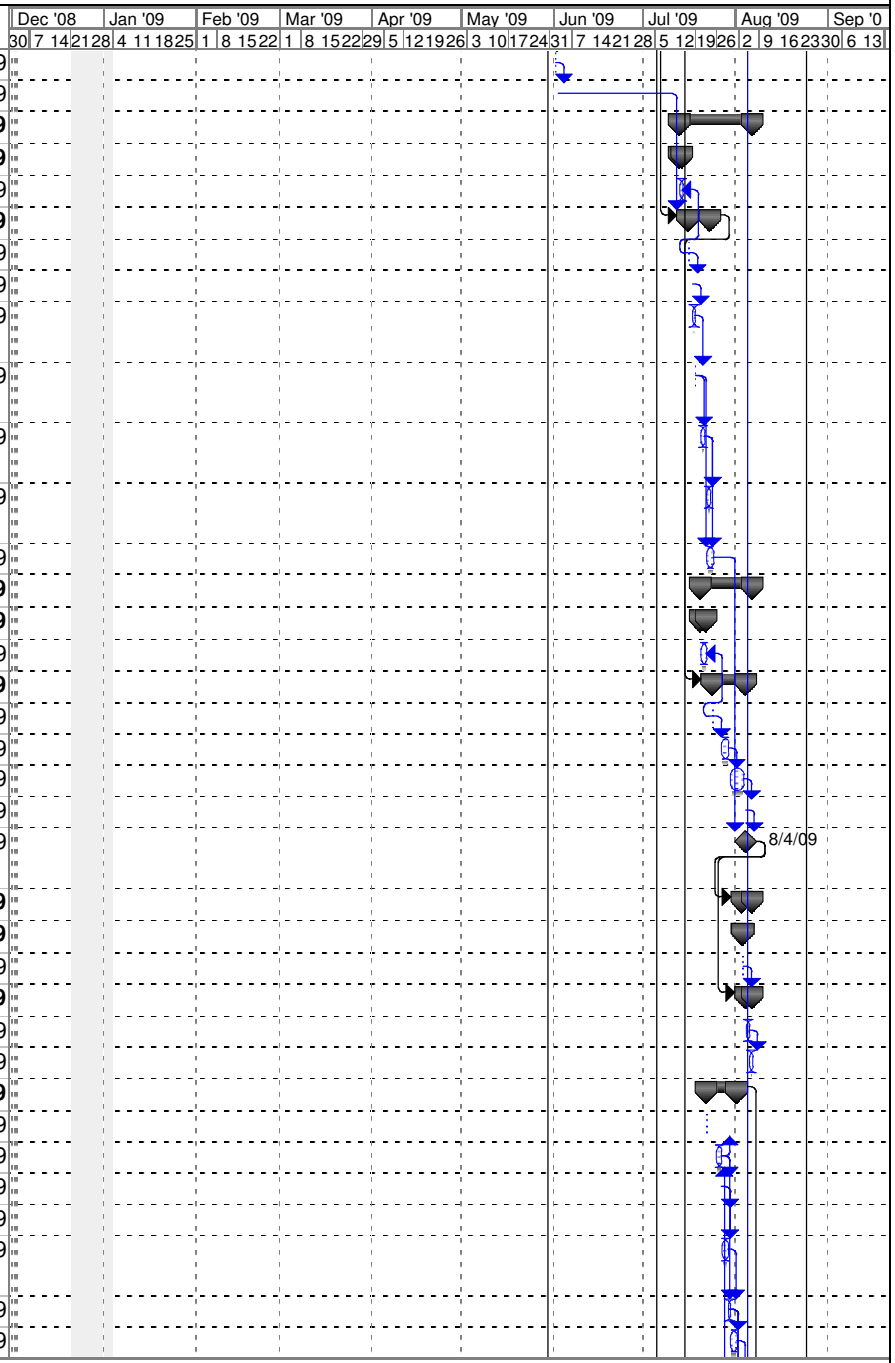
AMS CERN Flight Integration Schedule 12/2/08

ID	Task Name	Duration	Start	Finish
208	Quick Interface Verification Test	1 day	7/7/09	7/8/09
209	**STAR TRACKER METROLOGY**	**0.55 days**	**7/8/09**	**7/8/09**
210	Star tracker calibration	1 day	7/8/09	7/8/09
211	**UPPER TAS INSTALLATION**	**1.38 days**	**7/9/09**	**7/10/09**
212	Route, clean, connect fibers from P5 to LCF	0.5 days	7/9/09	7/9/09
213	glue fiber fixations to P5	0.5 days	7/9/09	7/9/09
214	connect fibers to LFCR'S	2 hrs	7/10/09	7/10/09
215	connect LFCR electrical cables	1 hr	7/10/09	7/10/09
216	**CABLE (AND TEST) TOP HALF TRACKER**	**9 days**	**7/2/09**	**7/11/09**
217	Fasten bundles, connect to crate	2 days	7/2/09	7/7/09
218	Mount balcony and attach cables	2 days	7/7/09	7/9/09
219	Fold and store extra length	1 day	7/9/09	7/10/09
220	Tests	1 day	7/10/09	7/11/09
221	**MOUNT P5**	**3 days**	**7/13/09**	**7/15/09**
222	Includes light tightness inst.	1 day	7/13/09	7/13/09
223	Connection outer to inner evaporators	0.5 days	7/14/09	7/14/09
224	Leak test of top evaporator	0.5 days	7/14/09	7/14/09
225	Pressure test	1 day	7/15/09	7/15/09
226	**LOWER TAS INSTALLATION**	**1.13 days**	**7/16/09**	**7/17/09**
227	Route, clean, connect fibers from P5 to LCF	0.5 days	7/16/09	7/16/09
228	glue fiber fixations to P5	0.5 days	7/16/09	7/16/09
229	connect LFCR electrical cables	1 hr	7/17/09	7/17/09
230	**CABLE (AND TEST) BOTTOM HALF TRACKER**	**8 days**	**7/16/09**	**7/23/09**
231	Fasten bundles, connect to crate	2 days	7/16/09	7/17/09
232	Mount balcony and attach cables	2 days	7/20/09	7/21/09
233	Fold and store extra length	1 day	7/22/09	7/22/09
234	Tests	1 day	7/23/09	7/23/09
235	Contingency	2 days	7/24/09	7/25/09
236	**BOTTOM CABLES FASTENING**	**6.88 days**	**7/17/09**	**7/23/09**
237	TAS system test	2 days	7/17/09	7/18/09
238	replace LBBX screws with flight screws/glue	1 day	7/20/09	7/20/09
239	glue LBBX protection bridges on P1,P5	1 day	7/20/09	7/21/09
242	Install Lower CF MLI, Tracker P5 Blanket	1 day	7/23/09	7/23/09
245	**Tracker Done Cryomagnet Vertical**	**0 days**	**7/23/09**	**7/23/09**
246	Tracker Done Cryomagnet Vertical	0 days	7/23/09	7/23/09
249	**Install TTCBs and weld TTCS tubing**	**8 days**	**5/26/09**	**6/2/09**
250	Install Primary box	1 day	5/26/09	5/26/09
251	Install Secondary box	1 day	5/26/09	5/27/09
252	Welding of the Primary box connections	1 day	5/27/09	5/28/09
253	Welding of the Secondary box connections	1 day	5/28/09	5/29/09
254	Proof pressure and cleaning Primary box	1 day	5/29/09	5/29/09
255	Proof pressure and cleaning Secondary box	1 day	5/29/09	5/30/09



AMS CERN Flight Integration Schedule 12/2/08

ID	Task Name	Duration	Start	Finish
256	Helium leak test Primary loop	1 day	6/1/09	6/1/09
257	Helium leak test Secondary loop	1 day	6/2/09	6/2/09
258	**Weld TTCBs to TTCS tubing**	**25 days**	**7/13/09**	**8/6/09**
259	**Off-Line Ops**	**1 day**	**7/13/09**	**7/14/09**
260	Filling system preparations	1 day	7/13/09	7/14/09
261	**On-line Ops**	**8 days**	**7/16/09**	**7/23/09**
262	Filling and Pinching Primary loop	1 day	7/16/09	7/16/09
263	Filling and Pinching Secondary loop	1 day	7/17/09	7/17/09
264	Installing cabling Primary loop (TTCE to TTCS-Pbox including cond and Tracker DS)	1 day	7/17/09	7/18/09
265	Installing cabling Secondary loop (TTCE to TTCS-Sbox including cond and Tracker DS)	1 day	7/18/09	7/18/09
266	Functional check Primary box and TTCE (only liquid flow)	2 days	7/20/09	7/21/09
267	Functional check Secondary box and TTCE (only liquid flow)	2 days	7/22/09	7/23/09
270	Install all TTCS/TTCB MLI	3 days	7/22/09	7/24/09
273	**Operational check TTCS P + S**	**18 days**	**7/20/09**	**8/6/09**
274	**Off-line Ops**	**2 days**	**7/20/09**	**7/22/09**
275	Set-up operational check	2 days	7/20/09	7/22/09
276	**On-Line Ops**	**12 days**	**7/24/09**	**8/4/09**
277	Set-up convection cooling condensers	1 day	7/24/09	7/24/09
278	Operational Check Primary loop	3 days	7/27/09	7/29/09
279	Operational Check Secondary loop	3 days	7/30/09	8/3/09
280	Check fill rate S+P loop (TBC if needed)	1 day	8/4/09	8/4/09
281	Attach "remove for flight tag" accumulator ground test heaters	0 days	8/4/09	8/4/09
282	**Post TTCB installation**	**4 days**	**8/3/09**	**8/6/09**
283	**EVAPORATORS CONNECTIONS**	**1 day**	**8/3/09**	**8/3/09**
284	Connect evaporators to TTCS and test	1 day	8/3/09	8/3/09
285	**GENERAL TRACKER TEST**	**2 days**	**8/4/09**	**8/6/09**
286	calibration	2 days	8/4/09	8/5/09
287	final test + DAQ	2 days	8/5/09	8/6/09
291	**Upper to Lower USS Integration**	**10.88 days**	**7/22/09**	**8/1/09**
292	Prepare LUSS, RICH, LTOF, ECAL for installation	0.5 days	7/22/09	7/22/09
293	Install Lower USS to Upper USS	1 day	7/25/09	7/27/09
294	Centering of LTOF under VC for clearance	0.5 days	7/27/09	7/27/09
295	Tension Lower TOF Z struts (TOF group)	0.5 days	7/27/09	7/27/09
296	Measure RICH Aerogel plane relative distance to PMT Structure using TOF fiducial marks.	2 days	7/27/09	7/29/09
297	Cabling UUSS to LUSS	1 day	7/29/09	7/30/09
298	Test LTOF, ECAL and RICH	3 days	7/30/09	8/1/09



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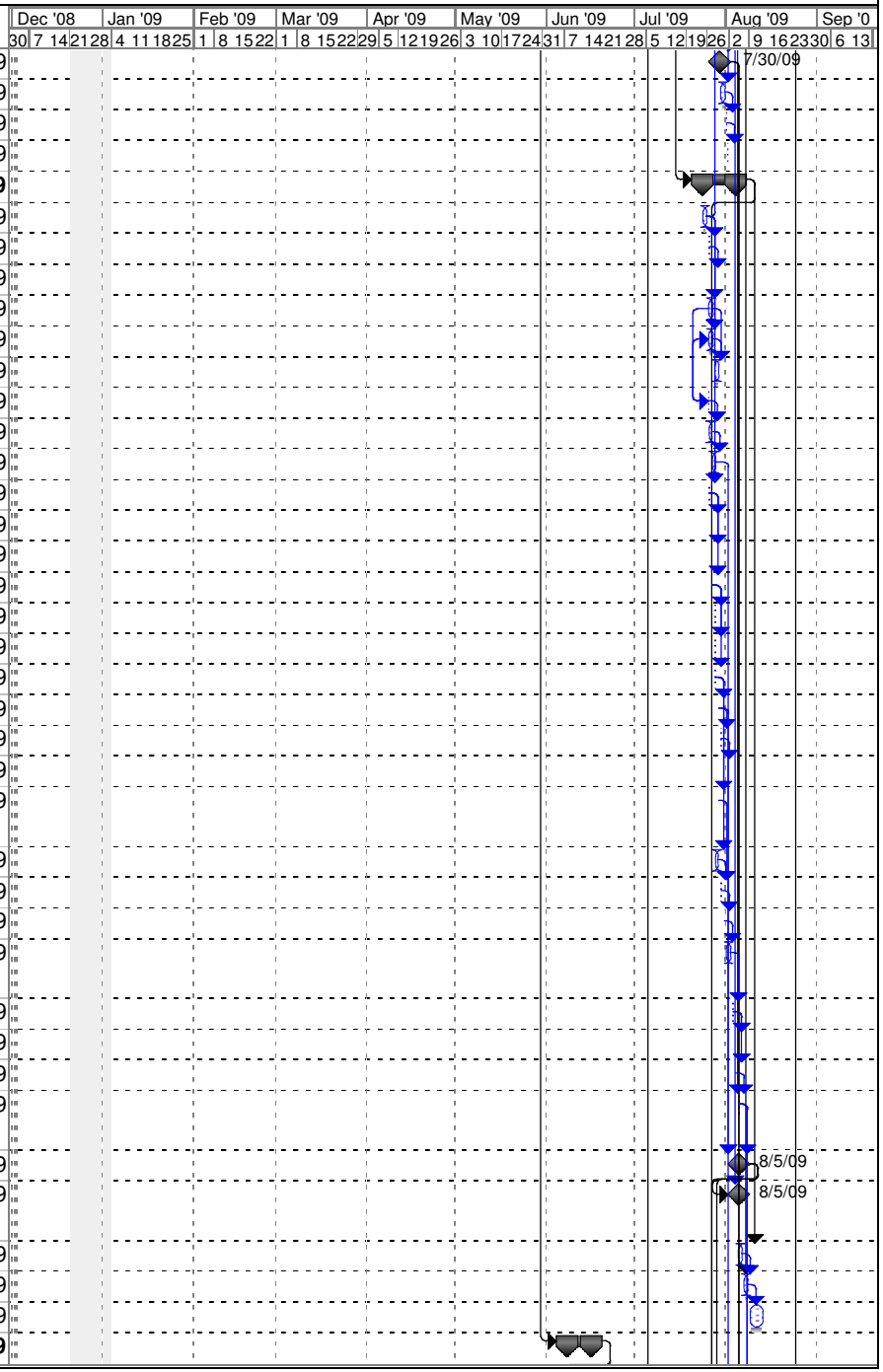
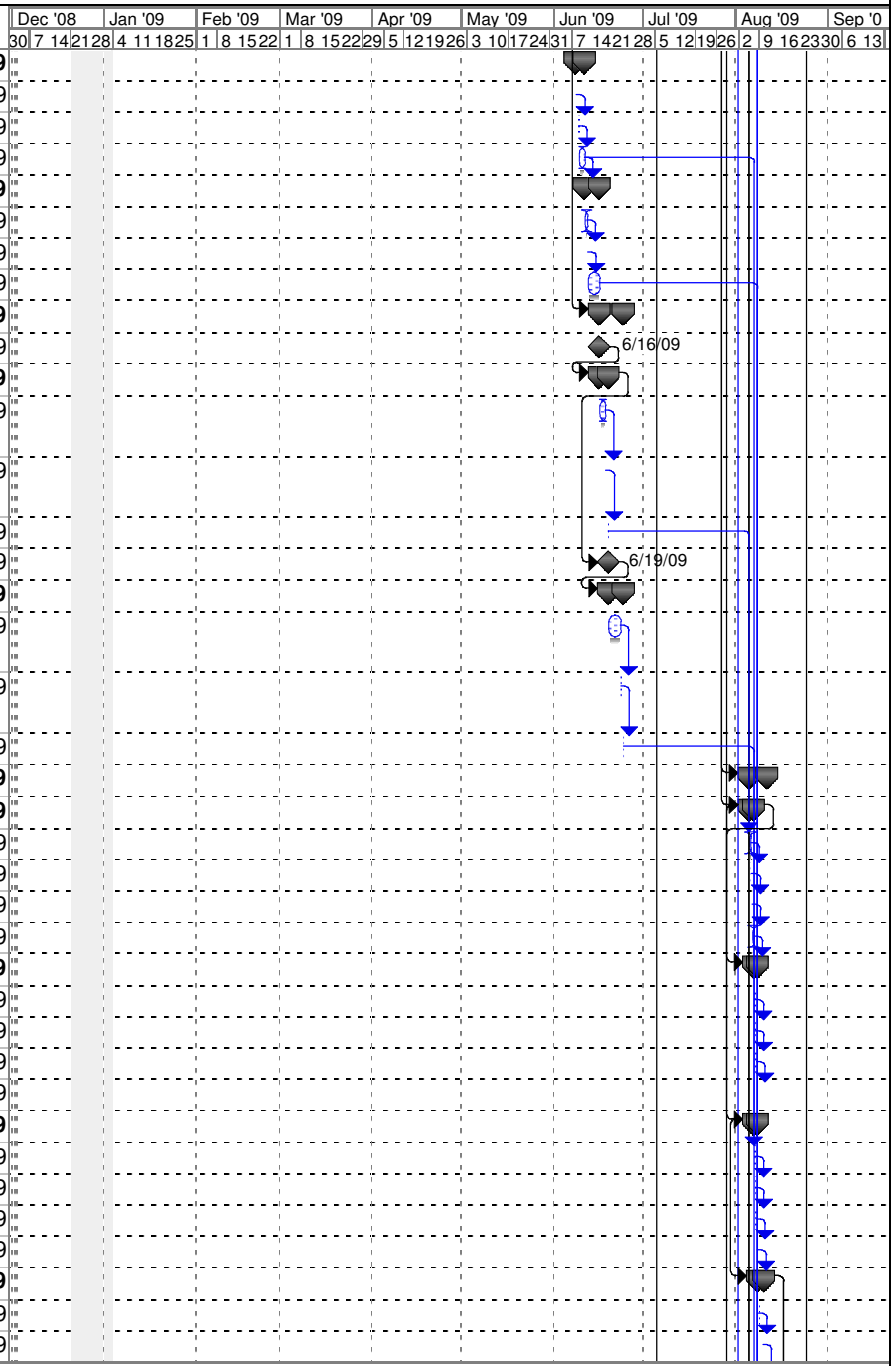
ID	Task Name	Duration	Start	Finish
299	All LUSS cabling done	0 days	7/30/09	7/30/09
301	Install MLI around RICH/LTOF Lat./ RICH MLI	2 days	7/30/09	7/31/09
303	Install MLI under ECAL	0.5 days	8/1/09	8/1/09
306	Install ECAL ZN MLI	0.5 days	8/1/09	8/1/09
310	**TRD / Upper TOF**	**12 days**	**7/24/09**	**8/4/09**
311	Mount TRD/UTOF on USS, Fix corner brackets	2 days	7/24/09	7/25/09
312	Connect TRD Gas IN-Out to GSE Gas Panel	1 day	7/26/09	7/26/09
313	TRD Gas Tightness Test / spokes/CC brackets	1 day	7/27/09	7/27/09
314	Cable TRD Signal & HV cables to U-Crates	2 days	7/26/09	7/27/09
315	Cable upper ToF	2 days	7/26/09	7/27/09
316	TRD / UTOF DAQ Read - out Test	2 days	7/28/09	7/29/09
317	Cable LFCR to Mcrate	0.5 days	7/26/09	7/26/09
318	Route Fibers from UCF to M Structure	1 day	7/26/09	7/27/09
319	Clean / Connect Fibers to LFCRs	1 day	7/27/09	7/28/09
320	Cable TRD Manifold & Temp. cables to UG-Crate	1 day	7/26/09	7/26/09
321	TRD Slow Control Read-out Test	1 day	7/27/09	7/27/09
322	Star Tracker baffle installation on M-Structure (2X)	1 day	7/27/09	7/27/09
323	TRD GAS FM Box S (Xe / CO2 FM Filling) Install	1 day	7/27/09	7/27/09
324	TRD GAS FM Box C Installation on USS	1 day	7/28/09	7/28/09
325	Connect Box S Tubing and cabling to Box C	1 day	7/28/09	7/28/09
326	Connect Box C Gas Lines to TRD	1 day	7/28/09	7/28/09
327	Cable Box C and Box S to UG Crate	1 day	7/29/09	7/29/09
328	TRD /TRD Gas System Leak Test	1 day	7/30/09	7/30/09
329	Potting of Gas Connectors	1 day	7/31/09	7/31/09
330	Remove protective covers from COPV's (Internal MLI on)	1 day	7/29/09	7/29/09
331	Mount TRD Gas External MLI	1 day	7/28/09	7/29/09
334	Install Debris Shield - PORT	1 day	7/30/09	7/30/09
335	TRD Gas Slow Control Test	1 day	7/31/09	7/31/09
336	TRD Read-out Test with circulating Gas and UTOF Trigger	2 days	8/1/09	8/2/09
338	FLT TRD MLI wrapping (lateral / top)	1 day	8/3/09	8/3/09
339	Install GPS antenna	0.5 days	8/4/09	8/4/09
342	Star Tracker MLI and VC Upper Skirt MLI	1 day	8/4/09	8/4/09
346	Final HV- und Signal cable connection to S-Crate/SHV	1 day	8/5/09	8/5/09
347	TRD/ToF/ACC/Laser Integration completed	0 days	8/5/09	8/5/09
348	combined TRD/ UToF/ LToF test, Test ACC with AMS readout	0 days	8/5/09	8/5/09
351	VC Upper Support Ring MLI	2 days	8/5/09	8/6/09
356	VC Lower Support Ring MLI (+ PVVV?)	2 days	8/7/09	8/8/09
367	Install USS VC Joint MLI + various MLI	5 days	8/9/09	8/13/09
370	**TRACKER FM Condensers and Frames On Line**	**8.5 days**	**6/8/09**	**6/16/09**



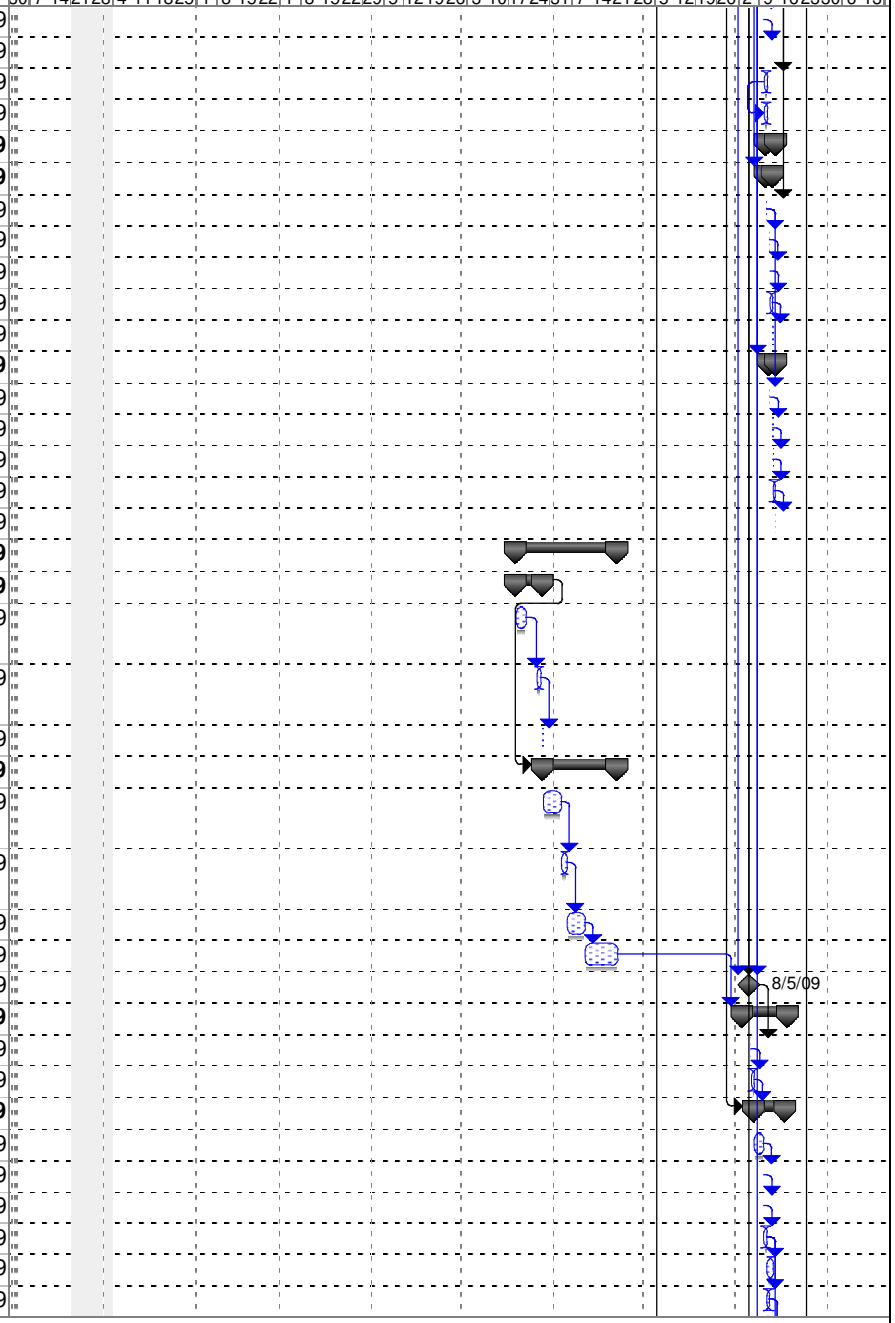
AMS CERN Flight Integration Schedule 12/2/08

ID	Task Name	Duration	Start	Finish
371	**On-line (Tracker RAM)**	**3.25 days**	**6/8/09**	**6/11/09**
372	mount the frame with rods	1 day	6/8/09	6/8/09
373	mount the condensers	2 hrs	6/9/09	6/9/09
374	rout the condenser pipes	2 days	6/9/09	6/11/09
375	**On-line (Tracker WAKE)**	**5.25 days**	**6/11/09**	**6/16/09**
376	mount the frame with rods	1 day	6/11/09	6/12/09
377	mount the condensers	2 hrs	6/12/09	6/12/09
378	rout the condenser pipes	2 days	6/12/09	6/16/09
379	**ZENITH FM RADIATOR Offline**	**8 days**	**6/16/09**	**6/24/09**
381	1&2 of 4 zenith FM radiators	0 days	6/16/09	6/16/09
382	**Off line 1**	**3 days**	**6/16/09**	**6/19/09**
383	Heaters and thermostats on the RADs internal surface	2 days	6/16/09	6/18/09
384	fix MGSE flanges on the radiator external surface	4 hrs	6/18/09	6/18/09
385	Visual inspection & storage	0.5 days	6/19/09	6/19/09
387	3&4 of 4 zenith FM radiators	0 days	6/19/09	6/19/09
388	**Off line 2**	**5 days**	**6/19/09**	**6/24/09**
389	Heaters and thermostats on the RADs internal surface	2 days	6/19/09	6/23/09
390	fix MGSE flanges on the radiator external surface	4 hrs	6/23/09	6/23/09
391	Visual inspection & storage	0.5 days	6/24/09	6/24/09
392	**INTEGRATION OF ZENITH FM RADIATOR**	**6 days**	**8/5/09**	**8/11/09**
393	**panel 1**	**1 day**	**8/5/09**	**8/7/09**
394	mount panel to the top of the Upper TRD	1 day	8/5/09	8/6/09
395	fix LHP to the Cryocooler	5 hrs	8/6/09	8/6/09
396	remove tubes protection (TBC)	3 hrs	8/6/09	8/6/09
397	BONDING &CABLING?	5 hrs	8/6/09	8/7/09
398	**panel 2**	**1.5 days**	**8/7/09**	**8/8/09**
399	mount panel to the top of the Upper TRD	1 day	8/7/09	8/7/09
400	fix LHP to the Cryocooler	5 hrs	8/7/09	8/7/09
401	remove tubes protection (TBC)	3 hrs	8/7/09	8/8/09
402	BONDING &CABLING?	5 hrs	8/8/09	8/8/09
403	**panel 3**	**1.5 days**	**8/7/09**	**8/8/09**
404	mount panel to the top of the Upper TRD	1 day	8/7/09	8/7/09
405	fix LHP to the Cryocooler	5 hrs	8/7/09	8/7/09
406	remove tubes protection (TBC)	3 hrs	8/7/09	8/8/09
407	BONDING &CABLING?	5 hrs	8/8/09	8/8/09
408	**panel 4**	**2.5 days**	**8/8/09**	**8/10/09**
409	mount panel to the top of the Upper TRD	1 day	8/8/09	8/8/09
410	fix LHP to the Cryocooler	5 hrs	8/10/09	8/10/09



AMS CERN Flight Integration Schedule 12/2/08

ID	Task Name	Duration	Start	Finish
411	remove tubes protection (TBC)	3 hrs	8/10/09	8/10/09
412	BONDING &CABLING?	5 hrs	8/10/09	8/10/09
414	Cryocooler MLI	2 days	8/10/09	8/11/09
417	Cryocooler LHP MLI	2 days	8/10/09	8/11/09
420	**TRACKER FM RADIATORS**	**3.88 days**	**8/11/09**	**8/14/09**
421	**On-line (Tracker RAM)**	**2.88 days**	**8/11/09**	**8/13/09**
422	mount the radiator panel	1 day	8/11/09	8/11/09
423	remove the frame	5 hrs	8/12/09	8/12/09
424	fix the tracker radiator to the main radiator	2 hrs	8/12/09	8/12/09
427	Ram Tracker Rad. Rod MLI	0.5 days	8/12/09	8/13/09
429	Ram Tracker Rad. Flt. BONDING &CABLING &	0.5 days	8/13/09	8/13/09
433	**On-line (Tracker WAKE)**	**2.88 days**	**8/12/09**	**8/14/09**
434	mount the radiator panel	1 day	8/12/09	8/12/09
435	remove the frame	5 hrs	8/13/09	8/13/09
436	fix the tracker radiator to the main radiator	2 hrs	8/13/09	8/13/09
437	Wake Tracker Rad. Rod MLI	0.5 days	8/13/09	8/14/09
439	Wake Tracker Rad. Flt. BONDING &CABLING	0.5 days	8/14/09	8/14/09
441	**Offline Main Radiator**	**34.5 days**	**5/19/09**	**6/22/09**
443	**Off line**	**9.5 days**	**5/19/09**	**5/28/09**
444	Heaters and thermostats on the RADs internal surface	4 days	5/19/09	5/22/09
445	fix MGSE flanges on the radiator external surface	2 days	5/26/09	5/27/09
446	Visual inspection & storage	0.5 days	5/28/09	5/28/09
448	**Off line**	**25 days**	**5/28/09**	**6/22/09**
449	Heaters and thermostats on the RADs internal surface	4 days	5/28/09	6/3/09
450	fix MGSE flanges on the radiator external surface	2 days	6/3/09	6/5/09
452	Bond CAB LHP to the Radiator surface	4 days	6/5/09	6/11/09
453	Visual inspection & storage / curing	7 days	6/11/09	6/22/09
454	All cabling done on Wake Jig	0 days	8/5/09	8/5/09
455	**INTEGRATION OF MAIN RADIATORS**	**16 days**	**8/3/09**	**8/18/09**
456	Remove Diagonal Wake Strut	0.25 days	8/6/09	8/6/09
457	Remove Wake Jig	1 day	8/6/09	8/7/09
458	**INTEGRATION OF WAKE FM RADIATOR**	**10.75 days**	**8/7/09**	**8/17/09**
459	Remove the CAB/IPA/UPS/Cables	1 day	8/7/09	8/10/09
460	move the radiator panel under AMS	3 hrs	8/10/09	8/10/09
461	connect heaters	1 hr	8/10/09	8/10/09
462	lift and rotate the radiator in position	1 day	8/10/09	8/11/09
463	Torque All Bolts	2 days	8/11/09	8/13/09
464	fix bonding straps to the radiator	3 hrs	8/11/09	8/12/09



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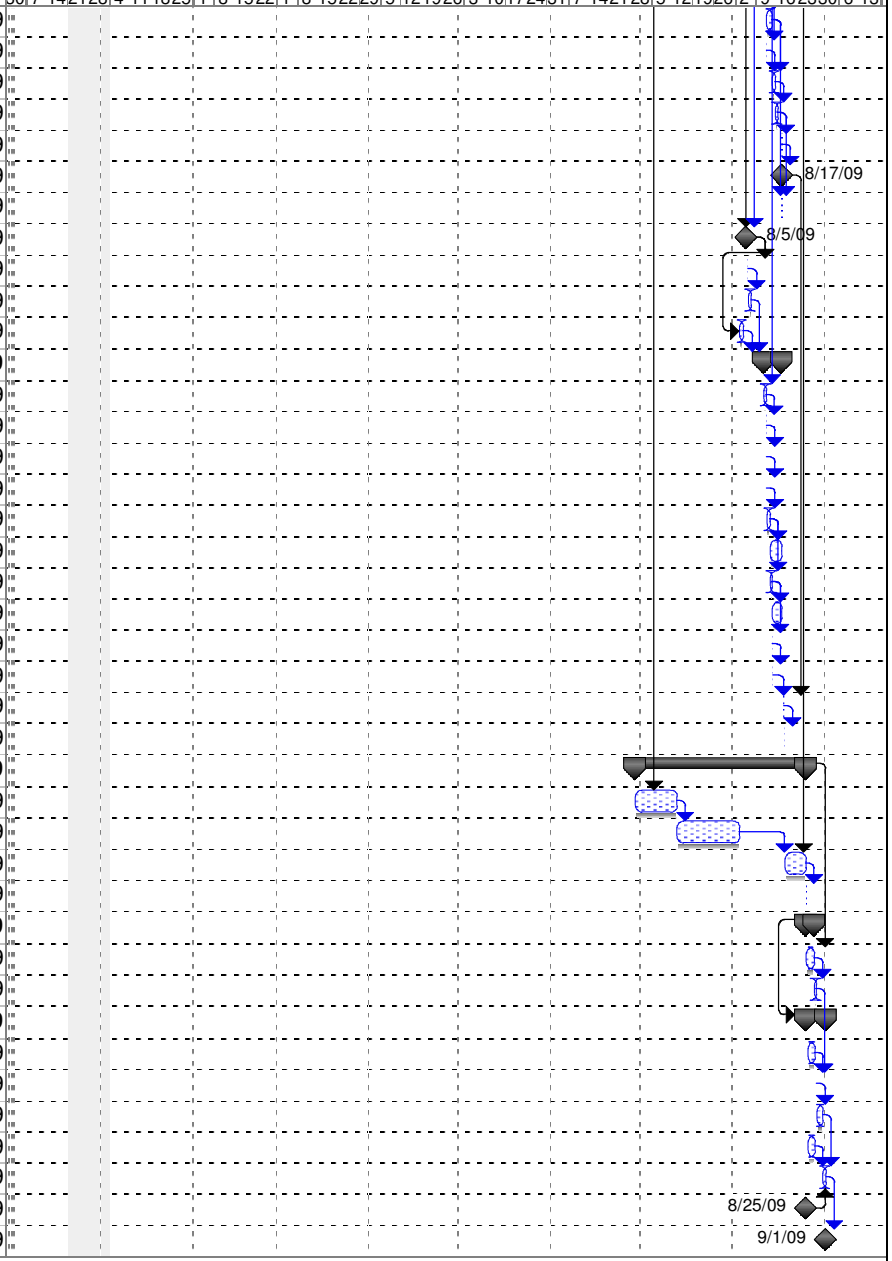
ID	Task Name	Duration	Start	Finish
465	Fix Crate Grounds	2 days	8/12/09	8/14/09
466	fix heater cables	5 hrs	8/12/09	8/12/09
467	Install Flight CAB/UPS/Cables	1.25 days	8/14/09	8/15/09
468	fix CAB LHP to the CAB	0.75 days	8/15/09	8/16/09
469	Mount IPA, install cables/blanks	1 day	8/17/09	8/17/09
470	remove soft protection from the USS (TBD)	0 days	8/17/09	8/17/09
472	Install CAB LHP MLI	1 day	8/17/09	8/17/09
476	All cabling done on Ram Jig	0 days	8/5/09	8/5/09
477	Remove Diagonal Ram Strut	0.25 days	8/6/09	8/6/09
478	Remove RAM Jig	1 day	8/6/09	8/7/09
479	Install OBVP / Cable and Plumb	2 days	8/3/09	8/4/09
480	**INTEGRATION OF RAM FM RADIATOR**	**6 days**	**8/11/09**	**8/17/09**
481	move radiator panel under AMS (raise RAS)	5 hrs	8/11/09	8/12/09
482	pass the crane cables within the USS	1 hr	8/12/09	8/12/09
483	link the crane hooks to the flanges	1 hr	8/12/09	8/12/09
484	connect heaters	1 hr	8/12/09	8/12/09
485	lift and rotate the radiator in position	1 day	8/12/09	8/13/09
486	Torque All Bolts	2 days	8/13/09	8/17/09
487	fix bonding straps to the radiator	3 hrs	8/13/09	8/14/09
488	Fix Crate Grounds	1.5 days	8/14/09	8/17/09
489	fix heater cables	5 hrs	8/14/09	8/14/09
490	Remove VC Rib Protection	2 hrs	8/14/09	8/14/09
491	Reinstall Diagonal Struts	0.5 days	8/18/09	8/18/09
493	Install Diagonal Strut MLI-Beta C.	0.5 days	8/18/09	8/18/09
499	**Testing Experiments with Field**	**57.67 days**	**6/29/09**	**8/25/09**
500	Pump Down (earliest)	2 ewks	6/29/09	7/13/09
501	Cool Down (earliest)	3 ewks	7/13/09	8/3/09
503	Experiment Testing w/ Magnet (KSC Visit?)	1 ewk	8/18/09	8/25/09
504	Discharge Magnet	0.1 edays	8/25/09	8/25/09
505	**FINAL M L I installation**	**2.55 days**	**8/25/09**	**8/28/09**
506	RICH/LTOF Lateral MLI (others)	5 days	8/25/09	8/28/09
510	AMS General Testing after Radiators	1 day	8/28/09	8/29/09
516	**Prep for shipping (Mid Config)**	**6.5 days**	**8/25/09**	**9/1/09**
517	Installation of the Stbd Debris Shield/parallel MLI	3 days	8/26/09	8/28/09
518	Disconnect Electronics GSE from PDS and J-Crate	0.5 days	8/29/09	8/29/09
519	Disconnect Cryomagnet GSE	2 days	8/29/09	8/31/09
520	Disconnect All GSE	3 days	8/26/09	8/28/09
521	Install Payload into PSS (mid configuration) - BAG IT	2 days	8/31/09	9/1/09
522	PSS ready for Mid Config Shipping	0 days	8/25/09	8/25/09
523	AMS-02 Complete Send to Testing (7 of 5)	0 days	9/1/09	9/1/09