#### **JLab FEL Overview**

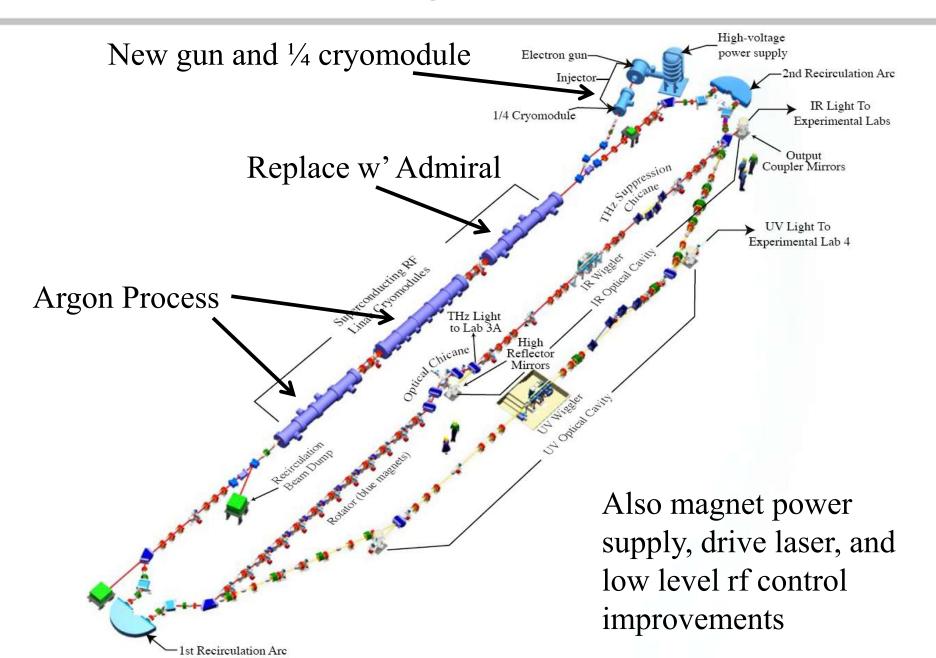
- Run Ops until July 31.
  - IR-FEL in March/April/May.
  - UV-FEL in May/June.

    requires vacuum/alignment help
  - Darklight (NP) in July. requires vacuum/alignment help
- ➤ In parallel refurbish Admiral as new C-100. (srf help)
- > Starting August 1 until December 31.
  - install Admiral, Ar process FEL03/04 (srf)
  - remove existing gun, quarter, install new gun, new cryounit tbd requires vacuum/alignment /mechanical/ cryo/electrical

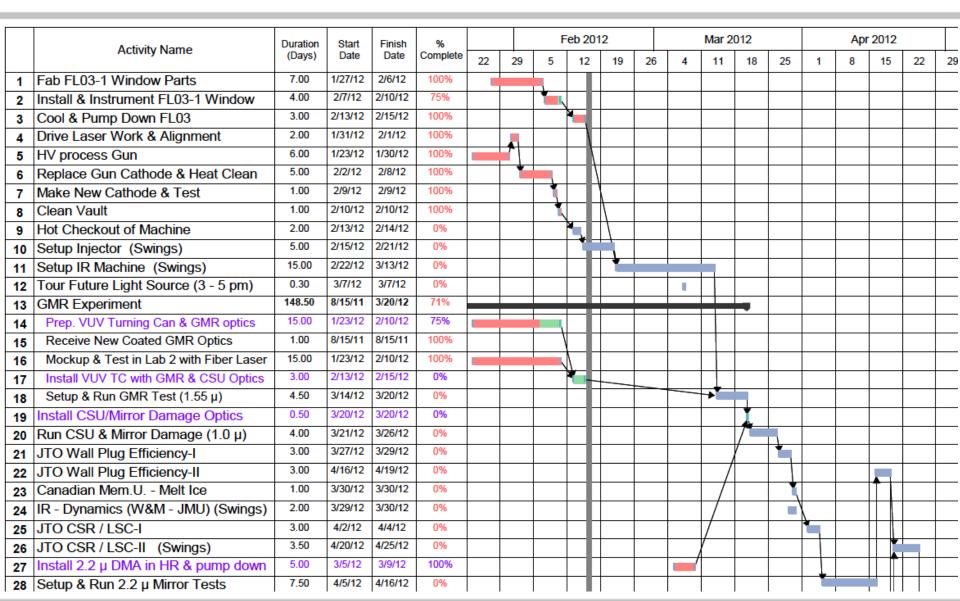




## **JLab FEL Upgrades Locations**



#### The IR Run





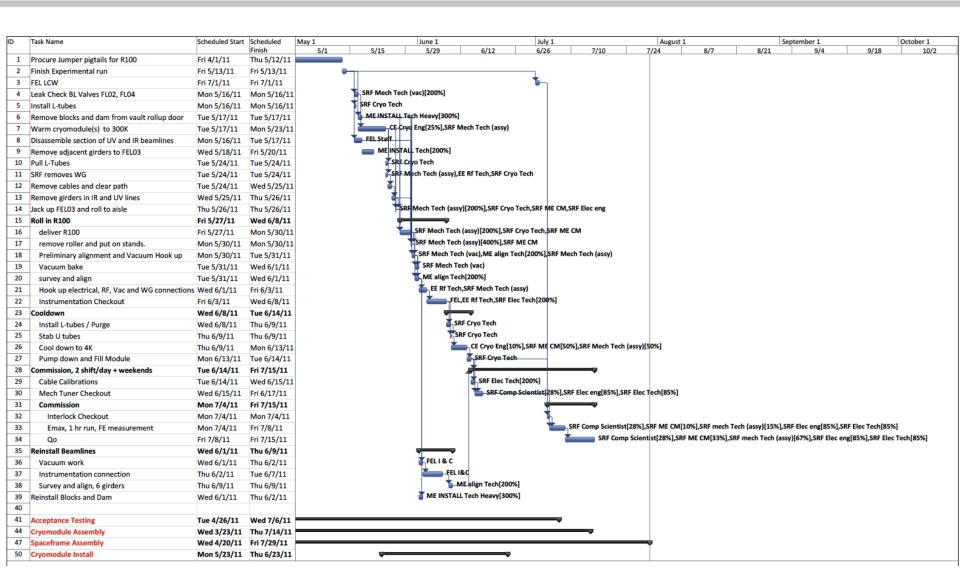


## The UV/Darklight Run

29	Install New Undulator	29.61	1/23/12	3/2/12	27%	Ō					_	'							П														
30	Machine Vacuum Chamber Flanges	10.00	1/23/12	2/3/12	100%														П											$\Box$			
31	Reweld Vacuum Chamber	2.00	2/6/12	2/7/12	100%			_											П											$\Box$			
32	Leak Check & Clean Vacuum Chamber	3.00	2/8/12	2/10/12	0%														П											$\Box$			
33	Install & Align Undulator Vac Chamber	5.00	2/13/12	2/20/12	0%					EE	S Vac T	ech, I&	C Tech[	00%], N	lech Er	ig																	
34	Undulator Final Alignment - 2B	1.00	2/20/12	2/21/12	0%					M M	E Align I	ng, M	E Align T	ech[200	%]				П														
35	Install Viewers	2.00	2/20/12	2/22/12	0%								Scientist																				
36	Re-connect 7F Vacuum Lines	1.00	2/20/12	2/21/12	0%								&C Tech						П														
37	Re-install & Connect UV Ion Pumps	1.00	2/21/12	2/22/12	0%					1	&C Tech	[200%]							П														
38	Install UV Magnets & Earth Coil	1.00	2/21/12	2/22/12	0%					T I	&C Tech	200%	], S.S. S	ientist					П											$\Box$			
39	Install & Cal. BPM Electronics	2.00	2/22/12	2/24/12	0%						Elec E	ng, I&C	Tech						П											$\Box$			
40	Pump 7F Beam Line	1.00	2/21/12	2/22/12	0%								I&C Tec						П											П			
41	Align Vacuum Chamber Viewers	2.00	2/22/12	2/24/12	0%								ch Eng,	ı					П											$\Box$			
42	Instrument UV Undulator	3.00	2/22/12	2/27/12	0%						11		Optics S	1																			
43	Checkout Undulator Diagnostics	4.00	2/27/12	3/2/12	0%							I&C T	ech[2009	6], Optio	s S. Sc	ientist			П														
44	Install OCCMs	3.00	2/15/12	2/17/12	0%					Optic	ech[2	00%]							П														
45	Align OCCMs	3.00	2/22/12	2/27/12	0%					X	Opt	ics Tec	:h[200%]																				
46	VUV Work	70.00	1/23/12	4/27/12	44%	0														•													
47	Fab UV DMA Components	9.00	1/23/12	2/2/12	100%																												
						22	29	5	12	19	26	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	22	29

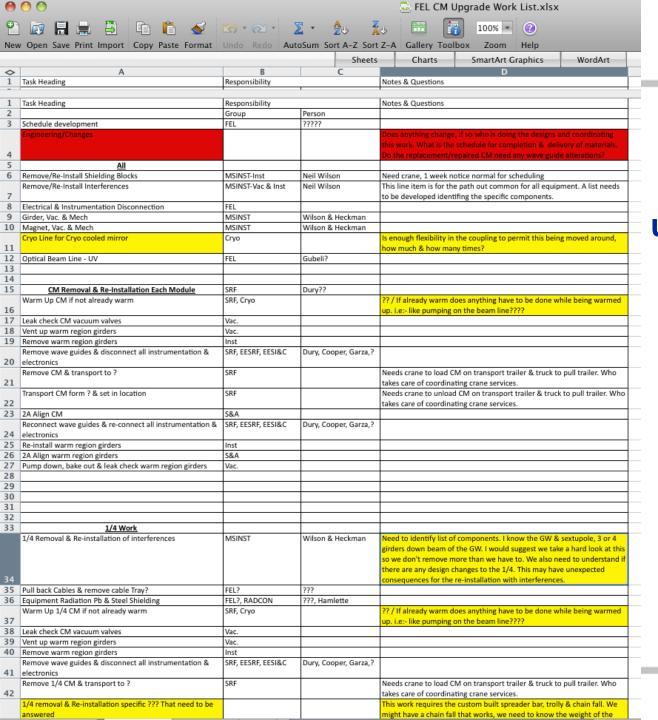
	Activity Name	Duration	Start	Finish	%			Feb 2012				Mar 2012					Apr	r 2012			N	/lay 20	12		Jun 2012					Jul 2012			
		(Days)	Date	Date	Complete	22	29	5	12	19	26	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	22	29
48	Procure new DMA Optics	15.00	1/23/12	2/10/12	100%																												$\Box$
49	Bond Trial UV DMA & Test	14.00	1/23/12	2/9/12	100%																												$\Box$
50	Coat new DMA Optics	20.00	2/10/12	3/8/12	0%			*											П														$\Box$
51	Test UV DMA	23.00	3/9/12	4/10/12	0%																												$\Box$
52	Install UV DMA	6.00	4/20/12	4/27/12	0%													*		l I													$\Box$
53	Beam Instruments Workshop Tour	0.50	4/19/12	4/19/12	0%													T		V.													
54	Install & pump VUV T.C., optic, pico's	5.00	4/30/12	5/4/12	0%															1	Optics	S. Scie	ntist, O	ptics Te	ch[2009	%]							
55	I&C Switch to UV Beamline	3.00	4/25/12	4/30/12	0%														T	180	C Tech[3	0%]											
56	Setup UV machine (Swings to Start)	12.00	4/30/12	5/16/12	0%															1													П
	Characterize UV Undulator	5.00	5/16/12	5/23/12	0%															1			Τ.	ptics S	. Scient	1							П
58	Setup & Characterize VUV Beam	12.00	5/23/12	6/8/12	0%																			i	i i	&C Te	ch, Opti	cs S. S	dientist				П
59	RadCon Test Lab 1	0.50	5/23/12	5/23/12	0%														17				1 B	adCon	Tech								П
60	VUV Users	15.00	6/8/12	6/29/12	0%														/						•								$\Box$
61	Install any exp hardware	5.00	6/8/12	6/15/12	0%														X						1								
62	RunAtomic trapping	10.00	6/15/12	6/29/12	0%																												
63	Dark Light	22.00	6/29/12	7/31/12	0%																												-
64	Install & Align Magnets & Cube	6.00	6/29/12	7/9/12	0%													/										ľ					
65	Setup Machine	11.00	7/9/12	7/24/12	0%													/															
66	Run Dark Light Beam Tests	5.00	7/24/12	7/31/12	0%																												
67	2 pass BPMs (Needs Beam)	78.00	2/6/12	5/23/12	35%												/																
68	Trim Card 2 - 1st Order	50.00	1/30/12	4/6/12	16%		Q																										
69	Test Boards & Assemble Units	40.00	1/30/12	3/23/12	20%												/																
70	Install & Commission	10.00	3/26/12	4/6/12	0%										4																		
71																																	$\top$

### **Detail of R-100 Swap Plan – Admiral is similar**









# Starting to work up cryounit swap worklist

