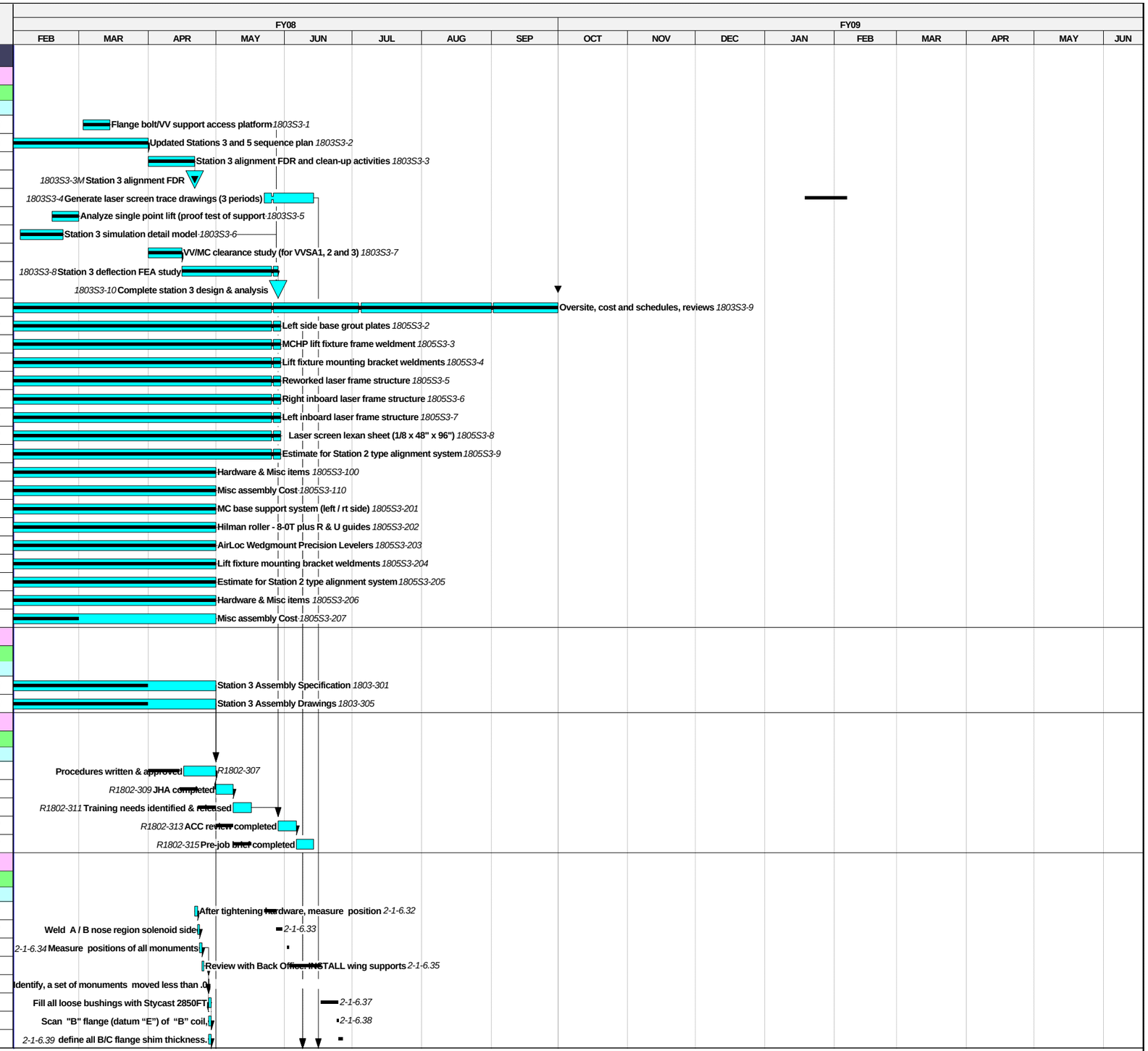
Activity ID	Activity Description	Duration (work days	Accelerated Start	Accelerated Finish	Total Float	PCTC	April 2008 Lehman Baseline
18 - Field Period Assembly							
Job: 1803/1805- FPA Tooling/Constr-BROWN/DUDEK							
Station 3-Modular Coil to VVSA Assembly							
1803S3-1	Flange bolt/VV support access platform	10*	03MAR08*	14MAR08	220		14MAR08
1803S3-2	Updated Stations 3 and 5 sequence plan	43*	31JAN08*	31MAR08	194		31MAR08
1803S3-3	Station 3 alignment FDR and clean-up activities	15	01APR08*	21APR08	194		21APR08
1803S3-3M	Station 3 alignment FDR	0		21APR08	201		21APR08
1803S3-4	Generate laser screen trace drawings (3 periods)	15	23MAY08	13JUN08	168		06FEB09
1803S3-5	Analyze single point lift (proof test of support	10*	18FEB08*	29FEB08	230		29FEB08
1803S3-6	Station 3 simulation detail model	15*	04FEB08*	22FEB08	235		22FEB08
1803S3-7	VV/MC clearance study (for VVSA1, 2 and 3)	11*	01APR08*	15APR08	168		15APR08
1803S3-8	Station 3 deflection FEA study	30	16APR08	28MAY08	168		28MAY08
1803S3-10	Complete station 3 design & analysis	0		28MAY08	168		30SEP08
1803S3-9	Oversite, cost and schedules, reviews	171	31JAN08*	30SEP08	1,521	LOE	30SEP08
1805S3-2	Left side base grout plates	85	31JAN08	29MAY08	174		29MAY08
1805S3-3	MCHP lift fixture frame weldment	85	31JAN08	29MAY08	174		29MAY08
1805S3-4	Lift fixture mounting bracket weldments	85	31JAN08	29MAY08	174		29MAY08
1805S3-5	Reworked laser frame structure	85	31JAN08	29MAY08	174		29MAY08
1805S3-6	Right inboard laser frame structure	85	31JAN08	29MAY08	174		29MAY08
1805S3-7	Left inboard laser frame structure	85	31JAN08	29MAY08	174		29MAY08
1805S3-8	Laser screen lexan sheet (1/8 x 48" x 96")	85	31JAN08	29MAY08	174		29MAY08
1805S3-9	Estimate for Station 2 type alignment system	85	31JAN08	29MAY08	174		29MAY08
1805S3-100	Hardware & Misc items	65	31JAN08	30APR08	194		30APR08
1805S3-110	Misc assembly Cost	65	31JAN08	30APR08	194		30APR08
1805S3-201	MC base support system (left / rt side)	65	31JAN08	30APR08	194		30APR08
1805S3-202	Hilman roller - 8-0T plus R & U guides	65	31JAN08	30APR08	194		30APR08
1805S3-203	AirLoc Wedgmount Precision Levelers	65	31JAN08	30APR08	194		30APR08
1805S3-204	Lift fixture mounting bracket weldments	65	31JAN08	30APR08	194		30APR08
1805S3-205	Estimate for Station 2 type alignment system	65	31JAN08	30APR08	194		30APR08
1805S3-206	Hardware & Misc items	65	31JAN08	30APR08	194		30APR08
1805S3-207	Misc assembly Cost	65	31JAN08A	30APR08	194		29FEB08
Job: 1806 - FP Assembly specs and drawings-COLE							
Station 3-Modular Coil to VVSA Assembly							
1803-301	Station 3 Assembly Specification	207*	02JUL07A	30APR08	175	30	31MAR08
1803-305	Station 3 Assembly Drawings	207*	02JUL07A	30APR08	175	60	31MAR08
Job: 1802 - FP Assy Oversight&Support-VIOLA							
Station 3 procedures,JHA,ACC,Training,Prep							
R1802-307	Procedures written & approved	10	17APR08	30APR08	175		14APR08
R1802-309	JHA completed	6	01MAY08	08MAY08	175		22APR08
R1802-311	Training needs identified & released	6	09MAY08	16MAY08	175		30APR08
R1802-313	ACC review completed	6	29MAY08	05JUN08	168		08MAY08
R1802-315	Pre-job brief completed	6	06JUN08	13JUN08	168		16MAY08
Job: 1810 - Field Period AssyStation 1,2,3 VIOLA							
Station 2 MC subassy A1B1C1							
A-B MC Assembly							
2-1-6.32	After tightening hardware, measure position	1	22APR08*	22APR08	83		27MAY08
2-1-6.33	Weld A / B nose region solenoid side	1	23APR08	23APR08	83		30MAY08
2-1-6.34	Measure positions of all monuments	1	24APR08	24APR08	83		02JUN08
2-1-6.35	Review with Back Office. INSTALL wing supports	1	25APR08	25APR08	83		16JUN08
2-1-6.36	Identify, a set of monuments moved less than .0	0	28APR08	25APR08	83		16JUN08
2-1-6.37	Fill all loose bushings with Stycast 2850FT	1	28APR08	28APR08	83		24JUN08
2-1-6.38	Scan "B" flange (datum "E") of "B" coil,	1	28APR08	28APR08	83		24JUN08
2-1-6.39	define all B/C flange shim thickness.	1	28APR08	28APR08	83		26JUN08



Run Date 22APR08 14:05

Post Lehman Accelerated Plan
zProposed Baseline
Progress Bar
Critical Activity

RBAC

NCSX Project
Post Lehman Accelerated Plan for Station 3 fit-up

Sheet 1 of 5

Sorted by Job Manager

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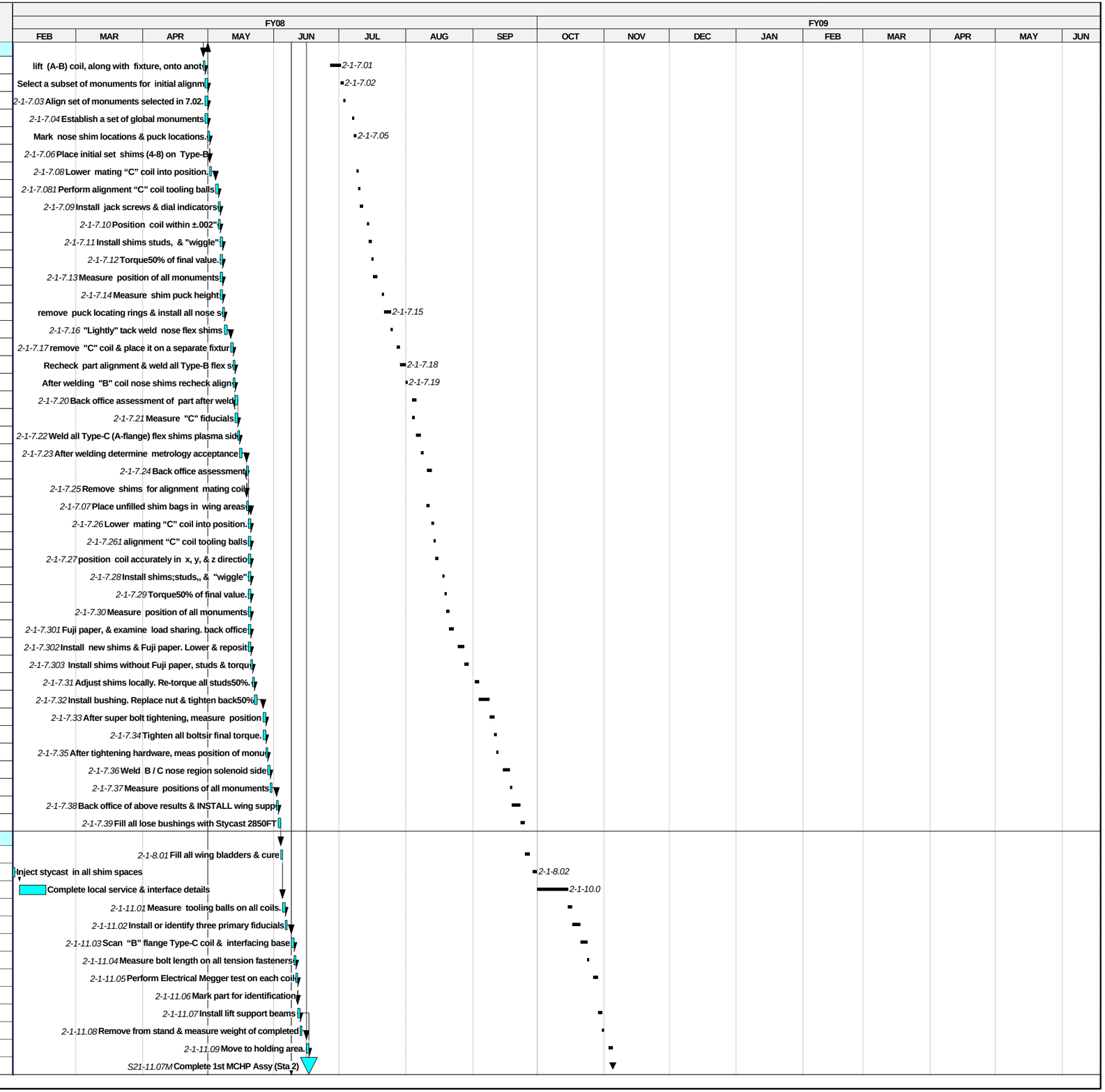
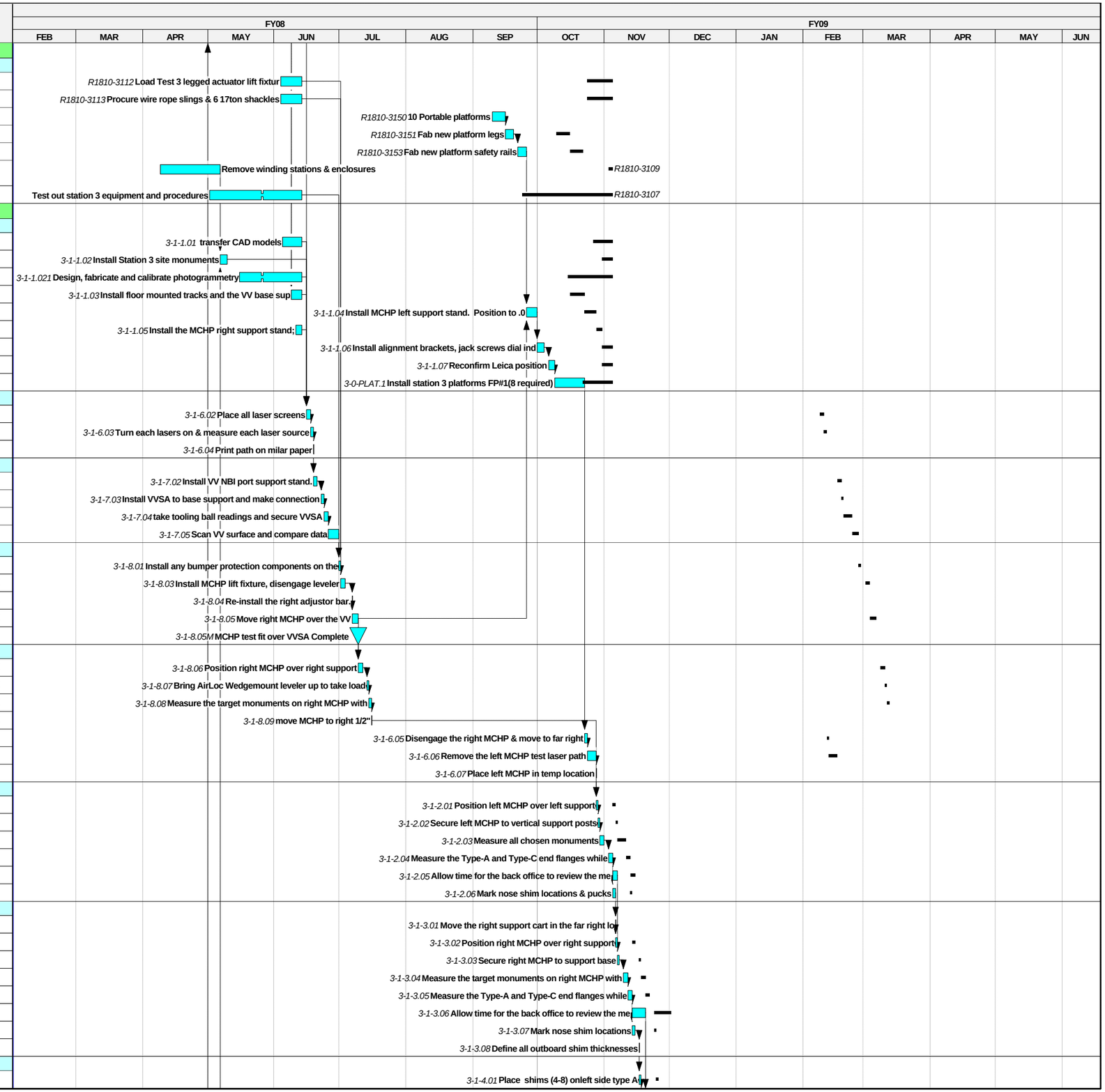
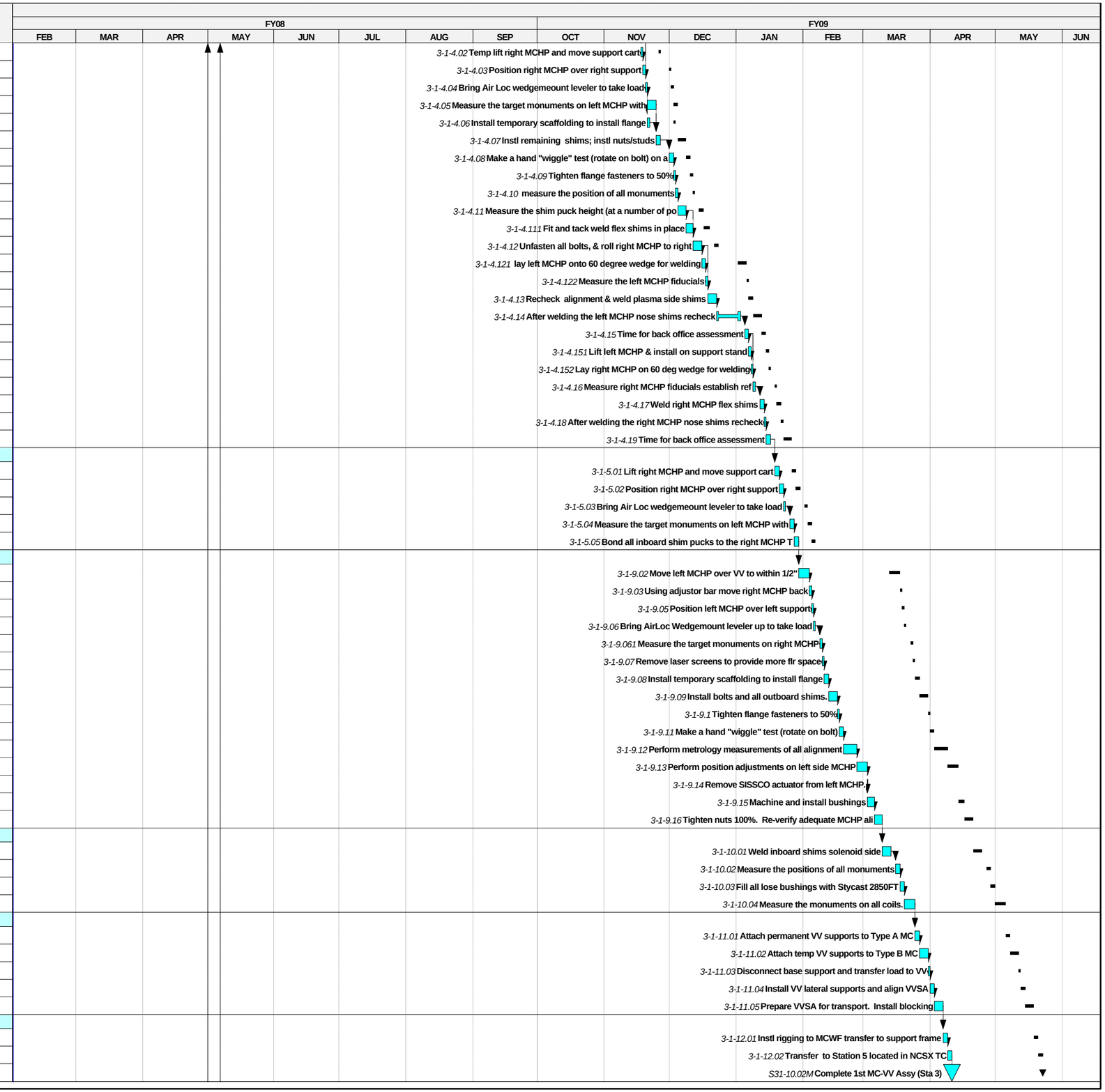
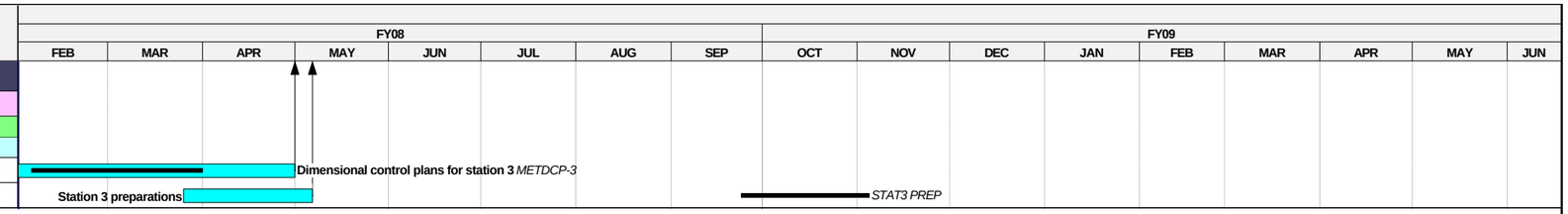
Activity ID	Activity Description	Duration (work days	Accelerated Start	Accelerated Finish	Total Float	PCTC	April 2008 Lehman Baseline
AB-C MC Assembly							
2-1-7.01	lift (A-B) coil, along with fixture, onto anot	1	29APR08	29APR08	83		01JUL08
2-1-7.02	Select a subset of monuments for initial alignm	1	30APR08	30APR08	98		02JUL08
2-1-7.03	Align set of monuments selected in 7.02.	1	30APR08	30APR08	98		03JUL08
2-1-7.04	Establish a set of global monuments	1	30APR08	30APR08	98		07JUL08
2-1-7.05	Mark nose shim locations & puck locations.	1	01MAY08	01MAY08	98		08JUL08
2-1-7.06	Place initial set shims (4-8) on Type-B	0	02MAY08	01MAY08	98		08JUL08
2-1-7.08	Lower mating "C" coil into position.	1	02MAY08	02MAY08	98		09JUL08
2-1-7.081	Perform alignment "C" coil tooling balls	1	05MAY08	05MAY08	98		10JUL08
2-1-7.09	Install jack screws & dial indicators	1	06MAY08	06MAY08	98		11JUL08
2-1-7.10	Position coil within ±.002"	1	06MAY08	06MAY08	98		14JUL08
2-1-7.11	Install shims studs, & "wiggle"	1	07MAY08	07MAY08	98		15JUL08
2-1-7.12	Torque50% of final value.	1	07MAY08	07MAY08	98		16JUL08
2-1-7.13	Measure position of all monuments	1	07MAY08	07MAY08	98		18JUL08
2-1-7.14	Measure shim puck height	1	07MAY08	07MAY08	98		21JUL08
2-1-7.15	remove puck locating rings & install all nose s	1	08MAY08	08MAY08	98		24JUL08
2-1-7.16	"Lightly" tack weld nose flex shims	1	09MAY08	09MAY08	98		25JUL08
2-1-7.17	remove "C" coil & place it on a separate fixtur	1	12MAY08	12MAY08	98		28JUL08
2-1-7.18	Recheck part alignment & weld all Type-B flex s	1	13MAY08	13MAY08	98		31JUL08
2-1-7.19	After welding "B" coil nose shims recheck align	1	13MAY08	13MAY08	98		01AUG08
2-1-7.20	Back office assessment of part after weld	1	14MAY08	14MAY08	98		05AUG08
2-1-7.21	Measure "C" fiducials	1	14MAY08	14MAY08	98		04AUG08
2-1-7.22	Weld all Type-C (A-flange) flex shims plasma sid	1	15MAY08	15MAY08	98		07AUG08
2-1-7.23	After welding determine metrology acceptance	1	16MAY08	16MAY08	98		08AUG08
2-1-7.24	Back office assessment	1	19MAY08	19MAY08	98		12AUG08
2-1-7.25	Remove shims for alignment mating coil	0	19MAY08	16MAY08	99		08AUG08
2-1-7.07	Place unfilled shim bags in wing areas	1	19MAY08	19MAY08	99		11AUG08
2-1-7.26	Lower mating "C" coil into position.	1	20MAY08	20MAY08	98		13AUG08
2-1-7.261	alignment "C" coil tooling balls	1	20MAY08	20MAY08	98		14AUG08
2-1-7.27	position coil accurately in x, y, & z directio	1	20MAY08	20MAY08	98		15AUG08
2-1-7.28	Install shims;studs,, & "wiggle"	1	20MAY08	20MAY08	98		18AUG08
2-1-7.29	Torque50% of final value.	1	20MAY08	20MAY08	98		19AUG08
2-1-7.30	Measure position of all monuments	1	20MAY08	20MAY08	98		20AUG08
2-1-7.301	Fuji paper, & examine load sharing. back office	1	20MAY08	20MAY08	98		22AUG08
2-1-7.302	Install new shims & Fuji paper. Lower & reposit	1	20MAY08	20MAY08	98		27AUG08
2-1-7.303	Install shims without Fuji paper, studs & torqu	1	21MAY08	21MAY08	98		29AUG08
2-1-7.31	Adjust shims locally. Re-torque all studs50%.	1	22MAY08	22MAY08	98		03SEP08
2-1-7.32	Install bushing. Replace nut & tighten back50%	1	23MAY08	23MAY08	98		08SEP08
2-1-7.33	After super bolt tightening, measure position	1	27MAY08	27MAY08	98		10SEP08
2-1-7.34	Tighten all boltsir final torque.	1	27MAY08	27MAY08	98		11SEP08
2-1-7.35	After tightening hardware, meas position of monu	1	28MAY08	28MAY08	98		12SEP08
2-1-7.36	Weld B / C nose region solenoid side	1	29MAY08	29MAY08	98		17SEP08
2-1-7.37	Measure positions of all monuments	1	30MAY08	30MAY08	98		18SEP08
2-1-7.38	Back office of above results & INSTALL wing supp	1	02JUN08	02JUN08	98		22SEP08
2-1-7.39	Fill all lose bushings with Stycast 2850FT	1	03JUN08	03JUN08	98		24SEP08
Stycast shim bags & final measurements							
2-1-8.01	Fill all wing bladders & cure	1	04JUN08	04JUN08	98		26SEP08
2-1-8.02	Inject stycast in all shim spaces	2	31JAN08	01FEB08	1,680		30SEP08
2-1-10.0	Complete local service & interface details	10	04FEB08	15FEB08	1,680		14OCT08
2-1-11.01	Measure tooling balls on all coils.	1	05JUN08	05JUN08	98		16OCT08
2-1-11.02	Install or identify three primary fiducials	1	06JUN08	06JUN08	98		20OCT08
2-1-11.03	Scan "B" flange Type-C coil & interfacing base	1	09JUN08	09JUN08	98		23OCT08
2-1-11.04	Measure bolt length on all tension fasteners	1	10JUN08	10JUN08	98		24OCT08
2-1-11.05	Perform Electrical Megger test on each coil	1	11JUN08	11JUN08	98		28OCT08
2-1-11.06	Mark part for identification	0	12JUN08	11JUN08	98		28OCT08
2-1-11.07	Install lift support beams	1	12JUN08	12JUN08	98		30OCT08
2-1-11.08	Remove from stand & measure weight of completed	1	13JUN08	13JUN08	98		31OCT08
2-1-11.09	Move to holding area.	1	16JUN08	16JUN08	98		04NOV08
S21-11.07M	Complete 1st MCHP Assy (Sta 2)	0		16JUN08	98		04NOV08



Activity ID	Activity Description	Duration (work days)	Accelerated Start	Accelerated Finish	Total Float	PCTC	April 2008 Lehman Baseline
Station 3 Setup/Preparations/General							
Misc Prep activities							
R1810-3112	Load Test 3 legged actuator lift fixtur	8	04JUN08	13JUN08	168		04NOV08
R1810-3113	Procure wire rope slings & 6 17ton shackles	8	04JUN08	13JUN08	168		04NOV08
R1810-3150	10 Portable platforms	4	10SEP08	15SEP08	113		
R1810-3151	Fab new platform legs	4	16SEP08	19SEP08	113		15OCT08
R1810-3153	Fab new platform safety rails	4	22SEP08	25SEP08	113		21OCT08
R1810-3109	Remove winding stations & enclosures	20	09APR08	06MAY08	192		04NOV08
R1810-3107	Test out station 3 equipment and procedures	30	02MAY08	13JUN08	168		04NOV08
Station 3-Assemble Mod Coils and VVSA-FP#1							
Set-up and Prep							
3-1-1.01	transfer CAD models	7	05JUN08	13JUN08	168		04NOV08
3-1-1.02	Install Station 3 site monuments	3	07MAY08*	09MAY08	192		04NOV08
3-1-1.021	Design, fabricate and calibrate photogrammetry	20	16MAY08	13JUN08	168		04NOV08
3-1-1.03	Install floor mounted tracks and the VV base sup	5	09JUN08	13JUN08	168		22OCT08
3-1-1.04	Install MCHP left support stand. Position to .0	3	26SEP08	30SEP08	113		27OCT08
3-1-1.05	Install the MCHP right support stand;	3	11JUN08	13JUN08	168		30OCT08
3-1-1.06	Install alignment brackets, jack screws dial ind	3	01OCT08	03OCT08	113		04NOV08
3-1-1.07	Reconfirm Leica position	3	06OCT08	08OCT08	113		04NOV08
3-0-PLAT.1	Install station 3 platforms FP#1(8 required)	10	09OCT08	22OCT08	113		04NOV08
Install Laser Screen							
3-1-6.02	Place all laser screens	2	16JUN08	17JUN08	168		10FEB09
3-1-6.03	Turn each lasers on & measure each laser source	1	18JUN08	18JUN08	168		11FEB09
3-1-6.04	Print path on milar paper	0	19JUN08	18JUN08	168		11FEB09
Install Vacuum Vessel							
3-1-7.02	Install VV NBI port support stand.	2	19JUN08	20JUN08	168		18FEB09
3-1-7.03	Install VVSA to base support and make connection	1	23JUN08	23JUN08	168		19FEB09
3-1-7.04	take tooling ball readings and secure VVSA	2	24JUN08	25JUN08	168		23FEB09
3-1-7.05	Scan VV surface and compare data	3	26JUN08	30JUN08	168		26FEB09
Trial fit MCHP over VV							
3-1-8.01	Install any bumper protection components on the	1	01JUL08	01JUL08	168		27FEB09
3-1-8.03	Install MCHP lift fixture, disengage leveler	2	02JUL08	03JUL08	168		03MAR09
3-1-8.04	Re-install the right adjustor bar.	0	07JUL08	03JUL08	168		03MAR09
3-1-8.05	Move right MCHP over the VV	3	07JUL08	09JUL08	168		06MAR09
3-1-8.05M	MCHP test fit over VVSA Complete	0		09JUL08	186		
Install RIGHT MCHP over VV							
3-1-8.06	Position right MCHP over right support	2	10JUL08	11JUL08	186		10MAR09
3-1-8.07	Bring AirLoc Wedgemount leveler up to take load	1	14JUL08	14JUL08	186		11MAR09
3-1-8.08	Measure the target monuments on right MCHP with	1	15JUL08	15JUL08	186		12MAR09
3-1-8.09	move MCHP to right 1/2"	0	16JUL08	15JUL08	186		12MAR09
3-1-6.05	Disengage the right MCHP & move to far right	1	23OCT08	23OCT08	113		12FEB09
3-1-6.06	Remove the left MCHP test laser path	2	24OCT08	27OCT08	113		16FEB09
3-1-6.07	Place left MCHP in temp location	0	28OCT08	27OCT08	113		16FEB09
Pre-assemble LEFT MCHP							
3-1-2.01	Position left MCHP over left support	1	28OCT08	28OCT08	113		05NOV08
3-1-2.02	Secure left MCHP to vertical support posts	1	29OCT08	29OCT08	113		06NOV08
3-1-2.03	Measure all chosen monuments	2	30OCT08	31OCT08	113		10NOV08
3-1-2.04	Measure the Type-A and Type-C end flanges while	2	03NOV08	04NOV08	113		12NOV08
3-1-2.05	Allow time for the back office to review the me	2	05NOV08	06NOV08	113		14NOV08
3-1-2.06	Mark nose shim locations & pucks	1	05NOV08	05NOV08	113		13NOV08
Pre-assemble RIGHT MCHP							
3-1-3.01	Move the right support cart in the far right lo	0	06NOV08	05NOV08	113		13NOV08
3-1-3.02	Position right MCHP over right support	1	06NOV08	06NOV08	113		14NOV08
3-1-3.03	Secure right MCHP to support base	1	07NOV08	07NOV08	113		17NOV08
3-1-3.04	Measure the target monuments on right MCHP with	2	10NOV08	11NOV08	113		19NOV08
3-1-3.05	Measure the Type-A and Type-C end flanges while	2	12NOV08	13NOV08	113		21NOV08
3-1-3.06	Allow time for the back office to review the me	4	14NOV08	19NOV08	113		01DEC08
3-1-3.07	Mark nose shim locations	1	14NOV08	14NOV08	113		24NOV08
3-1-3.08	Define all outboard shim thicknesses	0	17NOV08	14NOV08	113		24NOV08
Pre-assemble LEFT and RIGHT MCHP							
3-1-4.01	Place shims (4-8) onleft side type A	1	17NOV08	17NOV08	113		25NOV08



Activity ID	Activity Description	Duration (work days	Accelerated Start	Accelerated Finish	Total Float	PCTC	April 2008 Lehman Baseline
3-1-4.02	Temp lift right MCHP and move support cart	1	18NOV08	18NOV08	113		26NOV08
3-1-4.03	Position right MCHP over right support	1	19NOV08	19NOV08	113		01DEC08
3-1-4.04	Bring Air Loc wedgemeount leveler to take load	1	20NOV08	20NOV08	113		02DEC08
3-1-4.05	Measure the target monuments on left MCHP with	2	21NOV08	24NOV08	113		04DEC08
3-1-4.06	Install temporary scaffolding to install flange	1	21NOV08	21NOV08	114		03DEC08
3-1-4.07	Instl remaining shims; instl nuts/studs	2	25NOV08	26NOV08	113		08DEC08
3-1-4.08	Make a hand "wiggle" test (rotate on bolt) on a	2	01DEC08	02DEC08	113		10DEC08
3-1-4.09	Tighten flange fasteners to 50%	1	03DEC08	03DEC08	113		11DEC08
3-1-4.10	measure the position of all monuments	1	04DEC08	04DEC08	113		12DEC08
3-1-4.11	Measure the shim puck height (at a number of po	2	05DEC08	08DEC08	113		16DEC08
3-1-4.111	Fit and tack weld flex shims in place	3	09DEC08	11DEC08	113		19DEC08
3-1-4.12	Unfasten all bolts, & roll right MCHP to right	2	12DEC08	15DEC08	113		23DEC08
3-1-4.121	lay left MCHP onto 60 degree wedge for welding	2	16DEC08	17DEC08	113		05JAN09
3-1-4.122	Measure the left MCHP fiducials	1	18DEC08	18DEC08	113		06JAN09
3-1-4.13	Recheck alignment & weld plasma side shims	2	19DEC08	22DEC08	113		08JAN09
3-1-4.14	After welding the left MCHP nose shims recheck	2	23DEC08	02JAN09	113		12JAN09
3-1-4.15	Time for back office assessment	2	05JAN09	06JAN09	113		14JAN09
3-1-4.151	Lift left MCHP & install on support stand	1	07JAN09	07JAN09	113		15JAN09
3-1-4.152	Lay right MCHP on 60 deg wedge for welding	1	08JAN09	08JAN09	113		16JAN09
3-1-4.16	Measure right MCHP fiducials establish ref	1	09JAN09	09JAN09	113		19JAN09
3-1-4.17	Weld right MCHP flex shims	2	12JAN09	13JAN09	113		21JAN09
3-1-4.18	After welding the right MCHP nose shims recheck	1	14JAN09	14JAN09	113		22JAN09
3-1-4.19	Time for back office assessment	2	15JAN09	16JAN09	113		26JAN09
Re-assemble LEFT and RIGHT MCHP							
3-1-5.01	Lift right MCHP and move support cart	2	19JAN09	20JAN09	113		28JAN09
3-1-5.02	Position right MCHP over right support	2	21JAN09	22JAN09	113		30JAN09
3-1-5.03	Bring Air Loc wedgemeount leveler to take load	1	23JAN09	23JAN09	113		02FEB09
3-1-5.04	Measure the target monuments on left MCHP with	2	26JAN09	27JAN09	113		04FEB09
3-1-5.05	Bond all inboard shim pucks to the right MCHP T	2	28JAN09	29JAN09	113		06FEB09
Install LEFT MCHP over VV							
3-1-9.02	Move left MCHP over VV to within 1/2"	3	30JAN09	03FEB09	113		17MAR09
3-1-9.03	Using adjustor bar move right MCHP back	1	04FEB09	04FEB09	113		18MAR09
3-1-9.05	Position left MCHP over left support	1	05FEB09	05FEB09	113		19MAR09
3-1-9.06	Bring AirLoc Wedgemount leveler up to take load	1	06FEB09	06FEB09	113		20MAR09
3-1-9.061	Measure the target monuments on right MCHP	1	09FEB09	09FEB09	113		23MAR09
3-1-9.07	Remove laser screens to provide more flr space	1	10FEB09	10FEB09	113		24MAR09
3-1-9.08	Install temporary scaffolding to install flange	2	11FEB09	12FEB09	113		26MAR09
3-1-9.09	Install bolts and all outboard shims.	2	13FEB09	16FEB09	113		30MAR09
3-1-9.1	Tighten flange fasteners to 50%	1	17FEB09	17FEB09	113		31MAR09
3-1-9.11	Make a hand "wiggle" test (rotate on bolt)	2	18FEB09	19FEB09	113		02APR09
3-1-9.12	Perform metrology measurements of all alignment	4	20FEB09	25FEB09	113		08APR09
3-1-9.13	Perform position adjustments on left side MCHP	3	26FEB09	02MAR09	113		13APR09
3-1-9.14	Remove SISSCO actuator from left MCHP.	0	03MAR09	02MAR09	113		13APR09
3-1-9.15	Machine and install bushings	3	03MAR09	05MAR09	113		16APR09
3-1-9.16	Tighten nuts 100%. Re-verify adequate MCHP ali	2	06MAR09	09MAR09	113		20APR09
Weld inboard shims & fill bushing gaps							
3-1-10.01	Weld inboard shims solenoid side	4	10MAR09	13MAR09	113		24APR09
3-1-10.02	Measure the positions of all monuments	2	16MAR09	17MAR09	113		28APR09
3-1-10.03	Fill all lose bushings with Stycast 2850FT	2	18MAR09	19MAR09	113		30APR09
3-1-10.04	Measure the monuments on all coils.	3	20MAR09	24MAR09	113		05MAY09
VVSA attachment to MC's							
3-1-11.01	Attach permanent VV supports to Type A MC	2	25MAR09	26MAR09	113		07MAY09
3-1-11.02	Attach temp VV supports to Type B MC	2	27MAR09	30MAR09	113		11MAY09
3-1-11.03	Disconnect base support and transfer load to VV	1	31MAR09	31MAR09	113		12MAY09
3-1-11.04	Install VV lateral supports and align VVSA	2	01APR09	02APR09	113		14MAY09
3-1-11.05	Prepare VVSA for transport. Install blocking	2	03APR09	06APR09	113		18MAY09
Transfer to Station 5							
3-1-12.01	Instl rigging to MCWF transfer to support frame	2	07APR09	08APR09	113		20MAY09
3-1-12.02	Transfer to Station 5 located in NCSX TC	2	09APR09	10APR09	113		22MAY09
S31-10.02M	Complete 1st MC-VV Assy (Sta 3)	0		10APR09	113		22MAY09



Activity ID	Activity Description	Duration (work days	Accelerated Start	Accelerated Finish	Total Float	PCTC	April 2008 Lehman Baseline
82 - Project Engineering							
Job: 8205 - Dimensional Control Coordin-ELLIS							
Station 3-Modular Coil to VVSA Assembly							
METDCP-3	Dimensional control plans for station 3	65	31JAN08	30APR08	175	15	31MAR08
STAT3 PREP	Station 3 preparations	30	26MAR08	06MAY08	192		04NOV08