

Activity ID	Activity Description	Duration (work days)	Baseline Start	Baseline Finish	Shifts	Total Float	FY07												FY08												FY09																
							M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
<b>cc 9450 - NCSX Fabrication (MIE)</b>																																															
<b>1 - Stellarator Core Systems</b>																																															
<b>14 - Modular Coils</b>																																															
<b>Job: 1421 - Mod Coil Interface Design-WILLIAMSON</b>																																															
<b>Complete Design of MC Interface</b>																																															
IH1-000	ESTABLISH CONCEPT	25	01MAY07	05JUN07		238	■ ORNLEM =540hr ;																																								
IH1-0000	PEER REVIEW OF JOINT CONCEPT	12	06JUN07	21JUN07		238	■ ORNLEM =80hr ;																																								
IH1-001	Coil to coil analysis	30	22JUN07	03AUG07		238	■ ORNLEM =360hr ; ornlm&s=36																																								
1421-3125	Determine geometry&location of high COF shims&pl	12	06AUG07	21AUG07		238	■ ornlm =80hr ;																																								
1421-3127	Structural analyses to performance reqmts for bol	25	22AUG07	26SEP07		238	■ ORNLEM =160hr ;																																								
1421-3131	PDR prep for requirements, design,&development	6	27SEP07	04OCT07		238	■ ORNLEM =40hr ;																																								
1421-3132	PDR to review requirements, design,&development	0		04OCT07		238	▽ ORNLEM =00hr ;																																								
1421-3134	Develop specs & dwgs for station 2 &3 assy	20	05OCT07	01NOV07		238	■ ORNLEM =440hr ;																																								
1421-3135	FDR Prep	7	02NOV07	12NOV07		238	■ ORNLEM =40hr ;																																								
1421-3136	Conduct MC interface FDR	0		12NOV07		238	▽ ORNLEM =00hr ;																																								
1421-3138	Resolve issues, release assembly spec&drawings	35	13NOV07	11JAN08		238	■ ORNLEM =240hr ;																																								
1421-3140	Prep C-C shim drawings and release	25	14JAN08	15FEB08		602	■ ORNLEM =160hr ;																																								
1421-3142	FDR Prep for C-C shims	35	18FEB08	04APR08		602	■ ORNLEM =240hr ;																																								
1421-3144	FDR C-C Shims	0		04APR08		602	▽																																								
<b>Interface Design</b>																																															
INTRF-001	PPPL buy SS plate for weld trials	5	01JUN07*	07JUN07		215	■ M&S=31 em//em=8																																								
INTRF-005	Weld distortion trials at PPPL on SS plate	7	08JUN07	18JUN07		215	■ em//em=40; em//tb=20; 41=1																																								
INTRF-010	Develop Weld Geometry Procedure	7	19JUN07	27JUN07		215	■ ea//em=40																																								
INTRF-025	ORNL build pywood mockup of flange	10	23MAY07*	06JUN07		220	■ ornl41=30; ornlm=60																																								
INTRF-030	ORNL verify weld access	10	07JUN07	20JUN07		220	■ ornlm=40 ornl41=20																																								
INTRF-035	PPPL Determine shim material	15	23MAY07*	13JUN07		225	■ ea//em=40																																								
INTRF-040	Analysis of tensil loads (ORNL)	35	23MAY07*	12JUL07		205	■ ornlm=240																																								
INTRF-045	FDR prep outboard shims	10	13JUL07	26JUL07		205	▽ ■ ornlm=40																																								
INTRF-046	FDR outboard shims	0		26JUL07		207	▽																																								
IH4-020	Prepare outboard shim dwgs and release	10	27JUL07	09AUG07		207	■ ORNLEM =40hr ;																																								
INTRF-015	Weld trials on two MCWF's at PPPL	30	27JUL07	07SEP07		205	■ em//em=80;em//tb=645; 41=1k																																								
INTRF-020	Document results and update weld procedure	12	10SEP07	25SEP07		205	■ ea//em=80																																								
INTRF-050	Complete Shim fabrication drawings (ORNL)	25	27JUL07	30AUG07		222	■ ornlm=160																																								
INTRF-054	FDR prep a-b b-c inboard shims	6	18SEP07	25SEP07		205	■ em//em=40																																								
INTRF-055	FDR a-b b-c inboard shims	0		25SEP07		205	▽																																								
INTRF-100	Misc travel, meetings,reporting,presentations	287	01MAY07	23JUN08		1,068	■ 35=3k; ornl35=9k ■ ornlm=807;em//em=170																																								





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S21-7.07	Perform the X-Y positioning of the coil.	1	16JAN08	16JAN08		205																																			
S21-7.08	Install remaining metal shims torque to 50%	2	17JAN08	18JAN08		205																																			
S21-7.09	"wiggle" test Tighten bolt and recheck.	1	21JAN08	21JAN08		205																																			
S21-7.1	Measure the tooling balls on all coils.	5	22JAN08	28JAN08		205																																			
S21-7.11	adjust shims locally. Re-torque all studs to 50%	3	29JAN08	31JAN08		205																																			
S21-7.12	Install alumina shims. Re-torque all studs to	1	01FEB08	01FEB08		205																																			
S21-7.13	"wiggle" test Tighten bolt and recheck.	1	04FEB08	04FEB08		205																																			
S21-7.14	Measure the tooling balls on all coils.	5	05FEB08	11FEB08		205																																			
S21-7.15	adjust shims locally. Re-torque all studs to 50	3	12FEB08	14FEB08		205																																			
S21-7.16	Install bushing.	2	15FEB08	18FEB08		205																																			
S21-7.17	Complete tightening of flange bolts to 100%.	1	19FEB08	19FEB08		205																																			
S21-11.01	Identify primary fiducials for positioning Sta 3	1	20FEB08	20FEB08		205																																			
S21-7.18	Final metrology meas. Scan "B" flangeType-C coil	5	21FEB08	27FEB08		205																																			
Tack Weld Inboard Welded shims																																									
S21-8.01	Tack weld inboard shims	2	28FEB08	29FEB08		205																																			
Install Trim Coil																																									
S21-9.01	Install trim coil	6	03MAR08	10MAR08		205																																			
Complete Local Service & interface details																																									
S21-10.01	Install all wing support bladders	2	11MAR08	12MAR08		211																																			
S21-10.02	Make local service runs/connections	8	11MAR08	20MAR08		205																																			
S21-10.03	Inject stycast in all shim spaces	1	11MAR08	11MAR08		212																																			
Final Measurements/Transfer to Holding Area																																									
S21-11.03	Measure bolt length on all tension fasteners	0	25MAR08	24MAR08		205																																			
S21-11.04	Mark part for identification	0	25MAR08	24MAR08		205																																			
S21-11.05	Install lift support beams	2	21MAR08	24MAR08		205																																			
S21-11.06	Remove from stand & measure weight of assy	1	25MAR08	25MAR08		205																																			
S21-11.07	Move A1-B1-C1 to holding area.	0	26MAR08	25MAR08		205																																			
Station 2 MC Sub Assy A2-B2-C2																																									
A-B Assembly																																									
S22-6.01	A2 "A" flange dwn, 20deg fixt. Obtain fiduci	1	09OCT07	09OCT07		247																																			
S22-6.02	Align to the conical seats locking into a min of	1	10OCT07	10OCT07		247																																			
S22-6.03	Measure monuments on fixture and on the walls.	2	11OCT07	12OCT07		247																																			
S22-6.04	Place alumina grind inboard weld shims on coil.	2	28NOV07	03DEC07		215																																			
S22-6.05	Lower the Type-B coil onto the Type-A coil.	1	04DEC07	04DEC07		215																																			
S22-6.06	Meas monuments on A coil. Jack to within .002"	1	05DEC07	05DEC07		215																																			
S22-6.07	Perform the X-Y positioning of the B coil.	1	06DEC07	06DEC07		215																																			
S22-6.08	Install studs, supernuts, torque to 50% of final	2	07DEC07	10DEC07		215																																			
S22-6.09	"wiggle" test Tighten bolt and recheck.	1	11DEC07	11DEC07		215																																			
S22-6.1	Meas tooling balls on both coils. max devi .007"	5	12DEC07	18DEC07		215																																			
S22-6.11	adjust shims locally. Re-torque all studs to 50%	3	19DEC07	21DEC07		215																																			
S22-6.12	Install bushing.	2	02JAN08	03JAN08		215																																			



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		+ Station 5- Final FP Assy -FP#2 (in NCSX TC)																																				
			224	07NOV08	02OCT09		217																															
		+ Station 5- Final FP Assy -FP#3 (in NCSX TC)																																				
			116	07MAY09	20OCT09	2	205																															