

AIPINJ Status (Phase 1)

Steve's 1:30 SAD Meeting

February 8, 2021

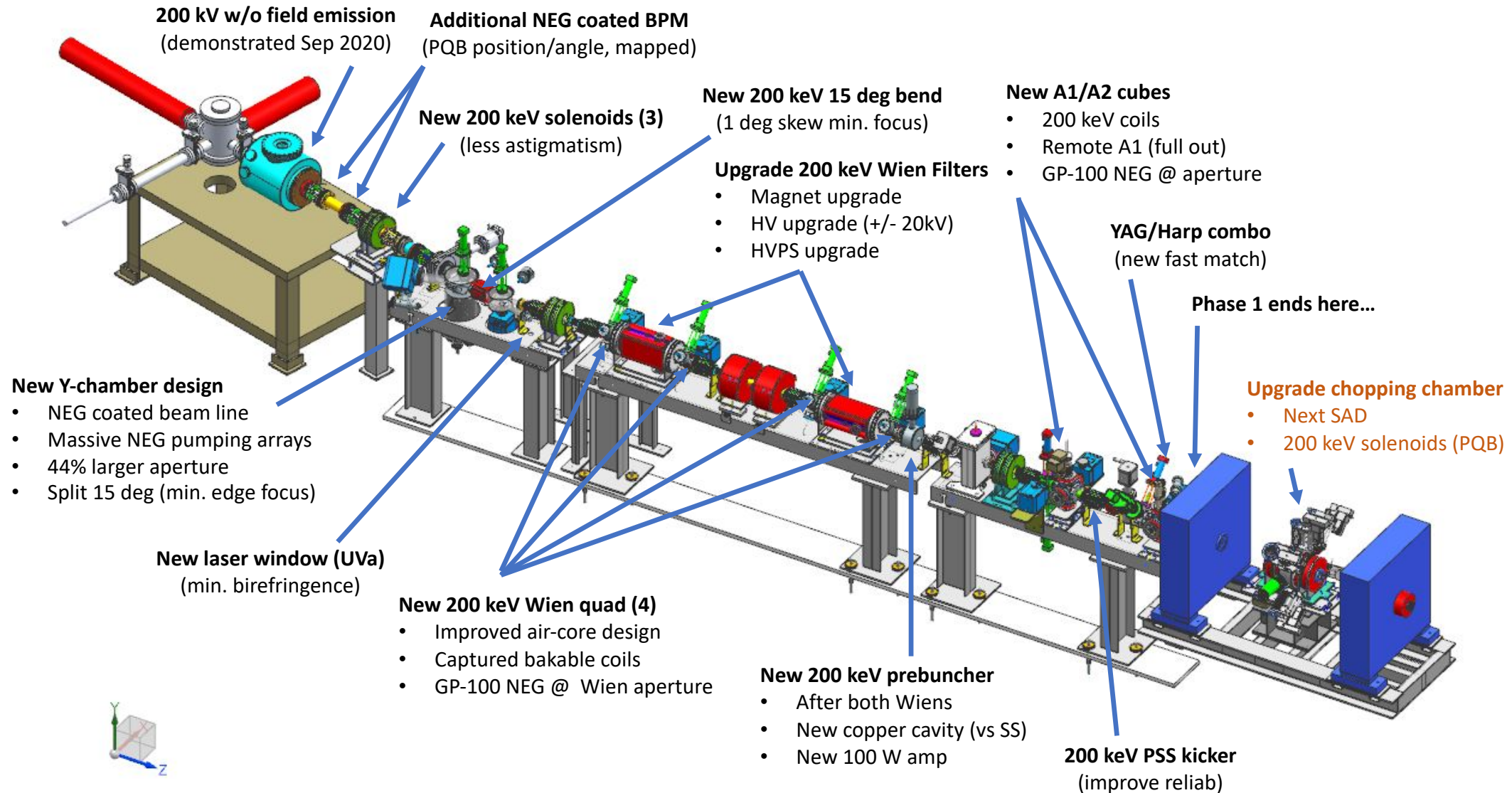
Homepage : https://wiki.jlab.org/ciswiki/index.php/CEBAF_Injector_Upgrade

Mailing list : aipinj@jlab.org

8:30 Toolbox : <https://bluejeans.com/171126028>

Phase 1 ATLIS : <http://devweb.acc.jlab.org/CSUEApps/atlis/task/21170>

Phase 1 Jobs



Preliminary Songsheet: Released Jan 25, 2021

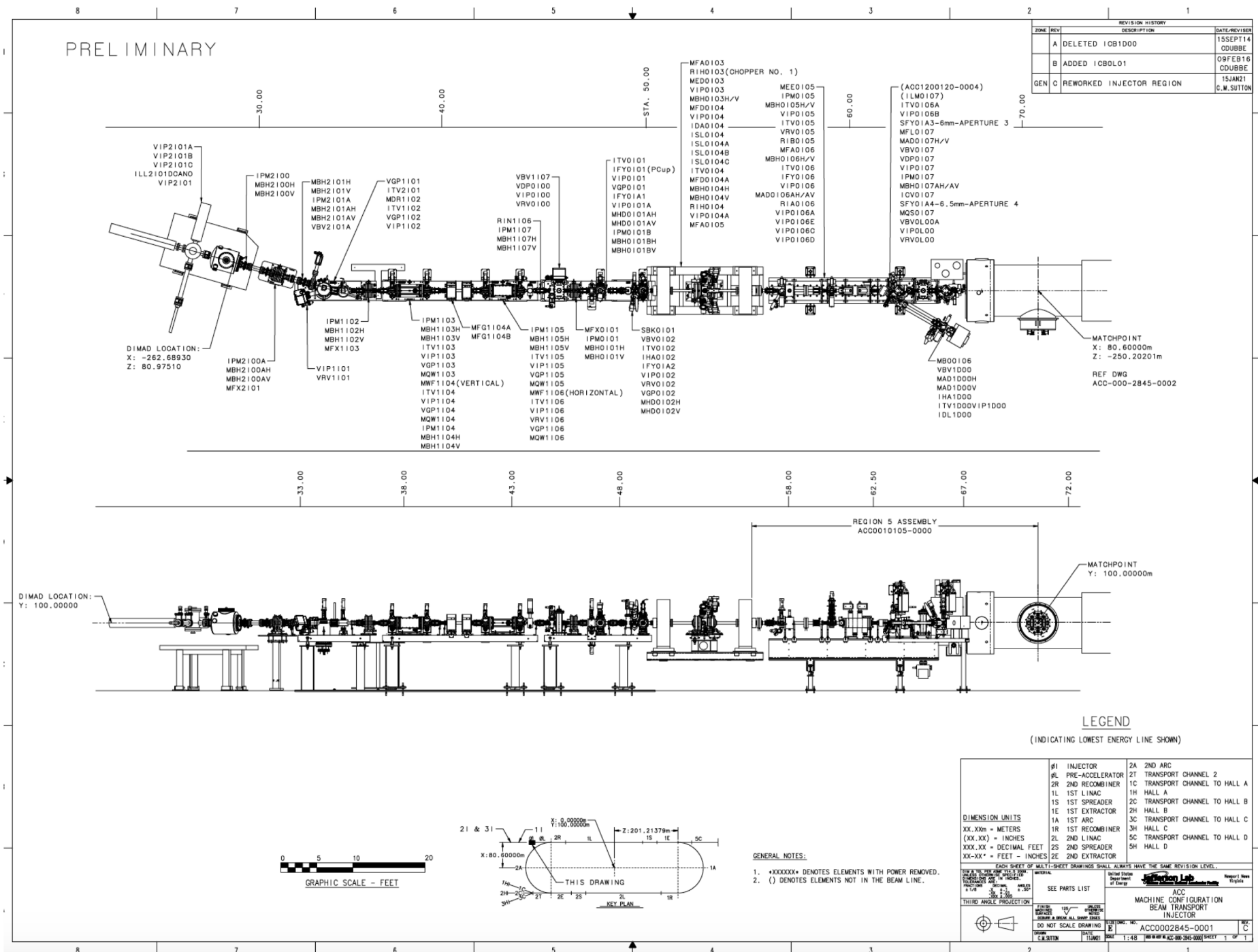
Overview:
Today Feb 8, 2021

I&C breakdown:
Mon Feb 22, 2021

Magnet breakdown:
Mon Mar 1, 2021

Super tiny text.

- Download.
- Zoom.
- Print E size



PINK notes a modification we should discuss

Type	Element	Before	After	Comment
Magnets	15 deg bend dipole	1	1	New DR (remove old DS)
	Solenoids	5	5	FH/FB/FQ => FX; and FGA/FGB remain
	Quads	6	4	New QW quad (retire old QW, remove QU)
	Correctors (H + V)	24	26	Additional pair on 2I line
Wien filters	Vacuum assemblies	2	2	vacuum chamber, HV feedthru, coils modified
	Wien filter - magnet channels	2	2	Replace 10A trim with 20A rack mount PS
	Wien filter - high voltage channels	4	4	Replace existing with Matsusada system
RF	Prebuncher	1	1	New prebuncher
	Brock cavity	1	0	Remove
Current Monitoring	Polarized Source Faraday Cup	1	1	New location; still interlocked with a viewer
	A1	1	1	Remote motorized aperture, new vac assembly
	A2	1	1	Manual PSS stopper, new vac assembly
Diagnostics	Harps	2	1	Reduce by 1, but need anti-collision with a viewer
	BPM	9	10	1 additional on 2I beam line
	Viewers	7	8	1 additional
Vacuum	Valves	4	3	Remove Gun3 valve, another viton=>all metal, additional bypass valve
	Gun ion pump	1	1	No change
	UHV beam line ion pumps	8	10	gang or add channel
Safety	PSS kicker	1	1	New 200 kV kicker

8 wks to complete mech/vac install, PSS certification, bake gun and beam lines, condition gun to 200 kV

February

- Install A1/A2 girder assembly to tunnel, bake out
- Repair FC#1
- Complete Wien girder assembly in Test Lab
- Support PSS INJ certification to PP/BP

March...April 2

- Install Wien girder assembly to tunnel, bake out
- Bake gun, lock-up and condition to 200 kV
- Early start for beam line connections

4 weeks dedicated to beam line connections, HCO and system readiness

April 5...April 30

- Complete beam line cabling, controls, software, CED
- Finish system readiness/HCO

9 weeks to restore beam, complete HCO with beam, first at 130 keV, then at 200 keV, calibrate Wien filters

May 3...

- Run beam to 500 keV dump, HCO with beam
- Complete 130 keV setup to 500 keV dump
- Test 200 keV settings

June...July 2

- Run beam to FC2
- Calibrate Wien filters