## AIPINJ – Booster Install Kickoff

injector upgrade related things: wiki.jlab.org/ciswiki/index.php/CEBAF\_Injector\_Upgrade

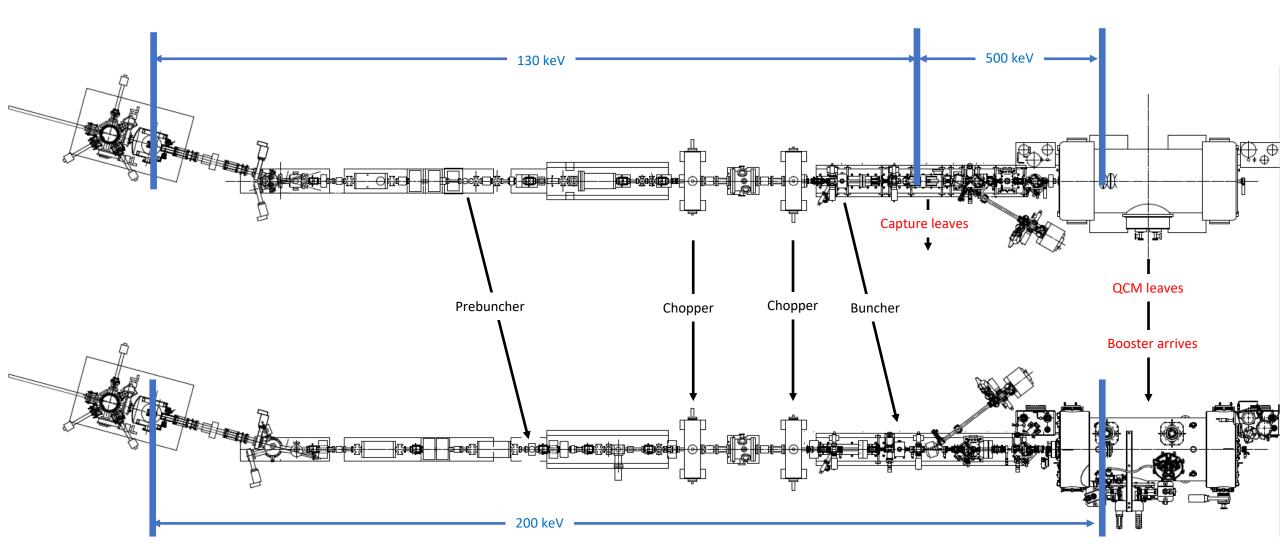
## **BIG PICTURE**

The gun voltage is increased to 200kV.

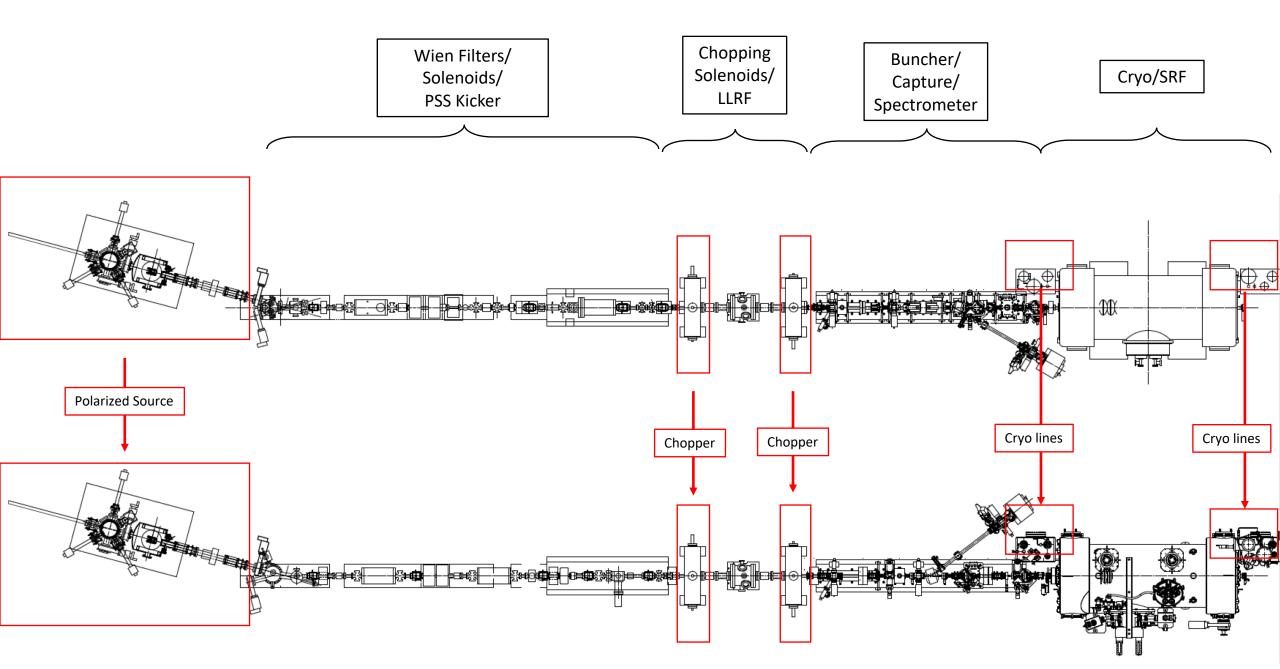
The SRF Booster replaces the combination of Capture + SRF QCM.

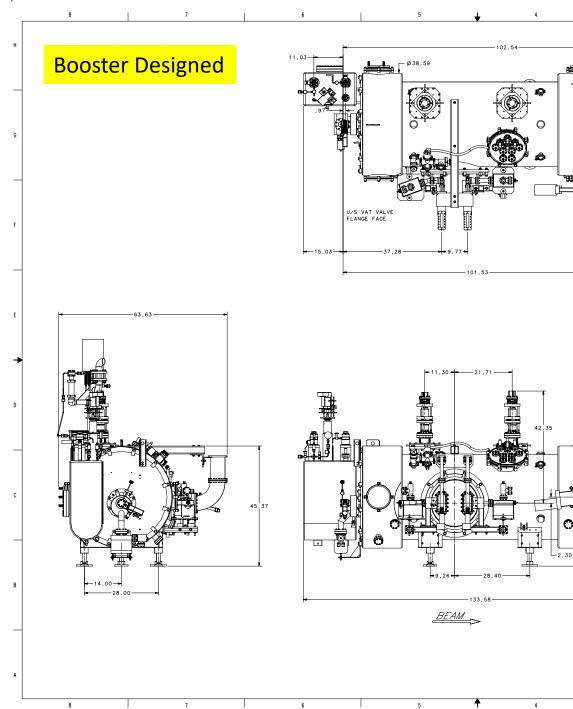
The prebuncher, chopper and buncher cavities remain, but now act on 200 keV beam (not 130 keV beam).

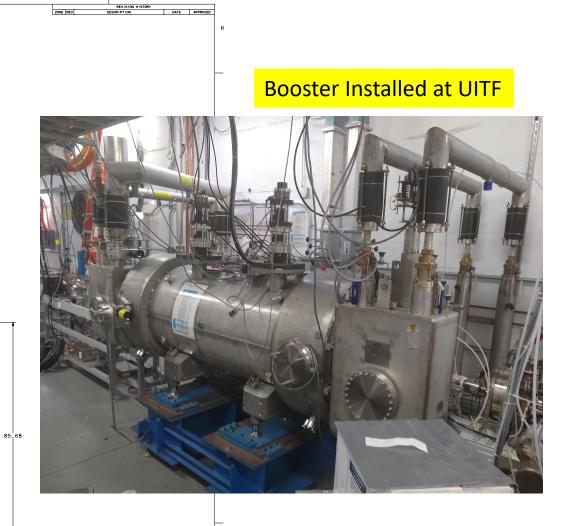
CEBAF QCM output energy is optimized for 6.3 MeV; Booster output energy being tested @ UITF, may be closer to 7-9 MeV.



## Items in red boxes remain as-is...pretty much everything else is reworked or replaced.







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SHEET DRAWINGS SHALL ALWAYS HAVE THE SAME REVISION LEVEL

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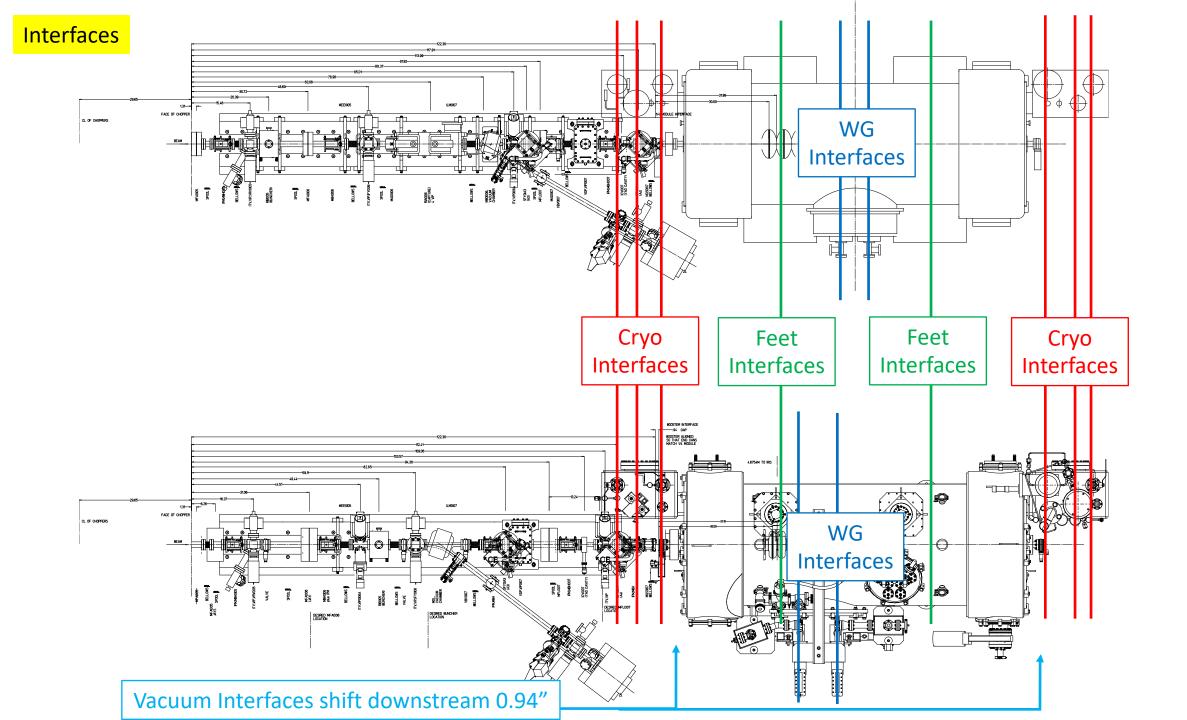
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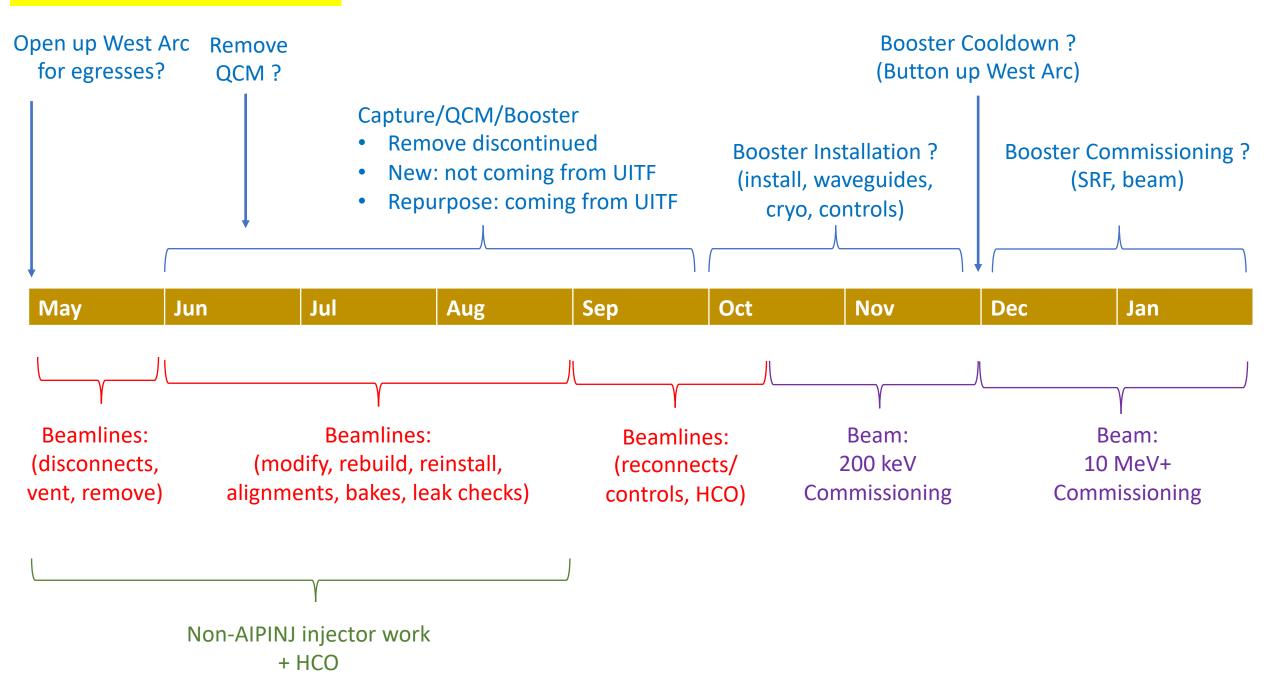
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United States Department Johnston Lab Negart New Virginia

CRM INJECTOR CRYOMODULE CRYOMODULE INJECTOR CRYOMODULE ASSEMBLY

CRM1107001-0001





- Installation (handling, egress, vacuum, clean-rooms, alignment, interfaces)
- Cryo (u-tube, plumbing, controls, screens, software)
- High Power RF (HV, klystrons, controllers, waveguide, cables, screens, software)
- LLRF (digital RFCM, tuners, cables, screens, software)
- I&C (vacuum, interlocks, controls, cables, screens, software)
- Coordination (scope of work, labor, procurements/fabrication, schedule)
- Safety (different groups, electrical jobs, cryogenics, high power, unique stuff)

