	10/05 3:23	PM Start Up 2005 v1.mpp				
ID	_	Task Name	Duration	Start	May 9, '05	May 16, '05
1	0	Baseline Measurements done (Power Supplies, Orbit,	0 days	Sun 4/10/05	T F S S M T W T F S	S M T
1			-			
2		Baseline Measurements done (LFB, TFB, growth rates	0 days	Sun 4/10/05		
3	11	Shutdown Start	0 days	Mon 4/11/05		
4						
5		Work during Shutdown	25 days	Mon 4/11/05	Work during Shutdown	:
6		Potentially Matlab HL software work	2.5 edays	Mon 4/11/05		
7		Check out thermal behaviour of Superbends	7 edays	Wed 4/20/05		
,		Check out Superbend ramping with new coldhead	7 edays	Wed 4/27/05		
0					me	
9		Superbends ready for startup	0 days	Wed 5/4/05		
10		2nd main RF HOM dampers installed	0 days	Mon 5/2/05		
11		Control System 100% Functional	0 days	Fri 5/6/05	6 Functional 🔶 -5/6	:
12						
13		Finish Shutdown, start Injector	2.67 days	Fri 5/6/05	Finish Shutdown, start Injector	:
14	T	Finish all shutdown work	0 days	Fri 5/6/05	5/6	
15	_	Search and secure LINAC, booster + SR	2 ehrs		hoster : SP	
					booster + SR	
16	11	Follow comprehensive startup procedure (Linac+t	8 ehrs		up procedure (Linac+booster)	
17		Follow comprehensive startup procedure (Storage	16 ehrs		nprehensive startup procedure (Storage Ring)	
18	T	Setup Beam Thru Injector and BTS Line	8 ehrs	Sat 5/7/05	Setup Beam Thru Injector and BTS Line	
19	T	Switch on all hardware in storage ring - Do NOT I	8 ehrs	Sun 5/8/05	all hardware in storage ring - Do NOT INJECT	
20						
21		Good Vacuum W/O Beam (Sublimate early enough)	0 days	Sun 5/8/05	acuum W/O Beam (Sublimate early enough) 5/8	
22			5 64,6			
23		Hardware Checkout W/O Beam	0.17 days	Mon 5/9/05	Hardware Checkout W/O Beam	
24	11	DCCT	0.2 ehrs	Mon 5/9/05	DCCT Physics	
25		Scrapers	1 ehr	Mon 5/9/05	Scrapers Physics	
26	11	Tune Measurement System	0.2 ehrs	Mon 5/9/05	Tune Measurement System Physics	
27		RF Frequency	0.2 ehrs	Mon 5/9/05	RF Frequency	
28		BPM and IDBPM data rates (no beam)	0.5 ehrs	Mon 5/9/05	BPM and IDBPM data rates (no beam) : Physics[50%]	
29	_	Shunts	1 ehr	Mon 5/9/05		
					Shunts Physics[50%]	
30		Test all Power Supplies (especially modified s	0.17 days	Mon 5/9/05	Test all Power Supplies (especially modified skew quadrupoles)	
31		Stability	2 ehrs	Mon 5/9/05	Stability Physics[50%]	
32	11	SP-AM	2 ehrs	Mon 5/9/05	SP-AM Physics[50%]	
33		Data Rates	2 ehrs	Mon 5/9/05	Data RatesPhysics[50%]	
34	T	Ramping	2 ehrs	Mon 5/9/05	Ramping Physics	
35	1	Check Power Supply Can Reach Max/Min C	1 ehr	Mon 5/9/05	Check Power Supply Can Reach Max/Min Current Physics	
36		,				
		Other stand and size the function to the stand of the standard s	0.00 dava	Man 5/0/05		
37		Start storage ring injection (watch HOM damper te	0.32 days	Mon 5/9/05	Start storage ring injection (watch HOM damper temperatures)	
38		First fill single bunch and verify/optimize THC tuni	2 ehrs	Mon 5/9/05	First fill single bunch and verify/optimize THC tuning with HOM dampers	
39		Radiation survey during injection and stored bear	2 ehrs	Mon 5/9/05	survey during injection and stored beam (desired to go to multibunch 200 mA) Fairchild	
40		Watch temperatures of HOM dampers -> do not (2 ehrs	Mon 5/9/05	Watch temperatures of HOM dampers -> do not overfill ring Kwiatkowski,Julian,Baptiste,Physics,Operators	
41	TT	Correct first turn orbit	1 ehr	Mon 5/9/05	Correct first turn orbit "Steler,Scarvie	
42		Adjust tunes/lattice	1 ehr	Mon 5/9/05	Adjust tunes/latticeSteier,Scarvie	
43		Tune rf phase - relative energy	0.5 ehrs	Mon 5/9/05	Tune rf phase - relative energy - Steier.Byrne	
44		Initial multi turn optimization/store beam		Mon 5/9/05	Initial multi turn optimization/store beam	
		-	0.21 days		\mathbf{v}	
45		BPM checkout	0.03 days	Mon 5/9/05	BPM checkout	
46		Check BPMs Calibrate	0.2 ehrs	Mon 5/9/05	Check BPMs Calibrate Steier, Scarvie	
47	T	Check Sample Rates	0.2 ehrs	Mon 5/9/05	Check Sample Rates Steler, Scarvie	
48	T	Measure Noise	0.2 ehrs	Mon 5/9/05	Measure Noise Steier,Scarvie	
49	1	Tune Measurement	0.2 ehrs	Mon 5/9/05	Tune Measurement .Steier,Scarvie	
50		RF Frequency	0.1 ehrs	Mon 5/9/05	RF Frequenty _Steler,Scarvie	:
	_		1 ehr	Mon 5/9/05		
51		Quick setup (orbit, tune, chrom correction)			i de la companya de l	
52		Skew quadrupole response matrix (dispersio	2 ehrs	Mon 5/9/05	Skew quadrupole response matrix (dispersion)	
	11	Response Matrix Measured	0.75 ehrs	Mon 5/9/05	Response Matrix Measured Steler,Scarvie	
53	11	Measurement Of Orbit Jitter	0.5 ehrs	Mon 5/9/05	Measurement Of Orbit Jitter Steier,Scarvie	
	111					:
53 54 55						:
54		First Stored Beam in SR	0 days	Mon 5/9/05	First Stored Beam in SR	

ID .		Task Name	Duration	Start	May 9, '05 May 16, '05	
•	0	rusk mulle	DurauUII	Sidil	T F S S M T W T F S S M	Т
57						
58		Beam Physics Studies (HOM dampers, instabilities	3.46 days	Mon 5/9/05	Beam Physics Studies (HOM dampers, instabilities, feedbacks, t	beam base
9	11	Test of HOM dampers 1 (different fill patterns, cu	10 ehrs	Mon 5/9/05	est of HOM dampers 1 (different fill patterns, currents and cavity temperatures) Awiatkowski,Burd,Barry,Stover	
0	11	Scrub With Beam (1.9 GeV) -> maybe more time	6 ehrs	Tue 5/10/05	eam (1.9 GeV) -> maybe more time needed ? Vacuumwork in sectors 2,3,4,6, !	
1	1	During Scrubbing: Test Slow Orbit Feedback and	6 ehrs	Tue 5/10/05	Orbit Feedback and new ML software (later in week potentially give some beam to users - BL 57) Steier, Scarvie	
62	11	Analyze response matrix	2 ehrs	Tue 5/10/05	Analyze rosponse matrix Steler[10%]	
-	11	Sufficiently Good Vacuum For Precision Machine	0 days	Tue 5/10/05	Sufficiently Good Vacuum For Precision Macrine Studies	
-		EPBI Test 2	6 ehrs	Tue 5/10/05	EPBI Test 2 Byrne, Operators	
		Measure absolute orbits/coupling	4 ehrs	Wed 5/11/05		
		Prepare For/Test Beam Based Alignment	2 ehrs	Wed 5/11/05		
		· ·				
57		Beam Based Alignment	0.63 days	Wed 5/11/05	Beam Based Alignment	
8		Find QF and QD Centers	6 ehrs	Wed 5/11/05	Find QF and QD Centers	
9	1	Find QFA+QDA Centers	6 ehrs	Wed 5/11/05	Find QFA+QDA Centers	
0	11	Establish Golden Orbit Without User Bumps	2 ehrs	Wed 5/11/05	Establish Goden Orbit Without User Bumps	
/1	11	Measure Response Matrix again	1 ehr	Wed 5/11/05	Reasure Response Matrix again Physics, Operators	
2	11	Test of HOM dampers 2 (different fill patterns and	8 ehrs	Wed 5/11/05	Test of HOM dampers 2 (different fill patterns and currents)	
3	11	Study transverse multibunch feedbacks with HON	4 ehrs	Thu 5/12/05	Study transverse multibunch leedbacks with HOM dampers	
-		Measurement of Beam Stability With Feedback S	4 ehrs	Thu 5/12/05	Measurement of Beam Stability With Feedback Systems and HOM dampers at 400 MilliampsKwiatkowski,Barry,Stover	
-		Fit Lattice Model	4 ehrs	Wed 5/11/05	Fit Lattice Model Steier	
-		Generate Feed Forward Tables	12 ehrs	Thu 5/12/05	Generate Feed Forward Tables Physics,Operators	
-	_	Test Routine high current operation		Fri 5/13/05	i de la companya de l	
		rest noutine righ current operation	4 ehrs	FII 5/ 13/05	Test Routine high current operation Physics,Operators,Byrne[50%],Byrd	
78						
79	11	HOM dampers decision point	0 days	Thu 5/12/05	HOM dampers decision point 🔶 5/12	
30						
31		Additional Beam Physics Studies	4.92 days	Fri 5/13/05		
32		Fast orbit feedback (new IP 2 boards)	8 ehrs	Fri 5/13/05	Fast orbit feedback (new IP 2 boards)	
	11	Scan all small gap vacuum chambers for lifetime	8 ehrs	Fri 5/13/05	Scan all small gap vacuum chambers for lifetime changes (especially IVID)Physics,Operators	
4		Additional tests with IVID (tune shift, orbit, dynami	8 ehrs	Fri 5/13/05	Additional tests with IVID (tune shift, orbit, dynamics,)	
35		Dynamics studies (gap vs. lifetime)	12 ehrs	Sat 5/14/05	Dynamics studies (gap vs. lifetime) Robin, Steier, Wan	
B6		New skew quadupole - local dispersion bump	12 ehrs	Sat 5/14/05		
					New skew quadupole - local dispersion bump	
87		Additional Middle Layer Tests - will be used during	12 ehrs	Sun 5/15/05	Additional Middle Layer Tests - will be used during whole startup	
88		Test digital feedorward for EPUs	4 ehrs	Sun 5/15/05	Test digital feedorward for EPUs	
89		EPBI test # 3 for IVID	4 ehrs	Sun 5/15/05	EPBit test # 3 for IVID Byrne,Nishimur	a
90		Test new IDBPMs	2 ehrs	Mon 5/16/05	Test new IDBPMs	
91		Test new skew coil in sector 11 [11 1]	2 ehrs	Mon 5/16/05	Test new skew coil in sector 11 [11 1]	
92		Skew FF table for [11 1]	12 ehrs	Mon 5/16/05	Skew FF table for [11 1]	h
93		New FF tables (sector 6,11, ?)	4 ehrs	Mon 5/16/05	New FF tables (sector 6,11?)	ř.
94		Move injection septa/straight further	6 ehrs	Mon 5/16/05	Move injection septa/straight further	*
95		More coupling/dynamics studies	8 ehrs	Tue 5/17/05	More coupling/dynamics studies	
96		Test beam bumps for users?	4 ehrs	Tue 5/17/05		mas for
				Tue 5/17/05 Tue 5/17/05	: Test beam bu	-
97		Low current scrubbing/beam time for some users	12 ehrs	Tue 5/17/05	Low current scrubbing/beam time f	or some u
98						
-	H.	Key enable all beamlines (WITHOUT opening the shut	3 edays	Thu 5/12/05	Key enable all beamlines (WITHOUT opening the shutter)	
100						
101		Operations tests with beamline scientists	3 days	Sun 5/15/05		
02	11	Get Beamlines online	2 ehrs	Sun 5/15/05	Get Beamlines online	to
-	11	Evaluate Overall Beam Stability/Quality with Bear	2 ehrs	Sun 5/15/05	Evaluate Overall Beam Stability/Quality with BeamlinesByrne,Beamline	
	11	Absolute Orbit / bumps	8 ehrs	Sun 5/15/05	Absolute Orbit / bumps Byrne,Duarte,B	
-		Align (potentially frontends)	14 ehrs	Sun 5/15/05	Align (potentially frontends)	Byrne,D
		Reevaluate Beamlines		Mon 5/16/05		÷ .
-			6 ehrs		Reevaluate Beamlines	Byrne,D
-	11	Fine Tune Beamline Alignment / Routine Operatic	40 ehrs	Mon 5/16/05	Fine Tune Beamline Alignment / Routine Operation	
08						
09		Align beamlines as necessary (reduced because si	37 days	Mon 4/11/05		
10	11	Frontends/inside tunnel	26 edays	Mon 4/11/05	_Duarte,Byrne,Gavidia	
		Outside tunnel	9 edays	Sat 5/7/05	Outside tunnel Duarte, Gavidia,	Beamline
11	TT					
111			-			