Activity cp Activity Duration Baseline Baseline Shifts ID Description (work Start Finish days Finish days Control of the start days Control of the	Total         FY07           MAY         JUN         JUL         AUG         SEP         OCT	FY08 NOV DEC JAN FEB MAR APR MAY	UN JUL AUG SEP	FY09       OCT     NOV     DEC     JAN     FEB     MAR     APR	MAY JUN JUL	AUG SEP OCT NOV DEC JAN	FY10 FEB MAR APR MAY	JUN JUL AUG SEF	FY11       OCT     NOV     DEC     JAN     FEB     MAR     APR	MAY         JUN         JUL         AUG         SEP         OCT         NOV	I2 DEC JAN
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											
1421-3075       C       Setup test fixture & perform JHA & pre-job brief       2       27JUL07*       30JUL07         1421-3077       C       Meas joint deflect vs preload & loss of preload       3       31JUL07       02AUG07         1421-3079       C       Measure joint deflect & preload v. temp @80K       3       03AUG07       07AUG07	7     Setup test fixture &perform JHA & pre-job b       7     Meas joint deflect vs preload & loss of pre       7     Measure joint deflect & preload v. temp	e80K									
1421-3084       C       Measure joint deflection&preload v. cooldown cyc       3       08AUG07       10AUG07         1421-3087       C       Perform pullout tests for tapped holes       3       13AUG07       15AUG07         1421-3084       C       Measure joint deflection&preload v. cooldown cyc       3       08AUG07       10AUG07         1421-3087       C       Perform pullout tests for tapped holes       3       13AUG07       15AUG07         1421-3084       C       Measure joint deflect % preload v. time (down) at the set of the	7 7 7 7 7 7 7 7 7 7 7 7 7 7	oldown cyc									
1421-3001     C     Interest of precoder V. time (days) at     20     10A0307     135EP07       1421-3090     C     Document&conduct review of test results     5     14SEP07     20SEP07       Outboard Interface-Bolted Joint Tests-Shear	7 Document&conduct review of test results										
1421-3112BCProcure/rab parts for test&initial assembly60°01MAY0725JUL071421-3115BCAssemble & test3127JUL0710SEP071421-3119BCDocument test results1511SEP07010CT07	0     Assemble & test       0     Document test results										
Inboard Interface-AB/BC/AA           INTRF-049         C         prepare winding form mods for weld clamp bolts         50         13JUN07*         22AUG07           INTRF-050         C         Complete Shim fabrication drawings (ORNL)         40         27JUN07*         22AUG07	3 3 3 3	vings (ORNL)									
INTRF-051         C         Release info for procurement of shim material         64*         01MAY07         31JUL07           INTRF-054         C         FDR prep AB/BC/AA inboard shims         5         28AUG07         04SEP07           INTRF-055         C         FDR AB/BC/AA inboard shims         0         04SEP07	18 FDR prep AB/BC/AA inboard shims										
Overall MC Interface         1421-3134       C       Issue interface dwgs for comment       75       01MAY07       15AUG07         1421-3135       C       FDR Prep       13       16AUG07       04SEP07	0 FDR Prep										
1421-3136       C       Conduct BC,AB,AA,Interface FDR incl job 1416       0       04SEP07         1421-3138       C       Resolve issues, release assembly spec&drawings       5       05SEP07       11SEP07	0       Conduct BC,AB,AA,Interface FDR incl job 1416         0       Resolve issues, release assembly spec&drawings										
Job: 1806 - FP Assembly specs and drawings-COLE Station 2-Modular Coil Sub- Assembly 1803-201 C Station 2 Assembly Specification 65 11 IIIN07* 11SEP07	O Station 2 Assembly St										
1803-205       C       Station 2 Assembly Drawings       65       11JUN07*       11SEP07         Job: 1802 - FP Assy Oversight&Support-VIOLA         Station 2 procedures.JHA.ACC.Training.Prep	14 Station 2 Assembly Dr	awings									
R1802-207       C       Procedures written & approved       14       12SEP07       01OCT07         R1802-209       C       JHA completed       6       02OCT07       09OCT07         R1802-211       C       Training needs identified & released       6       10OCT07       17OCT07	0 Procedures written & approved JHA completed										
R1802-213     C     ACC review completed     2     180CT07     190CT07       R1802-215     C     Pre-job brief completed     1     220CT07     220CT07	0   ACC review completed     0   Pre-job brief completed										
Image: Station 2 operational       1       230C107       230C107         Job:1810-Field Period Assy -Station 1,2,3       VIOLA         Station 2 Trials & Development       06 UU 07       06 UU 07	12 Complete CAD model of wold test specimen										
PHIL-04       C       water jet cut shims for A/B flange weld test       3       09JUL07       11JUL07         PHIL-12       C       Weld fiducials on A6 & B6       2       10JUL07*       11JUL07	13     water jet cut shims for A/B flange weld test       13     Weld fiducials on A6 & B6										
PHIL-13         C         Measure A6 casting         2         12JUL07         13JUL07           PHIL-15         C         Remove A6 & lower & grout wedge         4         16JUL07         19JUL07           PHIL-16         C         Re-mount A6 on wedge         2         20JUL07         23JUL07	13   Measure A6 casting     13   Remove A6 & lower & grout wedge     13   Re-mount A6 on wedge										
PHIL-17       C       Re-measure A6       2       24JUL07       25JUL07         PHIL-18       C       Measure B6 on wedge       2       26JUL07       27JUL07         PHIL-22       C       Water jet cut outboard 0,5" stk 316 SS shims       4       12JUL07       17JUL07	13   Re-measure A6     13   Measure B6 on wedge     13   Water jet cut outboard 0,5" stk 316 SS shims										
PHIL-23       C       Water jet cut inboard 0.625 316 SS       3       18JUL07       20JUL07         PHIL-24       C       Assemble castings,align torque&meas inbd. shims       4       23JUL07       26JUL07         PHIL-26       C       Grind inbd. Shims to thickness (outside shop)       4       27JUL07       01AUG07	13       Water jet cut inboard 0.625 316 SS         13       Assemble castings, align torque& meas inbd. s         13       Grind inbd. Shims to thickness (outside shift)	shims op)									
PHIL-27       C       Solution anneal shims       2       02AUG07       03AUG07         PHIL-32       C       Align castings       2       30JUL07       31JUL07         PHIL-37       C       Set up dial ind., CMM, transit system       5       01AUG07       07AUG07	13   Solution anneal shims     13   Align castings     13   Set up dial ind., CMM, transit system										
PHIL-38     C     Install all shims and adjust bushings     2     06AUG07     07AUG07       PHIL-39     C     Final align and baseline measurements     3     08AUG07     10AUG07       PHIL-40     C     Perform 25% of welding & measurements     2     10AUG07	<ul> <li>13 Install all shims and adjust bushings</li> <li>13 Final align and baseline measurements</li> <li>13 Perform 25% of wolding 9 measurements</li> </ul>										
PHIL-41     C     Perform 50% of welding & measure     2     13A0G07     14A0G07       PHIL-42     C     Perform 75% of welding & measure     2     15AUG07     16AUG07       PHIL-42     C     Perform 75% of welding & measure     2     17AUG07     20AUG07	13     Perform 50% of welding & measure       13     Perform 75% of welding & measure										
FTIL-43       C       Tillish welding & measure       2       21AUG07       22AUG07         PHIL-44       C       Analyze data; write report       14       23AUG07       12SEP07         Setup       PHANA 2422       C       ULTERWARD CLEAR       C       1000000000000000000000000000000000000	13     finish welding & measure       13     Analyze data; write report										
NOTO-2100       C       PARDWARE, DRAWINGS, & PROCURES AVAILABLE       0       230CT07       1         Pre-Measuring and fitup checks       S21-1.01       C       Verify mating MC's A1,B1,C1       4       20JUL07*       25JUL07       1         S21-1.02       C       Encryption of the large full place full p											
S21-1.02         C         Epoxy paint an close nitting interfacing surfac         3         26JUL07         30JUL07         1           S21-2.01         C         Set A1 on pre-measured fixt, "B" side down         1         31JUL07         31JUL07         1           S21-2.02         C         Align to the conical seats locking into of 8         2         01AUG07         02AUG07         1	1     Set A1 on pre-measured fixt, "B" side down       1     Align to the conical seats locking into of 8										
S21-2.03CEstab global coord sys on mc geometry. Meas monu703AUG0713AUG071S21-2.04CMeas tooling ball monuments on winding form.114AUG0714AUG071S21-2.05CScan the "A" flange of the Type-A1 coil.115AUG0715AUG071	1     Lestab global coord sys on mc geome       1     Meas tooling ball monuments on winding form.       1     Scan the "A" flange of the Type-A1 coil.	extry. Meas monu									
S21-2.07         C         Remove A1 coil from stand         1         16AUG07         16AUG07         1           S21-2.08         C         Measure B1 "A" flange         14         17AUG07         06SEP07         1           S21-2.11         C         Measure C1 "A" flange         13         07SEP07         25SEP07         1	1     Remove A1 coil from stand       1     Measure B1 "A" flange       1     Measure C1 "A" flange										
S21-2.14CMeasure Type A1-A2 "A" flange1326SEP0712OCT071S21-3.02CGrind shims first article f/assy process qu415OCT0718OCT071S21-4.02CPerform metrology set-up and checks219OCT0722OCT071	1     Measure Type A1-A2 "A" flange       1     Grind shims first article f/assy process query       1     Perform metrology set-up and checks										
S21-3.03       C       Ready For Preassembly A1B1C1       0       220CT07       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	1 Ready For Preassembly A1B1C1	Place "A/B" assy, "A" coil dwn, on 40deg fix.									
S21-7.02CAlign to the conical seats locking into a min of118FEB0818FEB081S21-7.03CMeasure the monuments on the fixture & the walls219FEB0820FEB081S21-7.04CPlace initial set metal shims on the coil221FEB0822FEB081	0 0 0	Align to the conical seats locking into a min of Measure the monuments on the fixture & the walls									
S21-7.05       C       Lower the Type-C coil onto the Type-B coil.       1       25FEB08       25FEB08       1         S21-7.06       C       Meas monuments on A coil to eval displacement.       1       26FEB08       26FEB08       1         S21 6 062       C       institution of the transmission of trans		Lower the Type-C coil onto the Type-B coil. Meas monuments on A coil to eval displacement.									
S21-5.062       C       Institutial indicators for X-y positioning       1       27FEB08       27FEB08       1         S21-5.00       C       BEGIN A-A Pre-assembly       0       23OCT07       1         S21-5.01       C       Place A2 "B" side down. Obtain fiduals       2       24OCT07       25OCT07       1	0 BEGIN A-A Pre-assembly Place A2 "B" side down. Obtain fiduals										
S21-5.02CAlign to the conical seats locking into 8.126OCT0726OCT071S21-5.03CMeas monuments on fixture & walls.229OCT0730OCT071S21-5.04CPlace shims on coil identical to A1-A2 fit up131OCT0731OCT071	0       Align to the conical seats locking into 8.         0       Meas monuments on fixture & walls.         0       Place shims on coil identical to A1-A2 fit up										
S21-5.05CInstall dial indicators on the MC to see deflec101NOV0701NOV071S21-5.06CLower mating A1 modular coil into position.102NOV0702NOV071S21-5.07CMeas monuments bottom coil. Jack to .002"105NOV0705NOV071	0       Install dial indicators on the MC to see defle         0       Lower mating A1 modular coil into position         0       Meas monuments bottom coil. Jack to .00										
S21-5.08CUsing 3 points, position as was done inA1A2 fit106NOV0706NOV071S21-5.09CTorque to 50%207NOV0708NOV071S21-5.1CMake "wiggle" test Tighten bolt and recheck.109NOV0709NOV071	0     Using 3 points, position as was done inA1A.       0     Torque to \$       0     Make "wiggle" test Tighten bolt and rech	2 fit									
S21-5.11       C       Meas tooling balls both coils.       5       12NOV07       16NOV07       1         S21-5.12       C       Adjust shims locally. Re-torque all studs to 50%       3       19NOV07       21NOV07       1         S21-5.14       C       Install A-A locator bushings       2       22NOV07       23NOV07       1	0 0 0 Adjust shims locally. Re-torque all stud	ds to 50%									
S21-5.14       C       Instant AA locator businings       2       2210007       2510007       1         S21-5.15       C       Remove studs,nuts,shims. Identify shim locations       1       26NOV07       26NOV07       1         S21-6.01       C       Place Type A "A" side down. Obtain fiduals       2       27NOV07       28NOV07       1	0   Remove studs,nuts,shims. Identify si     0   Place Type A "A" side down. I										
S21-6.02       C       Align to the conical seats locking into 8.       1       03DEC07       03DEC07       1         S21-6.03       C       Meas monuments on fixture & walls.       2       04DEC07       05DEC07       1         S21-6.04       C       Place the an initial set shims on coil       2       06DEC07       07DEC07       1	0   Align to the conical sea     0   Meas monuments of Place the an initial	on fixture & walls.									
S21-6.041CStuff shim bag w/fiberglass & place on wing110DEC0710DEC071S21-6.05CLower the Type-B coil onto the Type-A coil.111DEC0711DEC071S21-6.06CMeasure monuments on A coil. Jack to .002"112DEC0712DEC071	0     Stuff shim bag w/fibergla       0     Lower the Type-B coil of       0     Measure monuments or	ass & place on wingly									
S21-6.061       C       instl dial indicators for x-y positioning       1       13DEC07       13DEC07       1         S21-6.07       C       Perform the X-Y positioning of the B coil.       1       14DEC07       14DEC07       1         S21-6.08       C       Install remaining metal shims torque to 50%       2       17DEC07       18DEC07       1	0     instit dial indicat       0     Perform the X-Y po       0     Install remaining meta	ors for x-y positioning psitioning of the B coil.									
S21-6.09       C       Make "wiggle" test Tighten bolt and recheck.       1       19DEC07       19DEC07       1         S21-6.1       C       Measure the tooling balls on both coils.       5       20DEC07       04JAN08       1         S21-6.11       C       Loosen studs, adjust shims. Re-torque to 50%.       3       07JAN08       09JAN08       1	0     Make "wiggle" test T       0     Measure the to       0     Loosen studs,	ighten bolt and recheck.									
S21-6.12CInstall alumina shims. Re-torque to 50%.110JAN0810JAN081S21-6.13CMake "wiggle" test Tighten bolt and recheck.111JAN0811JAN081S21-6.14CMeasuretooling balls . The max devi .007" .514JAN0818JAN081	0     Install       0     Make "wig       0     Measu	alumina shims. Re-torque to 50%.									
S21-6.15CLoosen studs, adjust shims. Re-torque to 50%.321JAN0823JAN081S21-6.16CInstall bushings. Tighten back to 50%1024JAN0806FEB081S21-6.17CComplete tightening of flange bolts to 100%.107FEB0807FEB081	0 0 0	n studs, adjust shims. Re-torque to 50%.									
S21-6.18CMeasuretooling balls . The max devi .007" .208FEB0811FEB081S21-6.19CScan the "B" flange of Type-B coil112FEB0812FEB081S21-7.07CPerform the X-Y positioning of the coil.128FEB0828FEB081	0 0 0	Measuretooling balls . The max devi .007" . Scan the "B" flange of Type-B coil Perform the X-Y positioning of the coil.									
S21-7.08       C       Install remaining metal shims torque to 50%       2       29FEB08       03MAR08       1         S21-7.09       C       "wiggle" test Tighten bolt and recheck.       1       04MAR08       04MAR08       1         S21-7.1       C       Measure the tooling balls on all coils       5       05MAR08       11MAR08       1	0 0	Install remaining metal shims torque to 50%									
S21-7.12     C     Install alumina shims. Re-torque all studs to     1     17MAR08     14MAR08     1       S21-7.13     C     "install alumina shims. Re-torque all studs to     1     17MAR08     17MAR08     1	0 0 0	adjust shims locally. Re-torque all studs to 50%									
S21-7.13       S       Wiggle test righten bolt and recreek.       1       Remark test righten bolt and recreek.       1         S21-7.14       C       Measure the tooling balls on all coils.       5       19MAR08       25MAR08       1         S21-7.15       C       adjust shims locally. Re-torque all studs to 50       3       26MAR08       28MAR08       1		Measure the tooling balls on all coils.									
Sector     Complete tightening of flange bolts to 100%.     1     31MAR08     11APR08     1       S21-7.17     C     Complete tightening of flange bolts to 100%.     1     14APR08     14APR08     1       DOE-1     C     Notify DOE of scheduled station 3 lifts     0     27MAR08     1       DOE-2     C     DOE registrow life researching     1     14APR08     1		Complete tightening of flange bolts to 100%.									
DOE-2     C     DOE review int procedures     30     28MAR08     08MAY08     1       DOE-3     C     DOE approval of scheduled station 3 lifts     0     08MAY08     1       S21-11.01     C     Identify primary fiducials for positioning Sta 3     1     15APR08     15APR08     1		DOE review lift procedures									
S21-7.18       C       Final metrology meas. Scan "B" flangeType-C coil       5       16APR08       22APR08       1         S21-8.01       C       Tack weld inboard shims       2       23APR08       24APR08       1         S21-10.01       C       Install all wing support bladders       2       25APR08       28APR08       1		Final metrology meas. Scan "B" flangeType-C coil									
S21-10.02CMake local service runs/connections825APR0806MAY081S21-10.03CInject stycast in all shim spaces125APR0825APR081S21-11.03CMeasure bolt length on all tension fasteners009MAY0808MAY081	0 7 0	Make local service runs/connections									
S21-11.04CMark part for identification009MAY0808MAY081S21-11.05CInstall lift support beams207MAY0808MAY081S21-11.06CRemove from stand & measure weight of assy109MAY0809MAY081	0 0 0	Mark part for identification Install lift support beams Remove from stand & measure weight of assy									
S21-11.07       C       Move A1-B1-C1 to holding area.       0       09MAY08       1         Station 2 MC Sub Assy A2-B2-C2       S22-6.01       C       A2 "A" flange dwn, 20deg fixt.Obtain fiduci       1       13FEB08       13FEB08       1	0 4	A2 "A" flange dwn, 20deg fixt.Obtain fiduci									
S22-6.02CAlign to the conical seats locking into a min of114FEB0814FEB081S22-6.03CMeasure monuments on fixture and on the walls.215FEB0818FEB081S22-6.04CPlace alumina grind inboard weld shims on coil.219FEB0820FEB081	4           4           4           4	Align to the conical seats locking into a min of Measure monuments on fixture and on the walls. Place alumina grind inboard weld shims on coil.									
S22-6.05CLower the Type-B coil onto the Type-A coil.121FEB0821FEB081S22-6.06CMeas monuments on A coil. Jack to within .002"122FEB0822FEB081S22-6.07CPerform the X-Y positioning of the B coil.125FEB0825FEB081	4           4           4           4	Lower the Type-B coil onto the Type-A coil. Meas monuments on A coil. Jack to within .002" Perform the X-Y positioning of the B coil.									
S22-6.08CInstall studs, supernuts, torque to 50% of final226FEB0827FEB081S22-6.09C"wiggle" test Tighten bolt and recheck.128FEB0828FEB081S22-6.1CMeas tooling balls on both coils. max devi .007"529FEB0806MAR081	4           4           4           4	Install studs, supernuts, torque to 50% of final "wiggle" test Tighten bolt and recheck. Meas tooling balls on both coils. max devi .007"									
S22-6.12       C       Install bushings       10       12MAR08       25MAR08       1         S22-6.13       C       Complete tightening of flance bolts to 100%       1       26MAR08       26MAR08       1	4           4           4           4	adjust shims locally. Re-torque all studs to 50%									
S22-6.14     C     Measure the tooling balls on both coils.     3     27MAR08     31MAR08     1       S22-6.15     C     Scan the "B" flange of Type-B coil     1     01APR08     01APR08     1       S22-7.01     C     "A //B" access "A // active of the first of		Measure the tooling balls on both coils.									
S22-7.02       C       Align to the conical seats locking into min of 8       1       04APR08       04APR08       1         S22-7.03       C       Measure monuments on fixture and walls.       2       07APR08       08APR08       1		Align to the conical seats locking into min of 8									
S22-7.05       C       Prace arumin grind inboard weld shims on coil.       2       09APR08       10APR08       1         S22-7.05       C       Lower the Type-C coil onto the Type-B coil.       1       11APR08       11APR08       1         S22-7.06       C       Meas monuments on A coil for displacements.       1       14APR08       14APR08       1		Place alumin grind inboard weld shims on coil. Lower the Type-C coil onto the Type-B coil.									
S22-7.01CPerform the X-Y positioning of the coil.115APR0815APR081S22-7.08CInstall studs, supernuts, torque to 50% of fina216APR0817APR081S22-7.09C"wiggle" test Tighten bolt and recheck.118APR0818APR081	4 4 4	Perform the X-Y positioning of the coil. Install studs, supernuts, torque to 50% of final "wiggle" test Tighten bolt and recheck.									
S22-7.1CMeasure the tooling balls on all coils.521APR0825APR081S22-7.11CInstall bushings Replace nut and tighten to 50%1028APR0809MAY081S22-7.12CComplete tightening of flange bolts to 100%.112MAY0812MAY081	4           4           4           4	Measure the tooling balls on all coils.									
S22-7.13       C       Measure the tooling balls on both coils.       4       13MAY08       16MAY08       1         S22-8.01       C       Tack weld all inboard shims to one flange       1       19MAY08       19MAY08       1         S22-10.01       C       Install all wing support bladders       2       20MAY08       21MAY08       1	4           4           4           4	Measure the tooling balls on both coils. Tack weld all inboard shims to one flange. Install all wing support bladders.									
S22-10.02       C       local service connections on each MC.       8       22MAY08       03JUN08       1         S22-10.03       C       Inject stycast to fill in all shim spaces       1       04JUN08       04JUN08       1         S22-11.01       C       Install or identify three primary fiducials       1       05 II IN08       05 II IN08       4	4           4           4           4	local service connections on each MC.									
S22-11.02       C       Final metrology measurement of all fiducials.       5       06JUN08       12JUN08       1         S22-11.03       C       Tension tester measure bolt length       1       13JUN08       13JUN08       1         S22-11.04       C       Mark part for identification       0       46 II block       46 II block       46 II block	4           4           4           4	Final metrology measurement of all fiducials.									
S22-11.05       C       Install lift support beams       2       16JUN08       13JUN08       1         S22-11.06       C       Remove from stand Move A2-B2-C2 to holding area       2       18JUN08       19JUN08       1         Station 2-Modular Coil Subassembly-FP#2	4           4           4	Mark part for identification Install lift support beam Remove from stand Move A2-B2-C2 to holding an									
S23-A3B3C3       C       Assemble/Align Mod-Coils A3/B3/C3       140       12MAY08       26NOV08       1         S24-A4B4C4       C       Assemble/Align Mod-Coils A4/B4/C4       97       03JUL08       18NOV08       1         Station 2-Modular Coil Subassembly-FP#3	0 16	Assemble/Align Mod-Coils A3/B3/C3 Assemble/Align Mod-Coils	A4/B4/C4								
S25-A5B5C5CAssemble/Align Mod-Coils A5/B5/C5 (under 1 shift)8607OCT08*16FEB091S25A5B5C52CAssemble/Align Mod-Coils A5/B5/C5 (under 2 shift)2017FEB09*16MAR092S26-A6B6C6CAssemble/Align Mod-Coils A6/B6/C63623DEC08*19FEB091	5 5 4		Assemble/Align Mod-Coils A5/B5/C5 (under 1 sh	Assemble/Align Mod-Coils A5/B5/C5 (under 2 shift							
S26A6B6C62 C Assemble/Align Mod-Coils A6/B6/C6 24 20FEB09* 25MAR09 2	4			Assemble/Align Mod-Coils A6/B6/C6							

MAY JUN JUL AUG SEP OC	ICT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG	SEP OCT NOV DEC JAN
FY07	FY08	FY09	FY10	FY11	FY12

ID Description Station 3-Assemble Mod Coils and VVSA-FP#1	Duration         Baseline         Baseline         Shifts         Total           (work         Start         Finish         Float           days         Float         Float         Float	FY07         FY07         FY08           MAY         JUN         JUL         AUG         SEP         OCT         NOV         DEC         JAN         FEB         MAR         APR           Image: Constraint of the second sec	MAY JUN JUL AUG SEP OCT NOV DI	FY09 DEC JAN FEB MAR APR MAY JU	N JUL AUG SEP O	FY10 OCT NOV DEC JAN FEB MAR	APR MAY JUN JUL AUG	SEP OCT NOV DEC JAN FEB	FY11 MAR APR MAY	JUN JUL AUG S	EP OCT NOV DEC	C JAN
R1810-2109     C     Begin Station 3       S31-1.01     C     Install Station 3 site monuments	0         03MAR08*         1         56           3         03MAR08         05MAR08         1         56	Begin Station 3										
S31-1.02       C       Install floor mounted flacks and VV base support         S31-1.03       C       Establish the MCHP CG location.         S31-2.01       C       Install MCHP support cart assemblies	3         00MAR08         12MAR08         1         36           2         13MAR08         14MAR08         1         56           4         17MAR08         20MAR08         1         56	Establish the MCHP CG location.										
S31-2.02     C     Verify cart motion.       S31-2.03     C     Install adjustor bar support weldment	2         21MAR08         24MAR08         1         56           0         25MAR08         24MAR08         1         56	Verify cart motion.										
S31-2.04       C       Position left MCHP on the cart assembly         S31-2.05       C       Secure left MCHP on support cart base.         S31-2.06       C       Measure monuments on left MCHP and walls	1         12MAY08         12MAY08         1         22           2         13MAY08         14MAY08         1         22           5         15MAY08         21MAY08         1         22	Position left MCHP on the cart a Secure left MCHP on support c Measure monuments on left MCHP	sembly									
S31-2.07         C         Set positioning stop on the cart           S31-3.01         C         Move right base support cart to its final positi	1         22MAY08         22MAY08         1         22           1         23MAY08         23MAY08         1         22	Set positioning sto Move right base support cart to	o on the cart									
S31-3.02       C       Lift the right side MCHP and position         S31-3.03       C       Temporary fasteners bring the parts together.         S81-3.04       D       Atil as Mu brane and branches to table load	1         20JUN08         20JUN08         1         4           0         23JUN08         20JUN08         1         4           0         23JUN08         20JUN08         1         4	Lift the rigit Temporary fasten	side MCHP and position									
S31-3.04       C       AirLoc Wedgemount leveler to take load.         S31-3.05       C       Install temp scaffolding to install flange hw         S31-3.06       C       Install bolts and shims	0         23JUN08         20JUN08         1         4           1         23JUN08         23JUN08         1         4           1         24JUN08         24JUN08         1         4	AirLoc Wedg	affolding to install flange hw									
S31-3.07         C         Tighten flange fasteners to 50%           S31-3.08         C         Perform metrology measurements	1         25JUN08         25JUN08         1         4           5         26JUN08         02JUL08         1         4	Tig Perf	Intern flange fasteners to 50%									
S31-3.09     C     Perform position adjust on right side MCHP       S31-3.1     C     Verify position of the VV support hanger       S31-3.1     C     Remove flange bardware and town platforms	2         03JUL08         07JUL08         1         4           3         08JUL08         10JUL08         1         4           1         11,000         11,000         1         4	Perform p Veri	sition adjust on right side MCHP									
S31-3.11     C     Remove nange nardware and temp platforms       S31-4.01     C     EMeasure monuments on the MCHP's &walls.       S31-4.02     C     Place all of the laser screens	1         1130L08         1130L08         1         4           2         14JUL08         15JUL08         1         4           2         16JUL08         17JUL08         1         4	EMeasu	re monuments on the MCHP's &walls.									
S31-4.03     C     Determine laser alignment.       S31-4.04     C     mount the milar on the screens.	1         18JUL08         18JUL08         1         4           1         21JUL08         21JUL08         1         4		Determine laser alignment.									
S31-4.05         C         Disengage MCHP's to move the left MCHP.           S31-4.06         C         Remove both MCHP's.           S31-5.01         C         Remove the adjustor bar support from left side.	1         22JUL08         22JUL08         1         4           2         23JUL08         24JUL08         1         4           0         25JUL08         24JUL08         1         4	Re	sengage MCHP's to move the left MCHP.									
S31-5.03     C     Install VVSA to base support	2         25JUL08         28JUL08         1         4           1         29JUL08         29JUL08         1         4		Install VV NBI port support stand.									
S31-5.04         C         Secure the VVSA to base & NBI port sprt stand.           S31-6.01         C         Install bumper protection components on the VV           S31-6.02         C         Resident Airline wild components in lower protection	2         30JUL08         31JUL08         1         4           1         01AUG08         01AUG08         1         4           0         04AUG08         01AUG08         1         4	S S	cure the VVSA to base & NBI port sprt stand.									
S31-6.02     C     Position AirLoc wedgemount in lower position.       S31-6.03     C     move the left MCHP over the VV.       S31-6.04     C     Re-install the left adjustor bar.	0         04A0G08         01A0G08         1         4           2         04AUG08         05AUG08         1         4           0         06AUG08         05AUG08         1         4		Re-install the left adjustor bar.									
S31-6.05     C     Make adjustments to properly align MCHP.       S31-6.06     C     Transfer load to the AirLoc Wedgemount leveler.       Cold a 007     C     Transfer load to the AirLoc Wedgemount leveler.	2         06AUG08         07AUG08         1         4           0         08AUG08         07AUG08         1         4           0         08AUG08         07AUG08         1         4		Make adjustments to properly align MCHP.									
S31-6.07     C     Move the MCHP to the left 1/2 .       S31-7.01     C     Position AirLoc Wedgemount lowered position.       S31-7.02     C     move the right MCHP over the VV	0         08A0G08         07A0G08         1         4           0         08AUG08         07AUG08         1         4           2         08AUG08         11AUG08         1         4		Position AirLoc Wedgemount lowered position.									
S31-7.03         C         move the left MCHP to its final position.           S31-7.04         C         engage the preinstalled Type-A flange bushings.	1         12AUG08         12AUG08         1         4           1         13AUG08         13AUG08         1         4		move the left MCHP to its final position. engage the preinstalled Type-A flange bushings.									
S31-7.05         C         Temporary fasteners bring the parts together.           S31-7.06         C         AirLoc Wedgemount leveler up to take the load.           S31-7.07         C         Remove laser screens	0         14AUG08         13AUG08         1         4           1         14AUG08         14AUG08         1         4           0         15AUG08         14AUG08         1         4		Temporary fasteners bring the parts together. AirLoc Wedgemount leveler up to take the load. Remove laser screens									
S31-7.08         C         Install temp scaffolding to install flange hw           S31-7.09         C         Install bolts, alumina and inboard weld shims.	4         15AUG08         20AUG08         1         4           2         21AUG08         22AUG08         1         4		Install temp scaffolding to install flange hw									
S31-7.1     C     Tighten flange fasteners to 50%       S31-7.11     C     "wiggle" test Tighten bolt and recheck.       S31-7.12     C     Perform metrology measurements	1         25AUG08         25AUG08         1         4           1         26AUG08         26AUG08         1         4           5         27AUG08         03SEE08         1         4		Tighten flange fasteners to 50%									
S31-7.13         C         Perform position adjustments right side MCHP           S31-7.14         C         Remove SISSCO actuator from right MCHP.	3         04SEP08         08SEP08         1         4           0         09SEP08         08SEP08         1         4		Perform position adjustments right side MCHP									
S31-7.15     C     Pre-fit & Install bushings       S31-7.16     C     Tighten nuts 100%. & Measure       S31-8.01     C     partially wold the inheard shime	10         28AUG08         11SEP08         1         4           1         12SEP08         12SEP08         1         4           15         15SEP08         030CT09         4		Pre-fit & Install bushings									
S31-8.02         C         Final complete MC scan verify period alignment.           S31-9.01         C         Attach VV permanent vertical supports	5         060CT08         100CT08         1         4           2         130CT08         140CT08         1         4		Final complete MC scan verify period alignment.									
S31-9.02     C     Attach temporary VV vertical supports       S31-9.03     C     Transfer load to vertical supports.	1         150CT08         150CT08         1         4           1         160CT08         160CT08         1         4		Attach temporary VV vertical supports Transfer load to vertical supports.									
531-9.04         C         Install VV lateral supports and align           S31-9.05         C         Prepare VVSA for transport.           S31-10.01         C         transfer the unit to the transfer support frame	4         1700108         220CT08         1         4           2         230CT08         240CT08         1         4           2         270CT08         280CT08         1         4		Install VV lateral supports and align									
S31-10.02     C     Transfer     Period 1 to Station 5 in NCSX TC       Station 3-Assemble     Mod Coils and VVSA-FP#2	1 290CT08 290CT08 1 4		Transfer Period 1 to Station 5 in NCSX TC									
S32-1.01         C         Install Station 3 site monuments           S32-1.02         C         Install floor mounted tracks and VV base support           S32-1.03         C         Establish the MCHP CG location.	3         3000108         03NOV08         1         4           5         04NOV08         10NOV08         1         4           2         11NOV08         12NOV08         1         4		Install Station 3 site monuments Install floor mounted tracks and VV base support Establish the MCHP CG location.									
S32-2.01     C     Install MCHP support cart assemblies       S32-2.02     C     Verify cart motion.       S32-2.02     C     Install with a track	4         13NOV08         18NOV08         1         4           2         19NOV08         20NOV08         1         4           0         24NOV08         20NOV08         1         4		Install MCHP support cart assemblies									
S32-2.04     C     Position left MCHP on the cart assembly       S32-2.05     C     Secure left MCHP on support cart base.	C         ZUNOVUS         1         4           1         01DEC08         01DEC08         1         0           2         02DEC08         03DEC08         1         0		Position left MCHP on the cart assembly Secure left MCHP on support cart base.									
S32-2.06     C     Measure monuments on left MCHP and walls       S32-2.07     C     Set positioning stop on the cart	5         04DEC08         10DEC08         1         0           1         11DEC08         11DEC08         1         0		Measure monuments on left MCHP and walls									
S32-3.01       C       Move right base support cart to its final positi         S32-3.02       C       Lift the right side MCHP and position         S32-3.03       C       Temporary fasteners bring the parts together.	1         12DEC08         12DEC08         1         0           1         15DEC08         15DEC08         1         0           0         16DEC08         15DEC08         1         0		Move right base support cart to its final position Lift the right side MCHP and position Temporary fasteners bring the parts together.									
S32-3.04       C       AirLoc Wedgemount leveler to take load.         S32-3.05       C       Install temp scaffolding to install flange hw	0         16DEC08         15DEC08         1         0           1         16DEC08         16DEC08         1         0		AirLoc Wedgemount leveler to take load. Install temp scaffolding to install flange hw	vi								
S32-3.06     C     Install bolts and shims       S32-3.07     C     Tighten flange fasteners to 50%       S32-3.08     C     Perform metrology measurements	1         17DEC08         17DEC08         1         0           1         18DEC08         18DEC08         1         0           5         19DEC08         05JAN09         1         0		Install bolts and shims Tighten flange fasteners to 50% Perform metrology measurement	ns								
S32-3.09         C         Perform position adjust on right side MCHP           S32-3.1         C         Verify position of the VV support hanger	2         06JAN09         07JAN09         1         0           3         08JAN09         12JAN09         1         0		Perform position adjust on right si Verify position of the VV supp	side MCHP								
S32-3.11     C     Remove flange hardware and temp platforms       S32-4.01     C     EMeasure monuments on the MCHP's &walls.       S32-4.02     C     Place all of the laser screens	1         13JAN09         13JAN09         1         0           2         14JAN09         15JAN09         1         0           2         16JAN09         19JAN09         1         0		Remove flange hardware and te EMeasure monuments on the Mi Place all of the	temp platforms								
S32-4.03     C     Determine laser alignment.       S32-4.04     C     mount the milar on the screens.	1         20JAN09         20JAN09         1         0           1         21JAN09         21JAN09         1         0		Determine mount the mila	e laser alignment.								
S32-4.05     C     Disengage MCHP's to move the left MCHP.       S32-4.06     C     Remove both MCHP's.       S32-5.01     C     Remove the adjustor bar support from left side.	1         22JAN09         22JAN09         1         0           2         23JAN09         26JAN09         1         0           0         27JAN09         26JAN09         1         0		Disengage MCHP's to mo Rem Remove the adjustor bar su	ove the left MCHP.								
S32-5.03     C     Install VVSA to base support	2         27JAN09         28JAN09         1         0           1         29JAN09         29JAN09         1         0		Install VV NB	BI port support stand.								
S32-5.04     C     Secure the VVSA to base & NBI port sprt stand.       S32-6.01     C     Install bumper protection components on the VV       S32 6.02     C     Registion Airling work and the security of the secure security of the security of the se	1         30JAN09         30JAN09         2         0           1         30JAN09         30JAN09         2         0           0         02EEE00         30JAN09         30JAN09         3         0		Secure the VVSA to base Install bumper protection c	e & NBI port sprt stand.								
S32-6.02       C       Position Air Loc Wedgemount in lower position.         S32-6.03       C       move the left MCHP over the VV.         S32-6.04       C       Re-install the left adjustor bar.	0         021 EB03         303AN03         2         0           1         02FEB09         02FEB09         2         0           0         03FEB09         02FEB09         2         0		move the Re-ins	e left MCHP over the VV.								
S32-6.05       C       Make adjustments to properly align MCHP.         S32-6.06       C       Transfer load to the AirLoc Wedgemount leveler.         S32-6.07       C       move the MCHP to the left 1/2".	1         03FEB09         03FEB09         2         0           0         04FEB09         03FEB09         2         0           0         04FEB09         03FEB09         2         0		Make adjustments t Transfer load to the AirLo move th	to properly align MCHP.								
S32-7.01         C         Position AirLoc Wedgemount lowered position.           S32-7.02         C         move the right MCHP over the VV	0         04FEB09         03FEB09         2         0           1         04FEB09         04FEB09         2         0		Position AirLoc Wedge move the	emount lowered position.								
S32-7.03       C       move the left MCHP to its final position.         S32-7.04       C       engage the preinstalled Type-A flange bushings.         S32-7.05       C       Temporary fasteners bring the parts together	1         04FEB09         04FEB09         2         0           1         04FEB09         04FEB09         2         0           0         05FEB09         04FEB09         2         0		move the left M engage the preinstalled Temporary fasteners	MCHP to its final position.								
S32-7.06     C     AirLoc Wedgemount leveler up to take the load.       S32-7.07     C     Remove laser screens	1         05FEB09         05FEB09         2         0           0         06FEB09         05FEB09         2         0		AirLoc Wedgemount lev	eveler up to take the load. Remove laser screens								
S32-7.08     C     Install temp scaffolding to install flange hw       S32-7.09     C     Install bolts, alumina and inboard weld shims.       S32-7.1     C     Tighten flange fasteners to 50%	2         06FEB09         09FEB09         2         0           1         10FEB09         10FEB09         2         0           1         11FEB09         11FEB09         2         0		Install temp scaff Install bolts, alumir Tigh	ffolding to install flange hw								
Solution         C         Highler hange fusioners to cond           S32-7.11         C         "wiggle" test Tighten bolt and recheck.           S32-7.12         C         Perform metrology measurements	1         111 EB00         111 EB00         2         0           1         11FEB09         11FEB09         2         0           2         12FEB09         13FEB09         2         0		"wiggle" tes Perfor	est Tighten bolt and recheck.								
S32-7.13     C     Perform position adjustments right side MCHP       S32-7.14     C     Remove SISSCO actuator from right MCHP.       S32-7.15     C     Pro-fit & lostall buchings	2         16FEB09         17FEB09         2         0           0         18FEB09         17FEB09         2         0           5         12FEB09         18FEB09         2         0		Perform position Remove SISS	n adjustments right side MCHP SSCO actuator from right MCHP.								
S32-7.15     C     Fre-int & instain businings       S32-7.16     C     Tighten nuts 100%. & Measure       S32-8.01     C     partially weld the inboard shim.	3         12FEB09         16FEB09         2         0           1         19FEB09         19FEB09         2         0           4         20FEB09         25FEB09         2         0			Tighten nuts 100%. & Measure								
S32-8.02     C     Final complete MC scan verify period alignment.       S32-9.01     C     Attach VV permanent vertical supports       S32-9.02     C     Attach temporary VV vertical supports	2         26FEB09         27FEB09         2         0           1         02MAR09         02MAR09         2         0           1         03MAR09         03MAR09         2         0		Final complet	Attach two permanent vertical supports								
S32-9.03         C         Transfer load to vertical supports.           S32-9.04         C         Install VV lateral supports and align	1         04MAR09         04MAR09         2         0           2         05MAR09         06MAR09         2         0			Transfer load to vertical supports								
S32-9.05     C     Prepare VVSA for transport.       S32-10.01     C     transfer the unit to the transfer support frame       S32-10.02     C     Transfer Deried 2 to Station 5 in NCSY TC	1         09MAR09         09MAR09         2         0           1         10MAR09         10MAR09         2         0           1         10MAR09         10MAR09         2         0		trans	Prepare VVSA for transport.								
Station 3-Assemble Mod Coils and VVSA-FP#3       S33-1.01     C       Install Station 3 site monuments	1         11MAR09         11MAR09         2         0           2         12MAR09         13MAR09         2         0			Install Station 3 site monuments								
S33-1.02       C       Install floor mounted tracks and VV base support         S33-1.03       C       Establish the MCHP CG location.         S33-2.01       C       Install MCHP support cart assemblies	2         16MAR09         17MAR09         2         0           1         18MAR09         18MAR09         2         0           2         19MAR09         20MAR09         2         0		Instal	all floor mounted tracks and VV base support								
S33-2.02     C     Verify cart motion.       S33-2.03     C     Install adjustor bar support weldment	1         23MAR09         23MAR09         2         0           0         24MAR09         23MAR09         2         0			Verify cart motion. Install adjustor bar support weldment								
S33-2.04       C       Position left MCHP on the cart assembly         S33-2.05       C       Secure left MCHP on support cart base.         S33-2.06       C       Measure monuments on left MCHP and walls	1         24MAR09         24MAR09         2         0           1         25MAR09         25MAR09         2         0           2         26MAR09         27MAR09         2         0			Position left MCHP on the cart assembly Secure left MCHP on support cart base.								
S33-2.07         C         Set positioning stop on the cart           S33-3.01         C         Move right base support cart to its final positi	1         30MAR09         30MAR09         2         0           1         31MAR09         31MAR09         2         0			Set positioning stop on the cart Move right base support cart to its final positi								
S33-3.02       C       Lift the right side MCHP and position         S33-3.03       C       Temporary fasteners bring the parts together.         S33-3.04       C       AirLoc Wedgemount leveler, to take load	1         01APR09         01APR09         2         0           0         02APR09         01APR09         2         0           0         02APR09         01APR09         2         0			Lift the right side MCHP and position Temporary fasteners bring the parts together. AirLoc Wedgemount leveler to take load								
S33-3.05     C     Install temp scaffolding to install flange hw       S33-3.06     C     Install bolts and shims	1         02APR09         02APR09         2         0           1         02APR09         02APR09         2         0           1         02APR09         02APR09         2         0			Install temp scaffolding to install flange hw								
S33-3.07     C     Tighten flange fasteners to 50%       S33-3.08     C     Perform metrology measurements       S33-3.09     C     Perform position adjust on right side MOUD	1         03APR09         03APR09         2         0           2         06APR09         07APR09         2         0           1         08APR09         08APR09         2         0			Tighten flange fasteners to 50%								
S33-3.1     C     Verify position of the VV support hanger       S33-3.11     C     Remove flange hardware and temp platforms	2         09APR09         10APR09         2         0           2         09APR09         10APR09         2         0           2         09APR09         10APR09         2         0			Verify position of the VV support hanger								
S33-4.01     C     EMeasure monuments on the MCHP's &walls.       S33-4.02     C     Place all of the laser screens       S33-4.02     C     Decomposition to provide the laser screens	1         13APR09         13APR09         2         0           1         14APR09         14APR09         2         0           1         15APR09         15APR09         2         0			EMeasure monuments on the MCHP's &walls. Place all of the laser screens								
S33-4.03     C     Determine laser alignment.       S33-4.04     C     mount the milar on the screens.       S33-4.05     C     Disengage MCHP's to move the left MCHP.	I         I3APR09         15APR09         2         0           0         16APR09         15APR09         2         0           1         16APR09         16APR09         2         0			Determine laser alignment. mount the milar on the screens. Disengage MCHP's to move the left MCHP.								
S33-4.06     C     Remove both MCHP's.       S33-5.01     C     Remove the adjustor bar support from left side.	1         17APR09         17APR09         2         0           0         20APR09         17APR09         2         0			Remove both MCHP's.								
S33-5.02         C         Install VV NBI port support stand.           S33-5.03         C         Install VVSA to base support           S33-5.04         C         Secure the VVSA to base & NBI port sprt stand.	ZUAFRU9         ZUAPR09         2         0           1         21APR09         21APR09         2         0           1         22APR09         22APR09         2         0			Install VV NBI port support stand. Install VVSA to base support Secure the VVSA to base & NBI port sprt stand.								
S33-6.01         C         Install bumper protection components on the VV           S33-6.02         C         Position AirLoc Wedgemount in lower position.           S32-6.02         C         Position AirLoc Wedgemount in lower position.	1         23APR09         23APR09         2         0           0         24APR09         23APR09         2         0           1         24APR09         23APR09         2         0			Install bumper protection components on the VV Position AirLoc Wedgemount in lower position.								
S33-6.05       C       move the left MCHP over the VV.         S33-6.05       C       Re-install the left adjustor bar.         S33-6.05       C       Make adjustments to properly align MCHP.	I         24APR09         24APR09         2         0           0         27APR09         24APR09         2         0           1         27APR09         27APR09         2         0			move the left MCHP over the VV. Re-install the left adjustor bar. Make adjustments to properly align MCHP.								
S33-6.06     C     Transfer load to the AirLoc Wedgemount leveler.       S33-6.07     C     move the MCHP to the left 1/2".	0         28APR09         27APR09         2         0           0         28APR09         27APR09         2         0           0         28APR09         27APR09         2         0			Transfer load to the AirLoc Wedgemount leveler, move the MCHP to the left 1/2",								
S33-7.01         C         Position AirLoc Wedgemount lowered position.           S33-7.02         C         move the right MCHP over the VV           S33-7.03         C         move the left MCHP to its final position.	U         28APR09         27APR09         2         0           1         28APR09         28APR09         2         0           1         28APR09         28APR09         2         0           1         28APR09         28APR09         2         0			Position AirLoc Wedgemount lowered position. move the right MCHP over the VV move the left MCHP to its final position.								
S33-7.04     C     engage the preinstalled Type-A flange bushings.       S33-7.05     C     Temporary fasteners bring the parts together.	1         29APR09         29APR09         2         0           0         30APR09         29APR09         2         0			engage the preinstalled Type-A flange bushings. Temporary fasteners bring the parts together.								
S33-7.06       C       AirLoc Wedgemount leveler up to take the load.         S33-7.07       C       Remove laser screens         S33-7.08       C       Install temp scaffolding to install flange hw	1         30APR09         30APR09         2         0           0         01MAY09         30APR09         2         0           2         29APR09         30APR09         2         0			AirLoc Wedgemount leveler up to take the load. Remove laser screens Install temp scaffolding to install flance hw								
S33-7.09     C     Install bolts, alumina and inboard weld shims.       S33-7.1     C     Tighten flange fasteners to 50%	1         01MAY09         01MAY09         2         0           1         04MAY09         04MAY09         2         0			Install bolts, alumina and inboard weld shims.								
S33-7.11       C       "wiggle" test       Tighten bolt and recheck.         S33-7.12       C       Perform metrology measurements         S33-7.13       C       Perform position adjustments right side MCHP	1         05MAY09         05MAY09         2         0           2         06MAY09         07MAY09         2         0           2         08MAY09         11MAY09         2         0			"wiggle" test Tighten bolt and recheck. Perform metrology measurements Perform position adjustments right side MCHP								
S33-7.14     C     Remove SISSCO actuator from right MCHP.       S33-7.15     C     Pre-fit & Install bushing.	0         12MAY09         11MAY09         2         0           0         12MAY09         11MAY09         2         0           5         06MAY09         12MAY09         2         0			Remove SISSCO actuator from right MCHP. Pre-fit & Install bushing.								
S33-7.16CTighten nuts 100%. & MeasureS33-8.01Cpartially weld the inboard shim.S33-8.02CFinal complete MC scan verify period alignment	1         13MAY09         13MAY09         2         0           7         14MAY09         22MAY09         2         0           3         26MAY09         28MAY09         3         3			Tighten nuts 100%. & Measure partially weld the inboard shim.								
S33-9.01     C     Attach VV permanent vertical supports       S33-9.02     C     Attach temporary VV vertical supports	1         29MAY09         29MAY09         2         0           1         01JUN09         01JUN09         2         0			Attach temporary VV vertical supports								
S33-9.03     C     Transfer load to vertical supports.       S33-9.04     C     Install VV lateral supports and align       S33-9.05     C     Descent thread to the support of	1         02JUN09         02JUN09         2         0           1         03JUN09         03JUN09         2         0           1         04JUN09         04JUN09         2         0			Transfer load to vertical supports.								
S33-10.01         C         transfer the unit to the transfer support frame           S33-10.02         C         Transfer Period 3 to Station 5 in NCSX TC	1         05JUN09         05JUN09         2         0           1         05JUN09         05JUN09         2         0           1         08JUN09         08JUN09         2         0			transfer the unit to the transfer support frame Transfer Period 3 to Station 5 in NCSX TC								

FY09 FY10 FY12	MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN
	FY07 FY08	FY09	FY10	FY11	FY12

Activity     cp     Activity     Duration     Baseline     Baseline     Shifts     Total       ID     ID     Description     (work     Start     Finish     Float     Float	Fyo7         Fyo8         Fyo9         Fyo9 <th< th=""></th<>
Job: 1815 - Field Period Assy -Station 5-VIOLA Station 5- Final FP Assy -FP#1 (in NCSX TC)	
R1810-5109     C     Begin Station 5 Operations     0     29OCT08     1     5       S51-1.01     C     cut off short dome     2     30OCT08     31OCT08     1     5	Begin Station 5 Operations
S51-1.02     C     Install insulation system around all ports.     0     03NOV08     31OCT08     1     5       051-1.02     C     Install insulation system around all ports.     0     03NOV08     31OCT08     1     5	Install insulation system around all ports.
S51-1.03       C       Install near tape and theomocouples on all ports       0       03NOV08       31OC108       1       5         S51-2.01       C       Install period support fixture       2       03NOV08       04NOV08       1       5	Install period support fixture
S51-2.02     C     Install FPA on support stand.     2     05NOV08     06NOV08     1     5       S51-2.03     C     Install external working platforms     4     07NOV08     12NOV08     1     5	Install External working platforms
S51-2.04       C       Install internal VV working platforms       3       13NOV08       17NOV08       1       5         S51-3.01       C       Install the domes (left and right side),       2       18NOV08       19NOV08       1       5	Install internal VV working platforms Install internal VV working plat
S51-3.02       C       Install small dome ports remaining circ ports.       30       20NOV08       13JAN09       1       5         S51-3.03       C       Leak check each port after it is welded.       30       15DEC08       03FEB09       1       5	Install small dome ports remaining circ ports.
S51-4.01     C     Install boots on ports except for the two port     16     23JAN09     13FEB09     1     5       S51-5.01     C     Install MC lead connections to MC's (in job 7503     0     16FEB09     13FEB09     1     5	Install boots on ports except for the two port
Solution     C     Install MC coolant lines on each MC     6     16FEB09     23FEB09     2     5       251 5 22     C     Install MC coolant lines on each MC     6     16FEB09     23FEB09     2     5	Install MC coolant lines on each MC
S51-5.03     C     Platforms may need to be altered     2     24FEB09     25FEB09     2     5       S51-6.01     C     Rotate 2 TF coils over the MC on the right side     1     26FEB09     26FEB09     2     5	Rotate 2 TF coils over the MC on the right side
S51-6.02       C       Attach the temp support at end of Type-C MC       1       27FEB09       27FEB09       2       5         S51-6.03       C       Lower leveler pad disengage base of MC right sid       0       02MAR09       27FEB09       2       5	Attach the temp support at end of Type-C MC to Lower leveler pad disengage base of MC right side
S51-6.04         C         Install TF support brackets         1         02MAR09         02MAR09         2         5           S51-6.05         C         Secure First TF assy         1         03MAR09         03MAR09         2         5	Install TF support brackets Secure First TF assy
S51-6.06         C         Install TF support brackets         1         04MAR09         04MAR09         2         5           S51-6.07         C         Secure 2nd TF coil         1         05MAR09         05MAR09         2         5	Install TF support brackets Secure 2nd TF coil
S51-6.08     C     Install machine support plates     1     06MAR09     06MAR09     2     5       S51-6.09     C     Reinstall leveler pad     0     09MAR09     06MAR09     2     5	Install machine support plates
S51-6.1     C     Installed one side of the TF support brackets     1     09MAR09     09MAR09     2     5       S51-7.01     C     The TF installation on the left side     7     10MAR09     18MAR09     2     5	Installed one side of the TF support brackets
S51-8.01     C     Perform a fit-up check of the four TF coils     2     19MAR09     20MAR09     2     5       S51-8.01     C     Task wold the left and sight part 4/a     1     23MAR09     2     5	Perform a fit-up check of the four TF coils
S51-9.02     C     Install boots on both port 4's.     2     24MAR09     25MAR09     2     5       251 40.01     0     1     1     25MAR09     2     5	Install boots on both port 4's.
S51-10.01     C     Install PF coil support structure     4     26MAR09     31MAR09     2     5       S51-11.01     C     Install tMC coolant manifold     2     01APR09     02APR09     2     5	Install PF coil support structure Install tMC coolant manifold
S51-11.02     C     Connect MC coolant lines to the manifold     10     03APR09     16APR09     2     5       S51-12.01     C     Install Rogowski coils     3     17APR09     21APR09     2     5	Connect MC coolant lines to the manifold Install Rogowski coils
S51-13.01       C       Obtain set of Period 1 align fiducial positions       2       22APR09       23APR09       2       5         S51-13.02       C       align to tooling balls on each MCHP       1       24APR09       2       5	Obtain set of Period 1 align fiducial positions       align to tooling balls on each MCHP
S51-13.03       C       bring the VV into proper alignment       2       27APR09       28APR09       2       5         S51-13.04       C       Install or identify three primary fiducials       1       29APR09       29APR09       2       5	bring the VV into proper alignment Install or identify three primary fiducials
S51-13.05     C     Make a final measurement of all fiducials     2     30APR09     01MAY09     2     5       S51-13.11     C     Check Assembly (bolts, etc)     3     04MAY09     06MAY09     2     5	Make a final measurement of all fiducials Check Assembly (bolts, etc)
S51-13.12     C     Check Diagnostics (Loops, thermocouples)     2     07MAY09     08MAY09     2     5       S51-13.13     C     Check manifolds (pressure, flow, etc.)     3     11MAY09     13MAY09     2     5	Check Diagnostics (Loops, thermocouples)
S51-13.14     C     Check 6 modcoils (voltage etc)     3     14MAY09     18MAY09     2     5       S51-13.15     C     Check trim coils (voltage etc)     3     14MAY09     18MAY09     2     5	Check 6 modeoils (voltage etc)
S51-13.15       C       Cneck trim coils (voltage etc)       2       19MAY09       20MAY09       2       5         S51-13.16       C       Check TF coils (voltage etc)       3       21MAY09       26MAY09       2       5	Check trim coils (voltage etc)
S51-14.01       C       Install crane rigging to completed Period assy       1       27MAY09       27MAY09       2       5         S51-14.02       C       Remove platforms       1       28MAY09       28MAY09       2       5	Install crane rigging to completed Period assysteme version of the second secon
S51-14.03       C       Transfer Period 1 to Station 6 in NCSX tTC.       1       29MAY09       2       5         Station 5- Final FP Assy -FP#2 (in NCSX TC)	Transfer Period 1 to Station 6 in NCSX tTC.
S52-1.01       C       cut off short dome       2       12MAR09       13MAR09       1       9         S52-1.02       C       Install insulation system around all ports.       0       16MAR09       13MAR09       1       9	Install insulation system around all ports.
S52-1.03       C       Install heat tape and theomocouples on all ports       0       16MAR09       13MAR09       1       9         S52-2.01       C       Install period support fixture       2       16MAR09       17MAR09       1       9	Install heat tape and theomocouples on all ports Install period support fixture
S52-2.02     C     Install FPA on support stand.     2     18MAR09     19MAR09     1     9       S52-2.03     C     Install external working platforms     4     20MAR09     25MAR09     1     9	Install External working platforms
S52-2.04       C       Install internal VV working platforms       3       26MAR09       30MAR09       1       9         S52-3.01       C       Install the domes (left and right side),       2       31MAR09       01APR09       1       9	Install internal VV working platforms Install the domes (left and right side),
S52-3.02       C       Install small dome ports remaining circ ports.       30       02APR09       13MAY09       1       9         S52-3.03       C       Leak check each port after it is welded.       30       23APR09       04JUN09       1       9	Install small dome ports remaining circ ports.
S52-4.01       C       Install boots on ports except for the two port       16       26MAY09       16JUN09       1       9         S52-5.01       C       Install MC lead connections on each of the MC's       1       17JUN09       2       9	Install boots on ports except for the two port
S52-5.02     C     Install MC coolant lines on each MC     6     18JUN09     25JUN09     2     9       S52-5.03     C     Platforms may need to be altered     1     26JUN09     2     9	Install MC coolant lines on each MC
S52-5.03     C     Platforms may need to be allered     1     2001003     2001003     2     5       S52-6.01     C     Rotate 2 TF coils over the MC on the right side     1     29JUN09     29JUN09     2     9       S52-0.02     C     Attrack the term suprest of and of Type C MC     4     20 UN09     20 UN09     2     9	Rotate 2 TF coils over the MC on the right side
S52-6.02       C       Attach the temp support at end of Type-C MC       1       30JUN09       30JUN09       2       9         S52-6.03       C       Lower leveler pad disengage base of MC right sid       0       01JUL09       30JUN09       2       9	Attach the temp support at end of Type-C MC Lower leveler pad disengage base of MC right sid
S52-6.04         C         Install TF support brackets         1         01JUL09         01JUL09         2         9           S52-6.05         C         Secure First TF assy         1         02JUL09         02JUL09         2         9	Install TF support brackets Secure First TF assy
S52-6.06         C         Install TF support brackets         1         06JUL09         06JUL09         2         9           S52-6.07         C         Secure 2nd TF coil         1         07JUL09         07JUL09         2         9	Install TF support brackets Secure 2nd TF coil
S52-6.08     C     Install machine support plates     2     08JUL09     09JUL09     2     9       S52-6.09     C     Reinstall leveler pad     0     10JUL09     09JUL09     2     9	Install machine support plates Reinstall leveler pad
S52-6.1     C     Installed one side of the TF support brackets     1     10JUL09     10JUL09     2     9       S52-7.01     C     The TF installation on the left side     6     13JUL09     20JUL09     2     9	Installed one side of the TF support brackets The TF installation on the left side
S52-8.01     C     Perform a fit-up check of the four TF coils     3     21JUL09     23JUL09     2     9       S52-9.01     C     Tack weld the left and right port 4's.     1     24JUL09     24JUL09     2     9	Perform a fit-up check of the four TF coils
S52-9.02     C     Install boots on both port 4's.     2     27JUL09     28JUL09     2     9       S52-10.01     C     Install PE coil support structure     4     29.111.09     03AUG09     2     9	Install boots on both port 4's.
S52-11.01     C     Install IV consupport structure     1     2500L05     05A0005     2     5       S52-11.01     C     Install tMC coolant manifold     2     04AUG09     05AUG09     2     9       S52-11.02     C     Compact MC coolant lines to the manifold     10     05AUG09     10AUG09     3     0	Install tMC coolant manifold
S52-11.02     C     Connect Mc coolant lines to the manifold     10     06A0G09     19A0G09     2     9       S52-12.01     C     Install Rogowski coils     3     20AUG09     24AUG09     2     9	
S21-9.01     C     Install trim coll and supports     3     25A0G09     27A0G09     2     9       S52-13.01     C     Obtain set of Period 1 align fiducial positions     2     28AUG09     31AUG09     2     9	Obtain set of Period 1 align fiducial positions
S52-13.02     C     align to tooling balls on each MCHP     1     01SEP09     01SEP09     2     9       S52-13.03     C     bring the VV into proper alignment     2     02SEP09     03SEP09     2     9	align to tooling balls on each MCHP bring the VV into proper alignment
S52-13.04       C       Install or identify three primary fiducials       1       04SEP09       04SEP09       2       9         S52-13.05       C       Make a final measurement of all fiducials       2       08SEP09       09SEP09       2       9	Install or identify three primary fiducials Make a final measurement of all fiducials
S52-13.11         C         Check Assembly (bolts, etc)         3         10SEP09         14SEP09         2         9           S52-13.12         C         Check Diagnostics (Loops, thermocouples)         2         15SEP09         16SEP09         2         9	Check Assembly (bolts, etc) Check Diagnostics (Loops, thermocouples)
S52-13.13         C         Check manifolds (pressure, flow, etc.)         3         17SEP09         21SEP09         2         9           S52-13.14         C         Check 6 modcoils (voltage etc)         3         22SEP09         24SEP09         2         9	Check manifolds (pressure, flow, etc.)
S52-13.15         C         Check trim coils (voltage etc)         2         25SEP09         28SEP09         2         9           S52-13.16         C         Check TF coils (voltage etc)         2         29SEP09         30SEP09         2         9	Check trim coils (voltage etc)
S52-14.01       C       Install crane rigging to completed Period assy       1       010CT09       010CT09       2       9         S52-14.02       C       Remove platforms       1       020CT09       020CT09       2       9	Install crane rigging to completed Period assy
S52-14.03     C     Transfer Period 2 to Station 6 in NCSX tTC.     1     050CT09     050CT09     2     9       Station 5- Final FP Assy -FP#3 (in NCSX TC)     1     050CT09     050CT09     2     9	
S53-1.01     C     cut off short dome     1     09JUN09     09JUN09     2     0       S53-1.02     C     Install insulation system around all ports.     0     10JUN09     09JUN09     2     0	cut off short dome Install insulation system around all ports
S53-1.03       C       Install heat tape and theomocouples on all ports       0       10JUN09       09JUN09       2       0         S53-2.01       C       Install period support fixture       1       10JUN09       10JUN09       2       0	Install heat tape and theomocouples on all ports
S53-2.02     C     Install PFA on support stand.     1     11JUN09     11JUN09     2     0       S53-2.03     C     Install external working platforms     2     12    1009     15    1009     2     0	Install FPA on support stand.
S33-2.03     C     Install external working platforms     2     1250103     1350103     2     0       S53-2.04     C     Install internal VV working platforms     2     16JUN09     17JUN09     2     0       250-2.04     C     Install internal VV working platforms     2     16JUN09     17JUN09     2     0	Install external WORKING platforms
S53-3.01       C       Install the domes (left and right side),       1       18JUN09       18JUN09       2       0         S53-3.02       C       Install small dome ports remaining circ ports.       15       19JUN09       10JUL09       2       0         250-0.02       Q       Install small dome ports remaining circ ports.       15       19JUN09       10JUL09       2       0	Install small dome ports remaining circ ports.
S53-3.03     C     Leak check each port after it is weided.     15     30J0N09     21J0L09     2     0       S53-4.01     C     Install boots on ports except for the two port     8     16JUL09     27JUL09     2     0	Install boots on ports except for the two port
S53-5.01       C       Install MC lead connections on each of the MC's       1       28JUL09       28JUL09       2       0         S53-5.02       C       Install MC coolant lines on each MC       6       29JUL09       05AUG09       2       0	Install MC lead connections on each of the MC states on each MC st
S53-5.03       C       Platforms may need to be altered       2       06AUG09       07AUG09       2       0         S53-6.01       C       Rotate 2 TF coils over the MC on the right side       1       10AUG09       10AUG09       2       0	Platforms may need to be altered average and the second se
S53-6.02       C       Attach the temp support at end of Type-C MC       1       11AUG09       11AUG09       2       0         S53-6.03       C       Lower leveler pad disengage base of MC right sid       0       12AUG09       11AUG09       2       0	Attach the temp support at end of Type-C MC Lower leveler pad disengage base of MC right side
S53-6.04         C         Install TF support brackets         1         12AUG09         12AUG09         2         0           S53-6.05         C         Secure First TF assy         1         13AUG09         13AUG09         2         0	Install TF support brackets   Secure First TF assy
S53-6.06         C         Install TF support brackets         1         14AUG09         14AUG09         2         0           S53-6.07         C         Secure 2nd TF coil         1         17AUG09         17AUG09         2         0	Install TF support brackets Secure 2nd TF coil
S53-6.08     C     Install machine support plates     1     18AUG09     18AUG09     2     0       S53-6.09     C     Reinstall leveler pad     0     19AUG09     18AUG09     2     0	Install machine support plates.
S53-6.1       C       Installed one side of the TF support brackets       1       19AUG09       19AUG09       2       0         S53-7.01       C       The TF installation on the left side       6       20AUG09       27AUG09       2       0	Installed one side of the TF support brackets The TF installation on the left side
S53-9.01     C     Tack weld the left and right port 4's     1     02SER09     02SER09     2     0	Perform a fit-up check of the four TF coils
S53-9.02     C     Install boots on both port 4's.     2     03SEP09     04SEP09     2     0       S53-10.01     C     Install PE coil support structure     4     08SEP00     44SEP00     2     0	Install boots on both port 4's.
S53-11.01     C     Install tMC coolant manifold     2     14SEP09     15SEP09     2     0       S53-11.02     C     Connect MC coolant lines to the manifold     10     100EE000     200EE000     2     0	Install tMC coolant manifold
S03-11.02     C     Connect me conant lines to the manifold     10     16SEP09     29SEP09     2     0       S53-12.01     C     Install Rogowski coils     3     30SEP09     02OCT09     2     0	Install Rogowski coils
522-9.01     C     Install trim coll     3     050CT09     070CT09     2     0       S53-13.01     C     Obtain set of Period 1 align fiducial positions     2     080CT09     090CT09     2     0	Obtain set of Period 1 align fiducial positions
S53-13.02Calign to tooling balls on each MCHP1120CT09120CT0920S53-13.03Cbring the VV into proper alignment2130CT09140CT0920	align to tooling balls on each MCHPL bring the VV into proper alignment
S53-13.04CInstall or identify three primary fiducials1150CT0920S53-13.05CMake a final measurement of all fiducials3160CT09200CT0920	Install or identify three primary fiducials Make a final measurement of all fiducials
S53-13.11         C         Check Assembly (bolts, etc)         2         210CT09         220CT09         2         0           S53-13.12         C         Check Diagnostics (Loops, thermocouples)         3         230CT09         270CT09         2         0	Check Assembly (bolts, etc) Check Diagnostics (Loops, thermocouples)
S53-13.13         C         Check manifolds (pressure, flow, etc.)         2         280CT09         290CT09         2         0           S53-13.14         C         Check 6 modcoils (voltage etc)         3         300CT09         03NOV09         2         0	Check manifolds (pressure, flow, etc.) Check 6 modcoils (voltage etc)
S53-13.15         C         Check trim coils (voltage etc)         2         04NOV09         05NOV09         2         0           S53-13.16         C         Check TF coils (voltage etc)         3         06NOV09         10NOV09         2         0	Check trim coils (voltage etc)
S53-14.01     C     Install crane rigging to completed Period assy     1     11NOV09     11NOV09     2     0       S53-14.02     C     Remove platforms     1     12NOV09     2     0	Install crane rigging to completed Period assyl
S53-14.03     C     Transfer Period 3 to Station 6 in NCSX tTC.     1     13NOV09     2     0       R1810-5333     C     Last field period assembled     0     13NOV09     2     0	Transfer Period 3 to Station 6 in NCSX tTC.

Ν	IAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG	SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG S	P OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG	SEP OCT NOV DEC J
	FY07	FY08	FY09	FY10	FY11	FY12

Activity ID	cp Activity Description	Duration         Baseline         Baseline         Shifts         Total           (work         Start         Finish         Float           days         Float         Float         Float	FY07 MAY JUN JUL AUG SEP OCT	NOV DEC JAN FEB MAR APR MAY	JUN JUL AUG SEP OCT NOV DEC JAN FI	FY09 EB MAR APR MAY JUN JUL	AUG SEP OCT NOV	FY10 DV DEC JAN FEB MAR	APR MAY JUN JUL	AUG SEP OCT NOV DEC JAN	FY11 FEB MAR APR MAY	JUN JUL AUG SEP OCT NOV [	DEC JAN
7 - Test Cell F	Preparation and Machine Assy												
75 - Test Cell a Job: 7503 - Ma	and Basement Assembly Operations chine Assembly (station 6)-PERRY												
7501-10 0	Fabricate/Assemble assembly structure	30 04DEC08 23JAN09 1 13			Fabricate/Assemble assembly structure								
7501-10.1	C Fab struct to go between assy sleds&FPA's	20 04DEC08 09JAN09 1 23			Fab struct to go between assy sleds&FPA's								
7501-10.2 C	Assemble 3 FPA support stands           C         Assemble 3 VV spool piece support stands	15         12NOV08*         04DEC08         1         12           10         05DEC08         18DEC08         1         12			Assemble 3 VV spool piece support stands								
7501-10.4 C	Assemble machine base structure     Assemble 3 FPA installation carts	10 19DEC08 12JAN09 1 12 10 13JAN09 26JAN09 1 12			Assemble machine base structure								
7501-10.6	C Fab 3 laser support poles	30         20NOV08*         13JAN09         1         70			Fab 3 laser support poles								
7501-10.7 C	<ul> <li>Fab 3 concrete blocks for testing assy struct</li> <li>Begin Assembly Activities</li> </ul>	12         14JAN09         29JAN09         1         70           0         26JAN09*         1         3			Fab 3 concrete blocks for testing assy struct								
7503-020 C	Install Permanent support base and columns	10 26JAN09 06FEB09 1 3			Install Permanent support base and columns								
7503-015 C	Install Temp Assembly Structure           Install Lower PF 4,5&6 into prelim position	15         09FEB09         27FEB09         1         3           1         02MAR09         02MAR09         1         3			Install Temp Assembly Structure Install Lower PF 4,5&6 into prelim	position							
7503-070 0	Install 3 Spool Pieces on fixt & test movement	10 03MAR09 16MAR09 1 3			Install 3 Spool Pieces on fixt & test mo								
7501-10.10	Test TC floor deflections with concrete block	20         17MAR09         13APR09         1         3           15         14APR09         04MAY09         1         3			Test TC floor del	lections with concrete block							
7501-10.8 C	Exercise assy struc with concrete blocks & metro	20 05MAY09 02JUN09 2 3 20 03JUN09 30JUN09 1 3			Exercise as	ssy struc with concrete blocks & metro							
7503-080	C FPA-1 Installed on sleds	0 30JUN09 1 3				FPA-1 Installed on sleds							
7501-11 C	<ul> <li>Exercise assy struc w/FPA-1 before start of assy</li> <li>Measure vsl gaps to determ spool piece dimension</li> </ul>	40 01JUL09 26AUG09 1 3 n 18 27AUG09 22SEP09 1 3				Exercise assy struc w/FPA-1 before start of assy Measure vsl gaps to determ spool	piece dimension						
7503-415.0 0	Spool piece installation test	20 23SEP09 20OCT09 1 3					Spool piece installation test						
7503-416.2 0	Machine Flange A & B of Spool Piece 1 Machine Flange A & B of Spool Piece 2	30         210C109         03DEC09         1         33           30         04DEC09         26JAN10         1         33					Machine Flange A & B of Spool Plece 1 Machine Flange A & B of Spool P	Piece 2					
7503-416.3 C	Machine Flange A & B of Spool Piece 3         FPA-2 Installation and assembly test	30 27JAN10 09MAR10 1 3				F	PA-2 Installation and assembly test	ine Flange A & B of Spool Piece 3					
7503-110	C FPA-2 Installed on sleds	1         1 <th1< th=""> <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<></th1<>					FPA-2 Installed on sleds	,					
7503-150A C	C FPA-3 Installation and assembly test C FPA-3 Installed on sleds	20         16NOV09         15DEC09         1         0           0         15DEC09         1         0					FPA-3 Installation and assembly test	ed on sleds					
7503-120 C	C Test movement of FPA's incl position checks.	5 16DEC09 22DEC09 1 0					Test movement of FPA's incl posi	sition checks.					
7503-400 C	Move all FPA's together, chk fitup,tack shims	o         04JAN10         11JAN10         1         0           6         12JAN10         19JAN10         1         0					Install inboard Move all FPA's toge	gether, chk fitup,tack shims					
7503-404 0	Weld inboard shims on mating flanges	6 20JAN10 27JAN10 1 00					Weld inbo	poard shims on mating flanges					
7503-410	C Install spacer supports and spacers	2         05FEB10         08FEB10         1         0					ins	Install spacer supports and spacers					
7503-412 C	C Move FPA's & spacers together/chk fitup C Remove Spacers & Machine spacers to fit	6         09FEB10         16FEB10         1         0           4         17FEB10         22FEB10         1         0					М	Move FPA's & spacers together/chk fitup					
7503-415 0	C Re-install spacers	2 23FEB10 24FEB10 1 0						Re-install spacers					
7503-160 C	<ul> <li>Position all FPA's / Spool Pieces @ MC Interface</li> <li>Install local Platforms around FPA-1</li> </ul>	6         25FEB10         04MAR10         1         0           2         05MAR10         08MAR10         2         0					Po	Position all FPA's / Spool Pieces @ MC Interface					
7503-130 0	Install local Platforms around FPA-2	2 09MAR10 10MAR10 2 00						Install local Platforms around FPA-2					
7503-415.5	MC Interface:meas holes/mark bushings f/drilling	2         11MAR10         12MAR10         2         0           3         05MAR10         09MAR10         1         0						MC Interface:meas holes/mark bushings f/drilling					
7503-415.6 C	drill eccentric custom holes in bushings       Position Spool pieces and Bolt MC flanges	3 10MAR10 12MAR10 1 0 9 15MAR10 25MAR10 2 0						drill eccentric custom holes in bushings					
7503-417	C Retorque all super nuts after 30 days	6         26APR10         03MAY10         2         0						Retorque all super nuts afte	r 30 days				
7503-418 C	<ul> <li>Raise permanent supports to take machine loads</li> <li>Remove temporary assy structure</li> </ul>	8         26MAR10         06APR10         2         3           1         07APR10         07APR10         2         3						Raise permanent supports to take machine loads Remove temporary assy structure					
7503-419.1 0	Install/Level FPA's and spool piece supports	15 08APR10 28APR10 2 3						Install/Level FPA's and spool piece supports					
7503-419.2 C	C         FPA Metrology checks to assure alignment           C         Mate-up and Weld spacers onto vvsa	3         04MAY10         06MAY10         2         0           15         07MAY10         27MAY10         2         0						FPA Metrology checks to asso Mate-up and Weld spa	cers onto vvsa				
7503-422 0	Weld all six port 4's in place	15 28MAY10 18JUN10 2 0						We	Id all six port 4's in place				
7503-240	Install E-Beam mapping & diag equipt           Install Vacuum pumping system	3         21JUN10         23JUN10         2         0           3         21JUN10         23JUN10         2         2							Install Vacuum pumping system				
7503-250 C	Begin Vac Vsl Pumpdown     PTP Pumpdown & leak check VV	0 28JUN10 2 00 8 28JUN10 08JUL10 2 00							Begin Vac Vsl Pumpdown				
7503-424 C	C Install TF alignment & traction ring	4 09JUL10 14JUL10 2 0							Install TF alignment & traction ring				
7503-426 C	<ul> <li>Pull TF coil radially inward. Verify nose fit up</li> <li>Lock TF coils at four support locations</li> </ul>	5         15JUL10         21JUL10         2         0           4         22JUL10         27JUL10         2         0							Pull TF coil radially inward. Verify nose fit up				
7503-430 0	Install MC structure insulation boots port 4's	5 28JUL10 03AUG10 2 0							Install MC structure insulation boots port 4's				
7503-432	Fill MC/VVSA annulus with pourable aerogel insul	10         04A0G10         17A0G10         2         0           1         18AUG10         18AUG10         2         0							Fill MC/VVSA annulus with pourable aerog	el insul			
7503-433.1 C	<ul> <li>Install LN2 manifolds</li> <li>Instl in-cryostat cabling for elect pwr to coils</li> </ul>	5         19AUG10         25AUG10         2         16           8         19AUG10         30AUG10         2         0							Install LN2 ma	anifolds			
7503-436 0	C Connect cabling, and I&C to MC & TF Coils	8 31AUG10 10SEP10 2 0							Connect cabling, and I&C to M				
7503-439 C	Complete mag diag & machine I&C Align guide mechanism for solenoid installation	5         13SEP10         17SEP10         2         0           1         20SEP10         20SEP10         2         0							Complete mag c Align guide mechanism f	diag & machine I&C			
7503-444 0	Install solenoid support structure	1 21SEP10 21SEP10 2 0							Install sol	enoid support structure			
7503-442	C Connect cabling, LN2 and &C to solenoid assy	1 23SEP10 23SEP10 2 0							r Connect cabling, LN2	andI&C to solenoid assy			
7503-446 C	C Install PF4L C Connect cabling, LN2 and I&C to PF4L	1         24SEP10         24SEP10         2         0           1         27SEP10         27SEP10         2         0							Connect cab	Install PF4L			
7503-450 C	Adjust spring compression in solenoid sprt struc	1 28SEP10 28SEP10 2 0							Adjust spring compres	ssion in solenoid sprt struc			
7503-451 C	Raise lower PF 5&6 colls into final position         Instl Upper PF 4, 5 & 6	3         295EP10         010Cf10         2         0           3         040CT10         060CT10         2         0							Raise lower PF	Instl Upper PF 4, 5 & 6			
7503-330 C	<ul> <li>Begin Cryostat Installation</li> <li>Install cryostat base, vanor barrier, port boots</li> </ul>	0 070CT10 2 00 5 070CT10 130CT10 2 00							Install crucetat	Begin Cryostat Installation			
7503-456	C Install elec pwr, LN2, & instr feedthrus	3         140CT10         180CT10         2         0							Inst	all elec pwr, LN2, & instr feedthrus			
7503-458 C 7503-460 C	<ul> <li>Integrated Electrical testing</li> <li>Instl transition box,cabling,&amp;connect to pwr sup</li> </ul>	5         19OCT10         25OCT10         2         0           5         26OCT10         01NOV10         2         34							Insti tra	Integrated Electrical testing			
7503-462 0	C LN2 connections from coils to manifolds	5 260CT10 01NOV10 2 8								LN2 connections from coils to manifolds			
7503-466 C	Connect 150C bakeout	3         2000110         01N0V10         2         0           3         02N0V10         04N0V10         2         0								Connect 150C bakeout			
7503-470 C	<ul> <li>Install cryostat cooling syst &amp; instrumentation</li> <li>Install cryostat upper section. VB &amp; nort boots</li> </ul>	10         12NOV10         29NOV10         2         0           5         30NOV10         06DEC10         2         0								Install cryostat cooling syst & instrumentation			
7503-472	C Install midplane cryostat sections & port boots	8         07DEC10         16DEC10         2         0								Install midplane cryostat sections & port boots			
7503-473 C 730.8200 C	C Install cryostat circulation duct C PTP and Cool down	3         17DEC10         21DEC10         2         0           3         22DEC10         03JAN11         2         0								Install cryostat circulation duct			
8 - Project Ov	versight and Support												
<b>82 - Project El</b> Job: 8205 - Din	ngineering nensional Control Coordin-ELLIS												
METFY07R1	Dimensional control plans for station 2	65 01JUN07* 31AUG07	Dimensional control plans for s	station 2									
85 - Integrated	d Systems Testing												
Job: 8501 - Inte	egrated Systems Testing-GENTILE												
8501-102 C	<ul> <li>Punch list &amp; CSIS &amp; HIS PTP's complete,</li> <li>PTP's complete for FCS HCS vac pmpg</li> </ul>	5         010CT10*         070CT10         1         5           5         080CT10         140CT10         1         5							Punch list & C	CSIS & HIS PTP's complete,			
8501-104 C	ACC review and ORA	5         150CT10         210CT10         1         5							FIFS CO	ACC review and ORA			
730.1250 C	<ul> <li>PSO Operational Readiness Assessment</li> <li>Configure for Startup ISTP</li> </ul>	0         210CT10         1         5           5         260CT10         01N0V10         1         3							PSO	Operational Readiness Assessment			
8501-305 C	Coil Testing at room temp	5 05NOV10 11NOV10 1 0								Coil Testing at room temp			
8501-106 C 8501-107 C	Coul testing @ cryo temp, Pump-down VV Combined field testing, Make 1st Plasma	5         04JAN11         10JAN11         1         0           5         11JAN11         17JAN11         1         0								Coil testing @ cryo temp, Pump-down VV			
8501-108 C	Vent VV, Config for & instl e-beam mapping	5 18JAN11 24JAN11 1 0								Vent VV, Config for & instl e-beam mapping			
8501-306 C 8501-110 C	NCSX Startup Complete	5         25JAN11         31JAN11         1         0           0         31JAN11         1         0								E-beam mapping NCSX Startup Complete			
730.9000 C	CD-4	0 23DEC11* 1 0										CI	JD-4

		MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG	SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP	OCT NOV DEC JAN FEB MAR APR MAY JUN JU	JL AUG SEP OCT NOV DEC JAN
		FY07	FY08	FY09	FY10	FY11	FY12
Run Date		30JUL07 15:44	ETCL	NCSX Critical Paths			Sheet 4 of 4
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