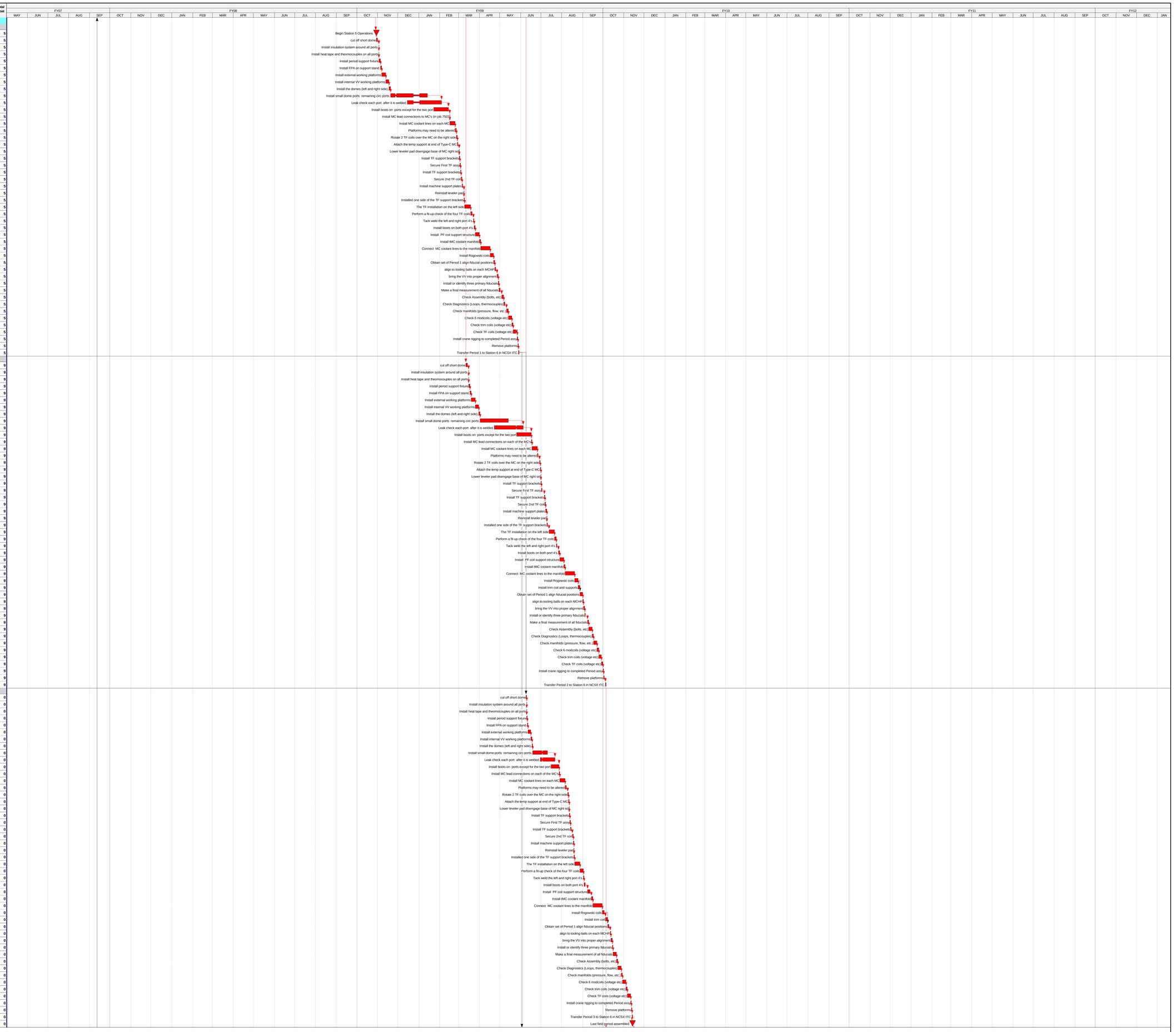
Activity ID	cp	Activity Description	Duration (work days	Baseline Start	Baseline Finish	Shifts	Total Float
cc 9450 - NCSX Fabrication (MIE)							
1 - Stellarator Core Systems							
14 - Modular Coils							
Job: 1421 - Mod Coil Interface Design-WILLIAMSON							
Outboard Interface-Bolted Joint Tests-Tension							
1421-3067	C	Procure 2 studs f/joint test.Use existing part	61*	01MAY07	26JUL07		0
1421-3075	C	Setup test fixture &perform JHA & pre-job brief	2	27JUL07*	30JUL07		7
1421-3077	C	Meas joint deflect vs preload & loss of preload	3	31JUL07	02AUG07		7
1421-3079	C	Measure joint deflec & preload v. temp @80K	3	03AUG07	07AUG07		7
1421-3084	C	Measure joint deflection&preload v. cooldown cyc	3	08AUG07	10AUG07		7
1421-3087	C	Perform pullout tests for tapped holes	3	13AUG07	15AUG07		7
1421-3081	C	Meas joint deflect & preload v. time (days) at	20	16AUG07	13SEP07		7
1421-3090	C	Document&conduct review of test results	5	14SEP07	20SEP07		7
Outboard Interface-Bolted Joint Tests-Shear							
1421-3112B	C	Procure/fab parts for test&initial assembly	60*	01MAY07	25JUL07		1
1421-3115B	C	Assemble & test	31	27JUL07	10SEP07		0
1421-3119B	C	Document test results	15	11SEP07	01OCT07		0
Inboard Interface-AB/BC/AA							
INTRF-049	C	prepare winding form mods for weld clamp bolts	50	13JUN07*	22AUG07		3
INTRF-050	C	Complete Shim fabrication drawings (ORNL)	40	27JUN07*	22AUG07		3
INTRF-051	C	Release info for procurement of shim material	64*	01MAY07	31JUL07		18
INTRF-054	C	FDR prep AB/BC/AA inboard shims	5	28AUG07	04SEP07		0
INTRF-055	C	FDR AB/BC/AA inboard shims	0		04SEP07		0
Overall MC Interface							
1421-3134	C	Issue interface dwgs for comment	75	01MAY07	15AUG07		0
1421-3135	C	FDR Prep	13	16AUG07	04SEP07		0
1421-3136	C	Conduct BC,AB,AA,Interface FDR incl job 1416	0		04SEP07		0
1421-3138	C	Resolve issues, release assembly spec&drawings	5	05SEP07	11SEP07		0
18 - Field Period Assembly							
Job: 1806 - FP Assembly specs and drawings-COLE							
Station 2-Modular Coil Sub- Assembly							
1803-201	C	Station 2 Assembly Specification	65	11JUN07*	11SEP07		0
1803-205	C	Station 2 Assembly Drawings	65	11JUN07*	11SEP07		14
Job: 1802 - FP Assy Oversight&Support-VIOLA							
Station 2 procedures,JHA,ACC,Training,Prep							
R1802-207	C	Procedures written & approved	14	12SEP07	01OCT07		0
R1802-209	C	JHA completed	6	02OCT07	09OCT07		0
R1802-211	C	Training needs identified & released	6	10OCT07	17OCT07		0
R1802-213	C	ACC review completed	2	18OCT07	19OCT07		0
R1802-215	C	Pre-job brief completed	1	22OCT07	22OCT07		0
R1802-217	C	Station 2 operational	1	23OCT07	23OCT07		0
Job:1810-Field Period Assy -Station 1,2,3 VIOLA							
Station 2 Trials & Development							
PHIL-03	C	complete CAD model of weld test specimen	1	06JUL07*	06JUL07		13
PHIL-04	C	water jet cut shims for A/B flange weld test	3	09JUL07	11JUL07		13
PHIL-12	C	Weld fiducials on A6 & B6	2	10JUL07*	11JUL07		13
PHIL-13	C	Measure A6 casting	2	12JUL07	13JUL07		13
PHIL-15	C	Remove A6 & lower & grout wedge	4	16JUL07	19JUL07		13
PHIL-16	C	Re-mount A6 on wedge	2	20JUL07	23JUL07		13
PHIL-17	C	Re-measure A6	2	24JUL07	25JUL07		13
PHIL-18	C	Measure B6 on wedge	2	26JUL07	27JUL07		13
PHIL-22	C	Water jet cut outboard 0,5" stk 316 SS shims	4	12JUL07	17JUL07		13
PHIL-23	C	Water jet cut inboard 0.625 316 SS	3	18JUL07	20JUL07		13
PHIL-24	C	Assemble castings,align torque&meas inbd. shims	4	23JUL07	26JUL07		13
PHIL-26	C	Grind inbd. Shims to thickness (outside shop)	4	27JUL07	01AUG07		13
PHIL-27	C	Solution anneal shims	2	02AUG07	03AUG07		13
PHIL-32	C	Align castings	2	30JUL07	31JUL07		13
PHIL-37	C	Set up dial ind., CMM, transit system	5	01AUG07	07AUG07		13
PHIL-38	C	Install all shims and adjust bushings	2	06AUG07	07AUG07		13
PHIL-39	C	Final align and baseline measurements	3	08AUG07	10AUG07		13
PHIL-40	C	Perform 25% of welding & measure	2	13AUG07	14AUG07		13
PHIL-41	C	Perform 50% of welding & measure	2	15AUG07	16AUG07		13
PHIL-42	C	Perform 75% of welding & measure	2	17AUG07	20AUG07		13
PHIL-43	C	finish welding & measure	2	21AUG07	22AUG07		13
PHIL-44	C	Analyze data; write report	14	23AUG07	12SEP07		13
Setup							
R1810-2108	C	HARDWARE,DRAWINGS,& PROCURES AVAILABLE	0		23OCT07	1	0
Pre-Measuring and fitup checks							
S21-1.01	C	Verify mating MC's A1,B1,C1	4	20JUL07*	25JUL07	1	1
S21-1.02	C	Epoxy paint all close fitting interfacing surfac	3	26JUL07	30JUL07	1	1
S21-2.01	C	Set A1 on pre-measured fixt, "B" side down	1	31JUL07	31JUL07	1	1
S21-2.02	C	Align to the conical seats locking into of 8	2	01AUG07	02AUG07	1	1
S21-2.03	C	Estab global coord sys on mc geometry. Meas monu	7	03AUG07	13AUG07	1	1
S21-2.04	C	Meas tooling ball monuments on winding form.	1	14AUG07	14AUG07	1	1
S21-2.05	C	Scan the "A" flange of the Type-A1 coil.	1	15AUG07	15AUG07	1	1
S21-2.07	C	Remove A1 coil from stand	1	16AUG07	16AUG07	1	1
S21-2.08	C	Measure B1 "A" flange	14	17AUG07	06SEP07	1	1
S21-2.11	C	Measure C1 "A" flange	13	07SEP07	25SEP07	1	1
S21-2.14	C	Measure Type A1-A2 "A" flange	13	26SEP07	12OCT07	1	1
S21-3.02	C	Grind shims first article f/assy process qu	4	15OCT07	18OCT07	1	1
S21-4.02	C	Perform metrology set-up and checks	2	19OCT07	22OCT07	1	1
S21-3.03	C	Ready For Preassembly A1B1C1	0		22OCT07	1	1
Station 2-MC Sub Assy A1-B1-C1							
S21-7.01	C	Place "A/B" assy, "A" coil dwn, on 40deg fix.	3	13FEB08	15FEB08	1	0
S21-7.02	C	Align to the conical seats locking into a min of	1	18FEB08	18FEB08	1	0
S21-7.03	C	Measure the monuments on the fixture & the walls	2	19FEB08	20FEB08	1	0
S21-7.04	C	Place initial set metal shims on the coil	2	21FEB08	22FEB08	1	0
S21-7.05	C	Lower the Type-C coil onto the Type-B coil.	1	25FEB08	25FEB08	1	0
S21-7.06	C	Meas monuments on A coil to eval displacement.	1	26FEB08	26FEB08	1	0
S21-6.062	C	instl dial indicators for x-y positioning	1	27FEB08	27FEB08	1	0
S21-5.00	C	BEGIN A-A Pre-assembly	0		23OCT07	1	0
S21-5.01	C	Place A2 "B" side down. Obtain fiduals	2	24OCT07	25OCT07	1	0
S21-5.02	C	Align to the conical seats locking into 8.	1	26OCT07	26OCT07	1	0
S21-5.03	C	Meas monuments on fixture & walls.	2	29OCT07	30OCT07	1	0
S21-5.04	C	Place shims on coil identical to A1-A2 fit up	1	31OCT07	31OCT07	1	0
S21-5.05	C	Install dial indicators on the MC to see deflec	1	01NOV07	01NOV07	1	0
S21-5.06	C	Lower mating A1 modular coil into position.	1	02NOV07	02NOV07	1	0
S21-5.07	C	Meas monuments bottom coil. Jack to .002"	1	05NOV07	05NOV07	1	0
S21-5.08	C	Using 3 points, position as was done inA1A2 fit	1	06NOV07	06NOV07	1	0
S21-5.09	C	Torque to 50%	2	07NOV07	08NOV07	1	0
S21-5.1	C	Make "wiggle" test Tighten bolt and recheck.	1	09NOV07	09NOV07	1	0
S21-5.11	C	Meas tooling balls both coils.	5	12NOV07	16NOV07	1	0
S21-5.12	C	Adjust shims locally. Re-torque all studs to 50%	3	19NOV07	21NOV07	1	0
S21-5.14	C	Install A-A locator bushings	2	22NOV07	23NOV07	1	0
S21-5.15	C	Remove studs,nuts,shims. Identify shim locations	1	26NOV07	26NOV07	1	0
S21-6.01	C	Place Type A "A" side down. Obtain fiduals	2	27NOV07	28NOV07	1	0
S21-6.02	C	Align to the conical seats locking into 8.	1	03DEC07	03DEC07	1	0
S21-6.03	C	Meas monuments on fixture & walls.	2	04DEC07	05DEC07	1	0
S21-6.04	C	Place the an initial set shims on coil	2	06DEC07	07DEC07	1	0
S21-6.041	C	Stuff shim bag w/fiberglass & place on wing	1	10DEC07	10DEC07	1	0
S21-6.05	C	Lower the Type-B coil onto the Type-A coil.	1	11DEC07	11DEC07	1	0
S21-6.06	C	Measure monuments on A coil. Jack to .002"	1	12DEC07	12DEC07	1	0
S21-6.061	C	instl dial indicators for x-y positioning	1	13DEC07	13DEC07	1	0
S21-6.07	C	Perform the X-Y positioning of the B coil.	1	14DEC07	14DEC07	1	0
S21-6.08	C	Install remaining metal shims torque to 50%	2	17DEC07	18DEC07	1	0
S21-6.09	C	Make "wiggle" test Tighten bolt and recheck.	1	19DEC07	19DEC07	1	0
S21-6.1	C	Measure the tooling balls on both coils.	5	20DEC07	04JAN08	1	0
S21-6.11	C	Loosen studs, adjust shims. Re-torque to 50%.	3	07JAN08	09JAN08	1	0
S21-6.12	C	Install alumina shims. Re-torque to 50%.	1	10JAN08	10JAN08	1	0
S21-6.13	C	Make "wiggle" test Tighten bolt and recheck.	1	11JAN08	11JAN08	1	0
S21-6.14	C	Measuretooling balls . The max devi .007" .	5	14JAN08	18JAN08	1	0
S21-6.15	C	Loosen studs, adjust shims. Re-torque to 50%.	3	21JAN08	23JAN08	1	0
S21-6.16	C	Install bushings. Tighten back to 50%	10	24JAN08	06FEB08	1	0
S21-6.17	C	Complete tightening of flange bolts to 100%.	1	07FEB08	07FEB08	1	0
S21-6.18	C	Measuretooling balls . The max devi .007" .	2	08FEB08	11FEB08	1	0
S21-6.19	C	Scan the "B" flange of Type-B coil	1	12FEB08	12FEB08	1	0
S21-7.07	C	Perform the X-Y positioning of the coil.	1	28FEB08	28FEB08	1	0
S21-7.08	C	Install remaining metal shims torque to 50%	2	29FEB08	03MAR08	1	0
S21-7.09	C	"wiggle" test Tighten bolt and recheck.	1	04MAR08	04MAR08	1	0
S21-7.1	C	Measure the tooling balls on all coils.	5	05MAR08	11MAR08	1	0
S21-7.11	C	adjust shims locally. Re-torque all studs to 50%	3	12MAR08	14MAR08	1	0
S21-7.12	C	linstall alumina shims. Re-torque all studs to	1	17MAR08	17MAR08	1	0
S21-7.13	C	"wiggle" test Tighten bolt and recheck.	1	18MAR08	18MAR08	1	0
S21-7.14	C	Measure the tooling balls on all coils.	5	19MAR08	25MAR08	1	0
S21-7.15	C	adjust shims locally. Re-torque all studs to 50	3	26MAR08	28MAR08	1	0
S21-7.16	C	Install bushings	10	31MAR08	11APR08	1	0
S21-7.17	C	Complete tightening of flange bolts to 100%.	1	14APR08	14APR08	1	0
DOE-1	C	Notify DOE of scheduled station 3 lifts to	0		27MAR08	1	0
DOE-2	C	DOE review lift procedures	30	28MAR08	08MAY08	1	0
DOE-3	C	DOE approval of scheduled station 3 lifts to	0		08MAY08	1	0
S21-11.01	C	Identify primary fiducials for positioning Sta 3	1	15APR08	15APR08	1	0
S21-7.18	C	Final metrology meas. Scan "B" flangeType-C coil	5	16APR08	22APR08	1	0
S21-8.01	C	Tack weld inboard shims	2	23APR08	24APR08	1	0
S21-10.01	C	Install all wing support bladders	2	25APR08	28APR08	1	6
S21-10.02	C	Make local service runs/connections	8	25APR08	06MAY08	1	0
S21-10.03	C	Inject stycast in all shim spaces	1	25APR08	25APR08	1	7
S21-11.03	C	Measure bolt length on all tension fasteners	0	09MAY08	08MAY08	1	0
S21-11.04	C	Mark part for identification	0	09MAY08	08MAY08	1	0
S21-11.05	C	Install lift support beams	2	07MAY08	08MAY08	1	0
S21-11.06	C	Remove from stand & measure weight of assy	1	09MAY08	09MAY08	1	0
S21-11.07	C	Move A1-B1-C1 to holding area.	0		09MAY08	1	0
Station 2 MC Sub Assy A2-B2-C2							
S22-6.01	C	A2 "A" flange dwn, 20deg fixt.Obtain fiduci	1	13FEB08	13FEB08	1	4
S22-6.02	C	Align to the conical seats locking into a min of	1	14FEB08	14FEB08	1	4
S22-6.03	C	Measure monuments on fixture and on the walls.	2	15FEB08	18FEB08	1	4
S22-6.04	C	Place alumina grind inboard weld shims on coil.	2	19FEB08	20FEB08	1	4
S22-6.05	C	Lower the Type-B coil onto the Type-A coil.	1	21FEB08	21FEB08	1	4
S22-6.06	C	Meas monuments on A coil. Jack to within .002"	1	22FEB08	22FEB08	1	4
S22-6.07	C	Perform the X-Y positioning of the B coil.	1	25FEB08	25FEB08	1	4
S22-6.08	C	Install studs, supernuts, torque to 50% of final	2	26FEB08	27FEB08	1	4
S22-6.09	C	"wiggle" test Tighten bolt and recheck.	1	28FEB08	28FEB08	1	4
S22-6.1	C	Meas tooling balls on both coils. max devi .007"	5	29FEB08	06MAR08	1	4
S22-6.11	C	adjust shims locally. Re-torque all studs to 50%	3	07MAR08	11MAR08	1	4
S22-6.12	C	Install bushings	10	12MAR08	25MAR08	1	4
S22-6.13	C	Complete tightening of flange bolts to 100%.	1	26MAR08	26MAR08	1	4
S22-6.14	C	Measure the tooling balls on both coils.	3	27MAR08	31MAR08	1	4
S22-6.15	C	Scan the "B" flange of Type-B coil	1	01APR08	01APR08	1	4
S22-7.01	C	"A/B" assy "A" coil dwn, 40deg fixt.Obtain fiduc	2	02APR08	03APR08	1	4
S22-7.02	C	Align to the conical seats locking into min of 8	1	04APR08	04APR08	1	4
S22-7.03	C	Measure monuments on fixture and walls.	2	07APR08	08APR08	1	4
S22-7.04	C	Place alumin grind inboard weld shims on coil.	2	09APR08	10APR08	1	4
S22-7.05	C	Lower the Type-C coil onto the Type-B coil.	1	11APR08	11APR08	1	4
S22-7.06	C	Meas monuments on A coil for displacements.	1	14APR08	14APR08	1	4
S22-7.07	C	Perform the X-Y positioning of the coil.	1	15APR08	15APR08	1	4
S22-7.08	C	Install studs, supernuts, torque to 50% of fina	2	16APR08	17APR08	1	4
S22-7.09	C	"wiggle" test Tighten bolt and recheck.	1	18APR08	18APR08	1	4
S22-7.1	C	Measure the tooling balls on all coils.	5	21APR08	25APR08	1	4
S22-7.11	C	Install bushings Replace nut and tighten to 50%	10	28APR08	09MAY08	1	4
S22-7.12	C	Complete tightening of flange bolts to 100%.	1	12MAY08	12MAY08	1	4
S22-7.13	C	Measure the tooling balls on both coils.	4	13MAY08	16MAY08	1	4
S22-8.01	C	Tack weld all inboard shims to one flange	1	19MAY08	19MAY08	1	4
S22-10.01	C	Install all wing support bladders	2	20MAY08	21MAY08	1	4
S22-10.02	C	local service connections on each MC.	8	22MAY08	03JUN08	1	4
S22-10.03	C	Inject stycast to fill in all shim spaces	1	04JUN08	04JUN08	1	4
S22-11.01	C	Install or identify three primary fiducials	1	05JUN08	05JUN08	1	4
S22-11.02	C	Final metrology measurement of all fiducials.	5	06JUN08	12JUN08	1	4
S22-11.03	C	Tension tester measure bolt length	1	13JUN08	13JUN08	1	4
S22-11.04	C	Mark part for identification	0	16JUN08	13JUN08	1	4
S22-11.05	C	Install lift support beams	2	16JUN08	17JUN08	1	4
S22-11.06	C	Remove from stand Move A2-B2-C2 to holding area	2	18JUN08	19JUN08	1	4
Station 2-Modular Coil Subassembly-FP#2							
S23-A3B3C3	C	Assemble/Align Mod-Coils A3/B3/C3	140	12MAY08	26NOV08	1	0
S24-A4B4C4	C	Assemble/Align Mod-Coils A4/B4/C4	97	03JUL08	18NOV08	1	16
Station 2-Modular Coil Subassembly-FP#3							
S25-A5B5C5	C	Assemble/Align Mod-Coils A5/B5/C5 (under 1 shift	86	07OCT08*	16FEB09	1	5
S25A5B5C5s2	C	Assemble/Align Mod-Coils A5/B5/C5 (under 2 shift	20	17FEB09*	16MAR09	2	5
S26-A6B6C6	C	Assemble/Align Mod-Coils A6/B6/C6	36	23DEC08*	19FEB09	1	4
S26A6B6C6s2	C	Assemble/Align Mod-Coils A6/B6/C6	24	20FEB09*	25MAR09	2	4

Activity ID	cp	Activity Description	Duration (work days	Baseline Start	Baseline Finish	Shifts	Total Float
Station 3-Assemble Mod Coils and VVSA-FPH#1							
R1810-2109	C	Begin Station 3	0	03MAR08*		1	56
S31-1.01	C	Install Station 3 site monuments	3	03MAR08	05MAR08	1	56
S31-1.02	C	Install floor mounted tracks and VV base support	5	06MAR08	12MAR08	1	56
S31-1.03	C	Establish the MCHP CG location.	2	13MAR08	14MAR08	1	56
S31-2.01	C	Install MCHP support cart assemblies	4	17MAR08	20MAR08	1	56
S31-2.02	C	Verify cart motion.	2	21MAR08	24MAR08	1	56
S31-2.03	C	Install adjustor bar support weldment	0	25MAR08	24MAR08	1	56
S31-2.04	C	Position left MCHP on the cart assembly	1	12MAY08	12MAY08	1	22
S31-2.05	C	Secure left MCHP on support cart base.	2	13MAY08	14MAY08	1	22
S31-2.06	C	Measure monuments on left MCHP and walls	5	15MAY08	21MAY08	1	22
S31-2.07	C	Set positioning stop on the cart	1	22MAY08	22MAY08	1	22
S31-3.01	C	Move right base support cart to its final positi	1	23MAY08	23MAY08	1	22
S31-3.02	C	Lift the right side MCHP and position	1	20JUN08	20JUN08	1	4
S31-3.03	C	Temporary fasteners bring the parts together.	0	23JUN08	20JUN08	1	4
S31-3.04	C	AirLoc Wedgemount leveler to take load.	0	23JUN08	20JUN08	1	4
S31-3.05	C	Install temp scaffolding to install flange hw	1	23JUN08	23JUN08	1	4
S31-3.06	C	Install bolts and shims	1	24JUN08	24JUN08	1	4
S31-3.07	C	Tighten flange fasteners to 50%	1	25JUN08	25JUN08	1	4
S31-3.08	C	Perform metrology measurements	5	26JUN08	02JUL08	1	4
S31-3.09	C	Perform position adjust on right side MCHP	2	03JUL08	07JUL08	1	4
S31-3.1	C	Verify position of the VV support hanger	3	08JUL08	10JUL08	1	4
S31-3.11	C	Remove flange hardware and temp platforms	1	11JUL08	11JUL08	1	4
S31-4.01	C	EMeasure monuments on the MCHP's &walls.	2	14JUL08	15JUL08	1	4
S31-4.02	C	Place all of the laser screens	2	16JUL08	17JUL08	1	4
S31-4.03	C	Determine laser alignment.	1	18JUL08	18JUL08	1	4
S31-4.04	C	mount the milar on the screens.	1	21JUL08	21JUL08	1	4
S31-4.05	C	Disengage MCHP's to move the left MCHP.	1	22JUL08	22JUL08	1	4
S31-4.06	C	Remove both MCHP's.	2	23JUL08	24JUL08	1	4
S31-5.01	C	Remove the adjustor bar support from left side.	0	25JUL08	24JUL08	1	4
S31-5.02	C	Install VV NBI port support stand.	2	25JUL08	28JUL08	1	4
S31-5.03	C	Install VVSA to base support	1	29JUL08	29JUL08	1	4
S31-5.04	C	Secure the VVSA to base & NBI port sprt stand.	2	30JUL08	31JUL08	1	4
S31-6.01	C	Install bumper protection components on the VV	1	01AUG08	01AUG08	1	4
S31-6.02	C	Position AirLoc Wedgemount in lower position.	0	04AUG08	01AUG08	1	4
S31-6.03	C	move the left MCHP over the VV.	2	04AUG08	05AUG08	1	4
S31-6.04	C	Re-install the left adjustor bar.	0	06AUG08	05AUG08	1	4
S31-6.05	C	Make adjustments to properly align MCHP.	2	06AUG08	07AUG08	1	4
S31-6.06	C	Transfer load to the AirLoc Wedgemount leveler.	0	08AUG08	07AUG08	1	4
S31-6.07	C	move the MCHP to the left 1/2".	0	08AUG08	07AUG08	1	4
S31-7.01	C	Position AirLoc Wedgemount lowered position.	0	08AUG08	07AUG08	1	4
S31-7.02	C	move the right MCHP over the VV	2	08AUG08	11AUG08	1	4
S31-7.03	C	move the left MCHP to its final position.	1	12AUG08	12AUG08	1	4
S31-7.04	C	engage the preinstalled Type-A flange bushings.	1	13AUG08	13AUG08	1	4
S31-7.05	C	Temporary fasteners bring the parts together.	0	14AUG08	13AUG08	1	4
S31-7.06	C	AirLoc Wedgemount leveler up to take the load.	1	14AUG08	14AUG08	1	4
S31-7.07	C	Remove laser screens	0	15AUG08	14AUG08	1	4
S31-7.08	C	Install temp scaffolding to install flange hw	4	15AUG08	20AUG08	1	4
S31-7.09	C	Install bolts, alumina and inboard weld shims.	2	21AUG08	22AUG08	1	4
S31-7.1	C	Tighten flange fasteners to 50%	1	25AUG08	25AUG08	1	4
S31-7.11	C	"wiggle" test Tighten bolt and recheck.	1	26AUG08	26AUG08	1	4
S31-7.12	C	Perform metrology measurements	5	27AUG08	03SEP08	1	4
S31-7.13	C	Perform position adjustments right side MCHP	3	04SEP08	08SEP08	1	4
S31-7.14	C	Remove SISSCO actuator from right MCHP.	0	09SEP08	08SEP08	1	4
S31-7.15	C	Pre-fit & Install bushings	10	28AUG08	11SEP08	1	4
S31-7.16	C	Tighten nuts 100%. & Measure	1	12SEP08	12SEP08	1	4
S31-8.01	C	partially weld the inboard shim.	15	15SEP08	03OCT08	1	4
S31-8.02	C	Final complete MC scan verify period alignment.	5	06OCT08	10OCT08	1	4
S31-9.01	C	Attach VV permanent vertical supports	2	13OCT08	14OCT08	1	4
S31-9.02	C	Attach temporary VV vertical supports	1	15OCT08	15OCT08	1	4
S31-9.03	C	Transfer load to vertical supports.	1	16OCT08	16OCT08	1	4
S31-9.04	C	Install VV lateral supports and align	4	17OCT08	22OCT08	1	4
S31-9.05	C	Prepare VVSA for transport.	2	23OCT08	24OCT08	1	4
S31-10.01	C	transfer the unit to the transfer support frame	2	27OCT08	28OCT08	1	4
S31-10.02	C	Transfer Period 1 to Station 5 in NCSX TC	1	29OCT08	29OCT08	1	4
Station 3-Assemble Mod Coils and VVSA-FPH#2							
S32-1.01	C	Install Station 3 site monuments	3	30OCT08	03NOV08	1	4
S32-1.02	C	Install floor mounted tracks and VV base support	5	04NOV08	10NOV08	1	4
S32-1.03	C	Establish the MCHP CG location.	2	11NOV08	12NOV08	1	4
S32-2.01	C	Install MCHP support cart assemblies	4	13NOV08	18NOV08	1	4
S32-2.02	C	Verify cart motion.	2	19NOV08	20NOV08	1	4
S32-2.03	C	Install adjustor bar support weldment	0	21NOV08	20NOV08	1	4
S32-2.04	C	Position left MCHP on the cart assembly	1	01DEC08	01DEC08	1	0
S32-2.05	C	Secure left MCHP on support cart base.	2	02DEC08	03DEC08	1	0
S32-2.06	C	Measure monuments on left MCHP and walls	5	04DEC08	10DEC08	1	0
S32-2.07	C	Set positioning stop on the cart	1	11DEC08	11DEC08	1	0
S32-3.01	C	Move right base support cart to its final positi	1	12DEC08	12DEC08	1	0
S32-3.02	C	Lift the right side MCHP and position	1	15DEC08	15DEC08	1	0
S32-3.03	C	Temporary fasteners bring the parts together.	0	16DEC08	15DEC08	1	0
S32-3.04	C	AirLoc Wedgemount leveler to take load.	0	16DEC08	15DEC08	1	0
S32-3.05	C	Install temp scaffolding to install flange hw	1	16DEC08	16DEC08	1	0
S32-3.06	C	Install bolts and shims	1	17DEC08	17DEC08	1	0
S32-3.07	C	Tighten flange fasteners to 50%	1	18DEC08	18DEC08	1	0
S32-3.08	C	Perform metrology measurements	5	19DEC08	05JAN09	1	0
S32-3.09	C	Perform position adjust on right side MCHP	2	06JAN09	07JAN09	1	0
S32-3.1	C	Verify position of the VV support hanger	3	08JAN09	12JAN09	1	0
S32-3.11	C	Remove flange hardware and temp platforms	1	13JAN09	13JAN09	1	0
S32-4.01	C	EMeasure monuments on the MCHP's &walls.	2	14JAN09	15JAN09	1	0
S32-4.02	C	Place all of the laser screens	2	16JAN09	19JAN09	1	0
S32-4.03	C	Determine laser alignment.	1	20JAN09	20JAN09	1	0
S32-4.04	C	mount the milar on the screens.	1	21JAN09	21JAN09	1	0
S32-4.05	C	Disengage MCHP's to move the left MCHP.	1	22JAN09	22JAN09	1	0
S32-4.06	C	Remove both MCHP's.	2	23JAN09	26JAN09	1	0
S32-5.01	C	Remove the adjustor bar support from left side.	0	27JAN09	26JAN09	1	0
S32-5.02	C	Install VV NBI port support stand.	2	27JAN09	28JAN09	1	0
S32-5.03	C	Install VVSA to base support	1	29JAN09	29JAN09	1	0
S32-5.04	C	Secure the VVSA to base & NBI port sprt stand.	1	30JAN09	30JAN09	2	0
S32-6.01	C	Install bumper protection components on the VV	1	30JAN09	30JAN09	2	0
S32-6.02	C	Position AirLoc Wedgemount in lower position.	0	02FEB09	30JAN09	2	0
S32-6.03	C	move the left MCHP over the VV.	1	02FEB09	02FEB09	2	0
S32-6.04	C	Re-install the left adjustor bar.	0	03FEB09	02FEB09	2	0
S32-6.05	C	Make adjustments to properly align MCHP.	1	03FEB09	03FEB09	2	0
S32-6.06	C	Transfer load to the AirLoc Wedgemount leveler.	0	04FEB09	03FEB09	2	0
S32-6.07	C	move the MCHP to the left 1/2".	0	04FEB09	03FEB09	2	0
S32-7.01	C	Position AirLoc Wedgemount lowered position.	0	04FEB09	03FEB09	2	0
S32-7.02	C	move the right MCHP over the VV	1	04FEB09	04FEB09	2	0
S32-7.03	C	move the left MCHP to its final position.	1	04FEB09	04FEB09	2	0
S32-7.04	C	engage the preinstalled Type-A flange bushings.	1	04FEB09	04FEB09	2	0
S32-7.05	C	Temporary fasteners bring the parts together.	0	05FEB09	04FEB09	2	0
S32-7.06	C	AirLoc Wedgemount leveler up to take the load.	1	05FEB09	05FEB09	2	0
S32-7.07	C	Remove laser screens	0	06FEB09	05FEB09	2	0
S32-7.08	C	Install temp scaffolding to install flange hw	2	06FEB09	09FEB09	2	0
S32-7.09	C	Install bolts, alumina and inboard weld shims.	1	10FEB09	10FEB09	2	0
S32-7.1	C	Tighten flange fasteners to 50%	1	11FEB09	11FEB09	2	0
S32-7.11	C	"wiggle" test Tighten bolt and recheck.	1	11FEB09	11FEB09	2	0
S32-7.12	C	Perform metrology measurements	2	12FEB09	13FEB09	2	0
S32-7.13	C	Perform position adjustments right side MCHP	2	16FEB09	17FEB09	2	0
S32-7.14	C	Remove SISSCO actuator from right MCHP.	0	18FEB09	17FEB09	2	0
S32-7.15	C	Pre-fit & Install bushings	5	12FEB09	18FEB09	2	0
S32-7.16	C	Tighten nuts 100%. & Measure	1	19FEB09	19FEB09	2	0
S32-8.01	C	partially weld the inboard shim.	4	20FEB09	25FEB09	2	0
S32-8.02	C	Final complete MC scan verify period alignment.	2	26FEB09	27FEB09	2	0
S32-9.01	C	Attach VV permanent vertical supports	1	02MAR09	02MAR09	2	0
S32-9.02	C	Attach temporary VV vertical supports	1	03MAR09	03MAR09	2	0
S32-9.03	C	Transfer load to vertical supports.	1	04MAR09	04MAR09	2	0
S32-9.04	C	Install VV lateral supports and align	2	05MAR09	06MAR09	2	0
S32-9.05	C	Prepare VVSA for transport.	1	09MAR09	09MAR09	2	0
S32-10.01	C	transfer the unit to the transfer support frame	1	10MAR09	10MAR09	2	0
S32-10.02	C	Transfer Period 2 to Station 5 in NCSX TC	1	11MAR09	11MAR09	2	0
Station 3-Assemble Mod Coils and VVSA-FPH#3							
S33-1.01	C	Install Station 3 site monuments	2	12MAR09	13MAR09	2	0
S33-1.02	C	Install floor mounted tracks and VV base support	2	16MAR09	17MAR09	2	0
S33-1.03	C	Establish the MCHP CG location.	1	18MAR09	18MAR09	2	0
S33-2.01	C	Install MCHP support cart assemblies	2	19MAR09	20MAR09	2	0
S33-2.02	C	Verify cart motion.	1	23MAR09	23MAR09	2	0
S33-2.03	C	Install adjustor bar support weldment	0	24MAR09	23MAR09	2	0
S33-2.04	C	Position left MCHP on the cart assembly	1	24MAR09	24MAR09	2	0
S33-2.05	C	Secure left MCHP on support cart base.	1	25MAR09	25MAR09	2	0
S33-2.06	C	Measure monuments on left MCHP and walls	2	26MAR09	27MAR09	2	0
S33-2.07	C	Set positioning stop on the cart	1	30MAR09	30MAR09	2	0
S33-3.01	C	Move right base support cart to its final positi	1	31MAR09	31MAR09	2	0
S33-3.02	C	Lift the right side MCHP and position	1	01APR09	01APR09	2	0
S33-3.03	C	Temporary fasteners bring the parts together.	0	02APR09	01APR09	2	0
S33-3.04	C	AirLoc Wedgemount leveler to take load.	0	02APR09	01APR09	2	0
S33-3.05	C	Install temp scaffolding to install flange hw	1	02APR09	02APR09	2	0
S33-3.06	C	Install bolts and shims	1	02APR09	02APR09	2	0
S33-3.07	C	Tighten flange fasteners to 50%	1	03APR09	03APR09	2	0
S33-3.08	C	Perform metrology measurements	2	06APR09	07APR09	2	0
S33-3.09	C	Perform position adjust on right side MCHP	1	08APR09	08APR09	2	0
S33-3.1	C	Verify position of the VV support hanger	2	09APR09	10APR09	2	0
S33-3.11	C	Remove flange hardware and temp platforms	2	09APR09	10APR09	2	0
S33-4.01	C	EMeasure monuments on the MCHP's &walls.	1	13APR09	13APR09	2	0
S33-4.02	C	Place all of the laser screens	1	14APR09	14APR09	2	0
S33-4.03	C	Determine laser alignment.	1	15APR09	15APR09	2	0
S33-4.04	C	mount the milar on the screens.	0	16APR09	15APR09	2	0
S33-4.05	C	Disengage MCHP's to move the left MCHP.	1	16APR09	16APR09	2	0
S33-4.06	C	Remove both MCHP's.	1	17APR09	17APR09	2	0
S33-5.01	C	Remove the adjustor bar support from left side.	0	20APR09	17APR09	2	0
S33-5.02	C	Install VV NBI port support stand.	1	20APR09	20APR09	2	0
S33-5.03	C	Install VVSA to base support	1	21APR09	21APR09	2	0
S33-5.04	C	Secure the VVSA to base & NBI port sprt stand.	1	22APR09	22APR09	2	0
S33-6.01	C	Install bumper protection components on the VV	1	23APR09	23APR09	2	0
S33-6.02	C	Position AirLoc Wedgemount in lower position.	0	24APR09	23APR09	2	0
S33-6.03	C	move the left MCHP over the VV.	1	24APR09	24APR09	2	0
S33-6.04	C	Re-install the left adjustor bar.	0	27APR09	24APR09	2	0
S33-6.05	C	Make adjustments to properly align MCHP.	1	27APR09	27APR09	2	0
S33-6.06	C	Transfer load to the AirLoc Wedgemount leveler.	0	28APR09	27APR09	2	0
S33-6.07	C	move the MCHP to the left 1/2".	0	28APR09	27APR09	2	0
S33-7.01	C	Position AirLoc Wedgemount lowered position.	0	28APR09	27APR09	2	0
S33-7.02	C	move the right MCHP over the VV	1	28APR09	28APR09	2	0
S33-7.03	C	move the left MCHP to its final position.	1	28APR09	28APR09	2	0
S33-7.04	C	engage the preinstalled Type-A flange bushings.	1	29APR09	29APR09	2	0
S33-7.05	C	Temporary fasteners bring the parts together.	0	30APR09	29APR09	2	0
S33-7.06	C	AirLoc Wedgemount leveler up to take the load.	1	30APR09	30APR09	2	0
S33-7.07	C	Remove laser screens	0	01MAY09	30APR09	2	0
S33-7.08	C	Install temp scaffolding to install flange hw	2	29APR09	30APR09	2	0
S33-7.09	C	Install bolts, alumina and inboard weld shims.	1	01MAY09	01MAY09	2	0
S33-7.1	C	Tighten flange fasteners to 50%	1	04MAY09	04MAY09	2	0
S33-7.11	C	"wiggle" test Tighten bolt and recheck.	1	05MAY09	05MAY09	2	0
S33-7.12	C	Perform metrology measurements	2	06MAY09	07MAY09	2	0
S33-7.13	C	Perform position adjustments right side MCHP	2	08MAY09	11MAY09	2	0
S33-7.14	C	Remove SISSCO actuator from right MCHP.	0	12MAY09	11MAY09	2	0
S33-7.15	C	Pre-fit & Install bushing.	5	06MAY09	12MAY09	2	0
S33-7.16	C	Tighten nuts 100%. & Measure	1	13MAY09	13MAY09	2	0
S33-8.01	C	partially weld the inboard shim.	7	14MAY09	22MAY09	2	0
S33-8.02	C	Final complete MC scan verify period alignment.	3	26MAY09	28MAY09	2	0
S33-9.01	C	Attach VV permanent vertical supports	1	29MAY09	29MAY09	2	0
S33-9.02	C	Attach temporary VV vertical supports	1	01JUN09	01JUN09	2	0
S33-9.03	C	Transfer load to vertical supports.	1	02JUN09	02JUN09	2	0
S33-9.04	C	Install VV lateral supports and align	1	03JUN09	03JUN09	2	0
S33-9.05	C	Prepare VVSA for transport.	1	04JUN09	04JUN09	2	0
S33-10.01	C	transfer the unit to the transfer support frame	1	05JUN09	05JUN09	2	0
S33-10.02	C	Transfer Period 3 to Station 5 in NCSX TC	1	08JUN09	08JUN09	2	0

Activity ID	cp	Activity Description	Duration (work days	Baseline Start	Baseline Finish	Shifts	Total Float
Job: 1815 - Field Period Assy -Station 5-VIOLA							
Station 5- Final FP Assy -FPi#1 (in NCSX TC)							
R1810-5109	C	Begin Station 5 Operations	0		29OCT08	1	5
SS1-1.01	C	cut off short dome	2	30OCT08	31OCT08	1	5
SS1-1.02	C	Install insulation system around all ports.	0	03NOV08	31OCT08	1	5
SS1-1.03	C	Install heat tape and theomocouples on all ports	0	03NOV08	31OCT08	1	5
SS1-2.01	C	Install period support fixture	2	03NOV08	04NOV08	1	5
SS1-2.02	C	Install FPA on support stand.	2	05NOV08	06NOV08	1	5
SS1-2.03	C	Install external working platforms	4	07NOV08	12NOV08	1	5
SS1-2.04	C	Install internal VV working platforms	3	13NOV08	17NOV08	1	5
SS1-3.01	C	Install the domes (left and right side),	2	18NOV08	19NOV08	1	5
SS1-3.02	C	Install small dome ports remaining circ ports.	30	20NOV08	13JAN09	1	5
SS1-3.03	C	Leak check each port after it is welded.	30	15DEC08	03FEB09	1	5
SS1-4.01	C	Install boots on ports except for the two port	16	23JAN09	13FEB09	1	5
SS1-5.01	C	Install MC lead connections to MC's (in job 7503	0	16FEB09	13FEB09	1	5
SS1-5.02	C	Install MC coolant lines on each MC	6	16FEB09	23FEB09	2	5
SS1-5.03	C	Platforms may need to be altered	2	24FEB09	25FEB09	2	5
SS1-6.01	C	Rotate 2 TF coils over the MC on the right side	1	26FEB09	26FEB09	2	5
SS1-6.02	C	Attach the temp support at end of Type-C MC	1	27FEB09	27FEB09	2	5
SS1-6.03	C	Lower leveler pad disengage base of MC right sid	0	02MAR09	27FEB09	2	5
SS1-6.04	C	Install TF support brackets	1	02MAR09	02MAR09	2	5
SS1-6.05	C	Secure First TF assy	1	03MAR09	03MAR09	2	5
SS1-6.06	C	Install TF support brackets	1	04MAR09	04MAR09	2	5
SS1-6.07	C	Secure 2nd TF coil	1	05MAR09	05MAR09	2	5
SS1-6.08	C	Install machine support plates	1	06MAR09	06MAR09	2	5
SS1-6.09	C	Reinstall leveler pad	0	09MAR09	06MAR09	2	5
SS1-6.1	C	Installed one side of the TF support brackets	1	09MAR09	09MAR09	2	5
SS1-7.01	C	The TF installation on the left side	7	10MAR09	18MAR09	2	5
SS1-8.01	C	Perform a fit-up check of the four TF coils	2	19MAR09	20MAR09	2	5
SS1-9.01	C	Tack weld the left and right port 4's.	1	23MAR09	23MAR09	2	5
SS1-9.02	C	Install boots on both port 4's.	2	24MAR09	25MAR09	2	5
SS1-10.01	C	Install PF coil support structure	4	26MAR09	31MAR09	2	5
SS1-11.01	C	Install IMC coolant manifold	2	01APR09	02APR09	2	5
SS1-11.02	C	Connect MC coolant lines to the manifold	10	01APR09	16APR09	2	5
SS1-12.01	C	Install Rogowski coils	3	17APR09	21APR09	2	5
SS1-13.01	C	Obtain set of Period 1 align fiducial positions	2	22APR09	23APR09	2	5
SS1-13.02	C	align to tooling balls on each MCHP	1	24APR09	24APR09	2	5
SS1-13.03	C	bring the VV into proper alignment	2	27APR09	28APR09	2	5
SS1-13.04	C	Install or identify three primary fiducials	1	29APR09	29APR09	2	5
SS1-13.05	C	Make a final measurement of all fiducials	2	30APR09	01MAY09	2	5
SS1-13.11	C	Check Assembly (bolts, etc)	3	04MAY09	06MAY09	2	5
SS1-13.12	C	Check Diagnostics (Loops, thermocouples)	2	07MAY09	08MAY09	2	5
SS1-13.13	C	Check manifolds (pressure, flow, etc.)	3	11MAY09	13MAY09	2	5
SS1-13.14	C	Check 6 modcoils (voltage etc)	3	14MAY09	18MAY09	2	5
SS1-13.15	C	Check trim coils (voltage etc)	2	19MAY09	20MAY09	2	5
SS1-13.16	C	Check TF coils (voltage etc)	3	21MAY09	26MAY09	2	5
SS1-14.01	C	Install crane rigging to completed Period assy	1	27MAY09	27MAY09	2	5
SS1-14.02	C	Remove platforms	1	28MAY09	28MAY09	2	5
SS1-14.03	C	Transfer Period 1 to Station 6 in NCSX ITC.	1	29MAY09	29MAY09	2	5
Station 5- Final FP Assy -FPi#2 (in NCSX TC)							
SS2-1.01	C	cut off short dome	2	12MAR09	13MAR09	1	9
SS2-1.02	C	Install insulation system around all ports.	0	16MAR09	13MAR09	1	9
SS2-1.03	C	Install heat tape and theomocouples on all ports	0	16MAR09	13MAR09	1	9
SS2-2.01	C	Install period support fixture	2	16MAR09	17MAR09	1	9
SS2-2.02	C	Install FPA on support stand.	2	18MAR09	19MAR09	1	9
SS2-2.03	C	Install external working platforms	4	20MAR09	25MAR09	1	9
SS2-2.04	C	Install internal VV working platforms	3	26MAR09	30MAR09	1	9
SS2-3.01	C	Install the domes (left and right side),	2	31MAR09	01APR09	1	9
SS2-3.02	C	Install small dome ports remaining circ ports.	30	02APR09	13MAY09	1	9
SS2-3.03	C	Leak check each port after it is welded.	30	23APR09	04JUN09	1	9
SS2-4.01	C	Install boots on ports except for the two port	16	28MAY09	16JUN09	1	9
SS2-5.01	C	Install MC lead connections on each of the MC's	1	17JUN09	17JUN09	2	9
SS2-5.02	C	Install MC coolant lines on each MC	6	18JUN09	25JUN09	2	9
SS2-5.03	C	Platforms may need to be altered	1	26JUN09	26JUN09	2	9
SS2-6.01	C	Rotate 2 TF coils over the MC on the right side	1	29JUN09	29JUN09	2	9
SS2-6.02	C	Attach the temp support at end of Type-C MC	1	30JUN09	30JUN09	2	9
SS2-6.03	C	Lower leveler pad disengage base of MC right sid	0	01JUL09	30JUN09	2	9
SS2-6.04	C	Install TF support brackets	1	01JUL09	01JUL09	2	9
SS2-6.05	C	Secure First TF assy	1	02JUL09	02JUL09	2	9
SS2-6.06	C	Install TF support brackets	1	06JUL09	06JUL09	2	9
SS2-6.07	C	Secure 2nd TF coil	1	07JUL09	07JUL09	2	9
SS2-6.08	C	Install machine support plates	2	08JUL09	09JUL09	2	9
SS2-6.09	C	Reinstall leveler pad	0	10JUL09	09JUL09	2	9
SS2-6.1	C	Installed one side of the TF support brackets	1	10JUL09	10JUL09	2	9
SS2-7.01	C	The TF installation on the left side	6	13JUL09	20JUL09	2	9
SS2-8.01	C	Perform a fit-up check of the four TF coils	3	21JUL09	23JUL09	2	9
SS2-9.01	C	Tack weld the left and right port 4's.	1	24JUL09	24JUL09	2	9
SS2-9.02	C	Install boots on both port 4's.	2	27JUL09	28JUL09	2	9
SS2-10.01	C	Install PF coil support structure	4	29JUL09	03AUG09	2	9
SS2-11.01	C	Install IMC coolant manifold	2	04AUG09	05AUG09	2	9
SS2-11.02	C	Connect MC coolant lines to the manifold	10	06AUG09	19AUG09	2	9
SS2-12.01	C	Install Rogowski coils	3	20AUG09	24AUG09	2	9
S21-9.01	C	Install trim coil and supports	3	25AUG09	27AUG09	2	9
SS2-13.01	C	Obtain set of Period 1 align fiducial positions	2	28AUG09	31AUG09	2	9
SS2-13.02	C	align to tooling balls on each MCHP	1	01SEP09	01SEP09	2	9
SS2-13.03	C	bring the VV into proper alignment	2	02SEP09	03SEP09	2	9
SS2-13.04	C	Install or identify three primary fiducials	1	04SEP09	04SEP09	2	9
SS2-13.05	C	Make a final measurement of all fiducials	2	08SEP09	09SEP09	2	9
SS2-13.11	C	Check Assembly (bolts, etc)	3	10SEP09	14SEP09	2	9
SS2-13.12	C	Check Diagnostics (Loops, thermocouples)	2	15SEP09	16SEP09	2	9
SS2-13.13	C	Check manifolds (pressure, flow, etc.)	3	17SEP09	21SEP09	2	9
SS2-13.14	C	Check 6 modcoils (voltage etc)	3	22SEP09	24SEP09	2	9
SS2-13.15	C	Check trim coils (voltage etc)	2	25SEP09	28SEP09	2	9
SS2-13.16	C	Check TF coils (voltage etc)	2	29SEP09	30SEP09	2	9
SS2-14.01	C	Install crane rigging to completed Period assy	1	01OCT09	01OCT09	2	9
SS2-14.02	C	Remove platforms	1	02OCT09	02OCT09	2	9
SS2-14.03	C	Transfer Period 2 to Station 6 in NCSX ITC.	1	05OCT09	05OCT09	2	9
Station 5- Final FP Assy -FPi#3 (in NCSX TC)							
SS3-1.01	C	cut off short dome	1	09JUN09	09JUN09	2	0
SS3-1.02	C	Install insulation system around all ports.	0	10JUN09	09JUN09	2	0
SS3-1.03	C	Install heat tape and theomocouples on all ports	0	10JUN09	09JUN09	2	0
SS3-2.01	C	Install period support fixture	1	10JUN09	10JUN09	2	0
SS3-2.02	C	Install FPA on support stand.	1	11JUN09	11JUN09	2	0
SS3-2.03	C	Install external working platforms	2	12JUN09	15JUN09	2	0
SS3-2.04	C	Install internal VV working platforms	2	16JUN09	17JUN09	2	0
SS3-3.01	C	Install the domes (left and right side),	1	18JUN09	18JUN09	2	0
SS3-3.02	C	Install small dome ports remaining circ ports.	15	19JUN09	10JUL09	2	0
SS3-3.03	C	Leak check each port after it is welded.	15	30JUN09	21JUL09	2	0
SS3-4.01	C	Install boots on ports except for the two port	8	16JUL09	27JUL09	2	0
SS3-5.01	C	Install MC lead connections on each of the MC's	1	28JUL09	28JUL09	2	0
SS3-5.02	C	Install MC coolant lines on each MC	6	29JUL09	05AUG09	2	0
SS3-5.03	C	Platforms may need to be altered	2	06AUG09	07AUG09	2	0
SS3-6.01	C	Rotate 2 TF coils over the MC on the right side	1	10AUG09	10AUG09	2	0
SS3-6.02	C	Attach the temp support at end of Type-C MC	1	11AUG09	11AUG09	2	0
SS3-6.03	C	Lower leveler pad disengage base of MC right sid	0	12AUG09	11AUG09	2	0
SS3-6.04	C	Install TF support brackets	1	12AUG09	12AUG09	2	0
SS3-6.05	C	Secure First TF assy	1	13AUG09	13AUG09	2	0
SS3-6.06	C	Install TF support brackets	1	14AUG09	14AUG09	2	0
SS3-6.07	C	Secure 2nd TF coil	1	17AUG09	17AUG09	2	0
SS3-6.08	C	Install machine support plates	1	18AUG09	18AUG09	2	0
SS3-6.09	C	Reinstall leveler pad	0	19AUG09	18AUG09	2	0
SS3-6.1	C	Installed one side of the TF support brackets	1	19AUG09	19AUG09	2	0
SS3-7.01	C	The TF installation on the left side	6	20AUG09	27AUG09	2	0
SS3-8.01	C	Perform a fit-up check of the four TF coils	3	28AUG09	01SEP09	2	0
SS3-9.01	C	Tack weld the left and right port 4's.	1	02SEP09	02SEP09	2	0
SS3-9.02	C	Install boots on both port 4's.	2	03SEP09	04SEP09	2	0
SS3-10.01	C	Install PF coil support structure	4	08SEP09	11SEP09	2	0
SS3-11.01	C	Install IMC coolant manifold	2	14SEP09	15SEP09	2	0
SS3-11.02	C	Connect MC coolant lines to the manifold	10	16SEP09	29SEP09	2	0
SS3-12.01	C	Install Rogowski coils	3	30SEP09	02OCT09	2	0
SZ2-9.01	C	Install trim coil	3	05OCT09	07OCT09	2	0
SS3-13.01	C	Obtain set of Period 1 align fiducial positions	2	08OCT09	09OCT09	2	0
SS3-13.02	C	align to tooling balls on each MCHP	1	12OCT09	12OCT09	2	0
SS3-13.03	C	bring the VV into proper alignment	2	13OCT09	14OCT09	2	0
SS3-13.04	C	Install or identify three primary fiducials	1	15OCT09	15OCT09	2	0
SS3-13.05	C	Make a final measurement of all fiducials	3	16OCT09	20OCT09	2	0
SS3-13.11	C	Check Assembly (bolts, etc)	2	21OCT09	22OCT09	2	0
SS3-13.12	C	Check Diagnostics (Loops, thermocouples)	3	23OCT09	27OCT09	2	0
SS3-13.13	C	Check manifolds (pressure, flow, etc.)	2	28OCT09	29OCT09	2	0
SS3-13.14	C	Check 6 modcoils (voltage etc)	3	30OCT09	03NOV09	2	0
SS3-13.15	C	Check trim coils (voltage etc)	2	04NOV09	05NOV09	2	0
SS3-13.16	C	Check TF coils (voltage etc)	3	06NOV09	10NOV09	2	0
SS3-14.01	C	Install crane rigging to completed Period assy	1	11NOV09	11NOV09	2	0
SS3-14.02	C	Remove platforms	1	12NOV09	12NOV09	2	0
SS3-14.03	C	Transfer Period 3 to Station 6 in NCSX ITC.	1	13NOV09	13NOV09	2	0
R1810-5333	C	Last field period assembled	0		13NOV09	2	0



Activity ID	cp	Activity Description	Duration (work days	Baseline Start	Baseline Finish	Shifts	Total Float
7 - Test Cell Preparation and Machine Assy							
75 - Test Cell and Basement Assembly Operations							
Job: 7503 - Machine Assembly (station 6)-PERRY							
7501-10	C	Fabricate/Assemble assembly structure	30	04DEC08	23JAN09	1	13
7501-10.1	C	Fab struct to go between assy sleds&FPA's	20	04DEC08	09JAN09	1	23
7501-10.2	C	Assemble 3 FPA support stands	15	12NOV08*	04DEC08	1	12
7501-10.3	C	Assemble 3 VV spool piece support stands	10	05DEC08	18DEC08	1	12
7501-10.4	C	Assemble machine base structure	10	19DEC08	12JAN09	1	12
7501-10.5	C	Assemble 3 FPA installation carts	10	13JAN09	26JAN09	1	12
7501-10.6	C	Fab 3 laser support poles	30	20NOV08*	13JAN09	1	70
7501-10.7	C	Fab 3 concrete blocks for testing assy struct	12	14JAN09	29JAN09	1	70
7503-010	C	Begin Assembly Activities	0	26JAN09*		1	3
7503-020	C	Install Permanent support base and columns	10	26JAN09	06FEB09	1	3
7503-015	C	Install Temp Assembly Structure	15	09FEB09	27FEB09	1	3
7503-060	C	Install Lower PF 4,5&6 into prelim position	1	02MAR09	02MAR09	1	3
7503-070	C	Install 3 Spool Pieces on fixt & test movement	10	03MAR09	16MAR09	1	3
7501-10.9	C	Install test cell metrology site monuments & chk	20	17MAR09	13APR09	1	3
7501-10.10	C	Test TC floor deflections with concrete block	15	14APR09	04MAY09	1	3
7501-10.8	C	Exercise assy struc with concrete blocks & metro	20	05MAY09	02JUN09	2	3
7503-080A	C	FPA-1 Installation and assembly test	20	03JUN09	30JUN09	1	3
7503-080	C	FPA-1 Installed on sleds	0		30JUN09	1	3
7501-11	C	Exercise assy struc w/FPA-1 before start of assy	40	01JUL09	26AUG09	1	3
7503-415.7	C	Measure vsl gaps to determ spool piece dimension	18	27AUG09	22SEP09	1	3
7503-415.0	C	Spool piece installation test	20	23SEP09	20OCT09	1	3
7503-416.1	C	Machine Flange A & B of Spool Piece 1	30	21OCT09	03DEC09	1	3
7503-416.2	C	Machine Flange A & B of Spool Piece 2	30	04DEC09	26JAN10	1	3
7503-416.3	C	Machine Flange A & B of Spool Piece 3	30	27JAN10	09MAR10	1	3
7503-110A	C	FPA-2 Installation and assembly test	20	06OCT09	02NOV09	1	9
7503-110	C	FPA-2 Installed on sleds	0		02NOV09	1	9
7503-150A	C	FPA-3 Installation and assembly test	20	16NOV09	15DEC09	1	0
7503-150	C	FPA-3 Installed on sleds	0		15DEC09	1	0
7503-120	C	Test movement of FPA's incl position checks.	5	16DEC09	22DEC09	1	0
7503-400	C	Install inboard and outboard shims	6	04JAN10	11JAN10	1	0
7503-402	C	Move all FPA's together, chk fitup,tack shims	6	12JAN10	19JAN10	1	0
7503-404	C	Weld inboard shims on mating flanges	6	20JAN10	27JAN10	1	0
7503-406	C	Install TF coils at ends of each FPA	6	28JAN10	04FEB10	1	0
7503-410	C	Install spacer supports and spacers	2	05FEB10	08FEB10	1	0
7503-412	C	Move FPA's & spacers together/chk fitup	6	09FEB10	16FEB10	1	0
7503-414	C	Remove Spacers & Machine spacers to fit	4	17FEB10	22FEB10	1	0
7503-415	C	Re-install spacers	2	23FEB10	24FEB10	1	0
7503-160	C	Position all FPA's / Spool Pieces @ MC Interface	6	25FEB10	04MAR10	1	0
7503-090	C	Install local Platforms around FPA-1	2	05MAR10	08MAR10	2	0
7503-130	C	Install local Platforms around FPA-2	2	09MAR10	10MAR10	2	0
7503-190	C	Install local Platforms around FPA-3	2	11MAR10	12MAR10	2	0
7503-415.5	C	MC Interface:meas holes/mark bushings fit/drilling	3	05MAR10	09MAR10	1	0
7503-415.6	C	drill eccentric custom holes in bushings	3	10MAR10	12MAR10	1	0
7503-416	C	Position Spool pieces and Bolt MC flanges	9	15MAR10	25MAR10	2	0
7503-417	C	Retorque all super nuts after 30 days	6	26APR10	03MAY10	2	0
7503-418	C	Raise permanent supports to take machine loads	8	26MAR10	06APR10	2	3
7503-419	C	Remove temporary assy structure	1	07APR10	07APR10	2	3
7503-419.1	C	Install/Level FPA's and spool piece supports	15	08APR10	28APR10	2	3
7503-419.2	C	FPA Metrology checks to assure alignment	3	04MAY10	06MAY10	2	0
7503-420	C	Mate-up and Weld spacers onto vvsa	15	07MAY10	27MAY10	2	0
7503-422	C	Weld all six port 4's in place	15	28MAY10	16JUN10	2	0
7503-422.1	C	Install E-Beam mapping & diag equipt	5	21JUN10	25JUN10	2	0
7503-240	C	Install Vacuum pumping system	3	21JUN10	23JUN10	2	2
7503-250	C	Begin Vac Vsl Pumpdown	0	28JUN10		2	0
7503-260	C	PTP Pumpdown & leak check VV	8	28JUN10	08JUL10	2	0
7503-424	C	Install TF alignment & traction ring	4	09JUL10	14JUL10	2	0
7503-426	C	Pull TF coil radially inward. Verify nose fit up	5	15JUL10	21JUL10	2	0
7503-428	C	Lock TF coils at four support locations	4	22JUL10	27JUL10	2	0
7503-430	C	Install MC structure insulation boots port 4's	5	28JUL10	03AUG10	2	0
7503-431	C	Seal gaps MC shims,cooling tubes, for insul pour	10	04AUG10	17AUG10	2	0
7503-432	C	Fill MCV/VSA annulus with pourable aerogel insul	1	18AUG10	18AUG10	2	0
7503-433.1	C	Install LN2 manifolds	5	19AUG10	25AUG10	2	16
7503-434	C	Instl in-cryostat cabling for elect pwr to coils	8	19AUG10	30AUG10	2	0
7503-436	C	Connect cabling, and I&C to MC & TF Coils	8	31AUG10	10SEP10	2	0
7503-439	C	Complete mag diag & machine I&C	5	13SEP10	17SEP10	2	0
7503-438	C	Align guide mechanism for solenoid installation	1	20SEP10	20SEP10	2	0
7503-444	C	Install solenoid support structure	1	21SEP10	21SEP10	2	0
7503-440	C	Install solenoid assembly	1	22SEP10	22SEP10	2	0
7503-442	C	Connect cabling, LN2 and&C to solenoid assy	1	23SEP10	23SEP10	2	0
7503-446	C	Install PF4L	1	24SEP10	24SEP10	2	0
7503-448	C	Connect cabling, LN2 and I&C to PF4L	1	27SEP10	27SEP10	2	0
7503-450	C	Adjust spring compression in solenoid sprt struc	1	28SEP10	28SEP10	2	0
7503-451	C	Raise lower PF 5&6 coils into final position	3	29SEP10	01OCT10	2	0
7503-452	C	Instl Upper PF 4, 5 & 6	3	04OCT10	06OCT10	2	0
7503-330	C	Begin Cryostat Installation	0	07OCT10		2	0
7503-454	C	Install cryostat base, vapor barrier port boots	5	07OCT10	13OCT10	2	0
7503-456	C	Install elec pwr, LN2, & instr feedthrus	3	14OCT10	18OCT10	2	0
7503-458	C	Integrated Electrical testing	5	19OCT10	25OCT10	2	0
7503-460	C	Instl transition box,cabling,&connect to pwr sup	5	26OCT10	01NOV10	2	34
7503-462	C	LN2 connections from coils to manifolds	5	26OCT10	01NOV10	2	8
7503-464	C	Connect coil & VV instrumentation	5	26OCT10	01NOV10	2	0
7503-466	C	Connect 150C bakeout	3	02NOV10	04NOV10	2	0
7503-470	C	Install cryostat cooling syst & instrumentation	10	12NOV10	29NOV10	2	0
7503-471	C	Install cryostat upper section, VB & port boots	5	30NOV10	06DEC10	2	0
7503-472	C	Install midplane cryostat sections & port boots	8	07DEC10	16DEC10	2	0
7503-473	C	Install cryostat circulation duct	3	17DEC10	21DEC10	2	0
730.8200	C	PTP and Cool down	3	22DEC10	03JAN11	2	0
8 - Project Oversight and Support							
82 - Project Engineering							
Job: 8205 - Dimensional Control Coordin-ELLIS							
METFY07R1	C	Dimensional control plans for station 2	65	01JUN07*	31AUG07		6
85 - Integrated Systems Testing							
Job: 8501 - Integrated Systems Testing-GENTILE							
8501-102	C	Punch list & CSIS & HIS PTP's complete,	5	01OCT10*	07OCT10	1	5
8501-103	C	PTP's complete for ECSJHCS,vac pmpg	5	08OCT10	14OCT10	1	5
8501-104	C	ACC review and ORA	5	15OCT10	21OCT10	1	5
730.1250	C	PSO Operational Readiness Assessment	0		21OCT10	1	5
8501-301	C	Configure for Startup ISTP	5	26OCT10	01NOV10	1	3
8501-305	C	Coil Testing at room temp	5	05NOV10	11NOV10	1	0
8501-106	C	Coil testing @ cryo temp, Pump-down VV	5	04JAN11	10JAN11	1	0
8501-107	C	Combined field testing, Make 1st Plasma	5	11JAN11	17JAN11	1	0
8501-108	C	Vent VV, Config for & instl e-beam mapping	5	18JAN11	24JAN11	1	0
8501-306	C	E-beam mapping	5	25JAN11	31JAN11	1	0
8501-110	C	NCSX Startup Complete	0		31JAN11	1	0
730.9000	C	CD-4	0		23DEC11*	1	0