

Cryomodule Assembly Facility (CAF) Setup Status

Tug Arkan

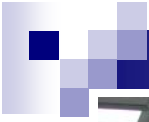
June 22, 2006



Cavity String Assembly Clean Rooms Procurement (completed)

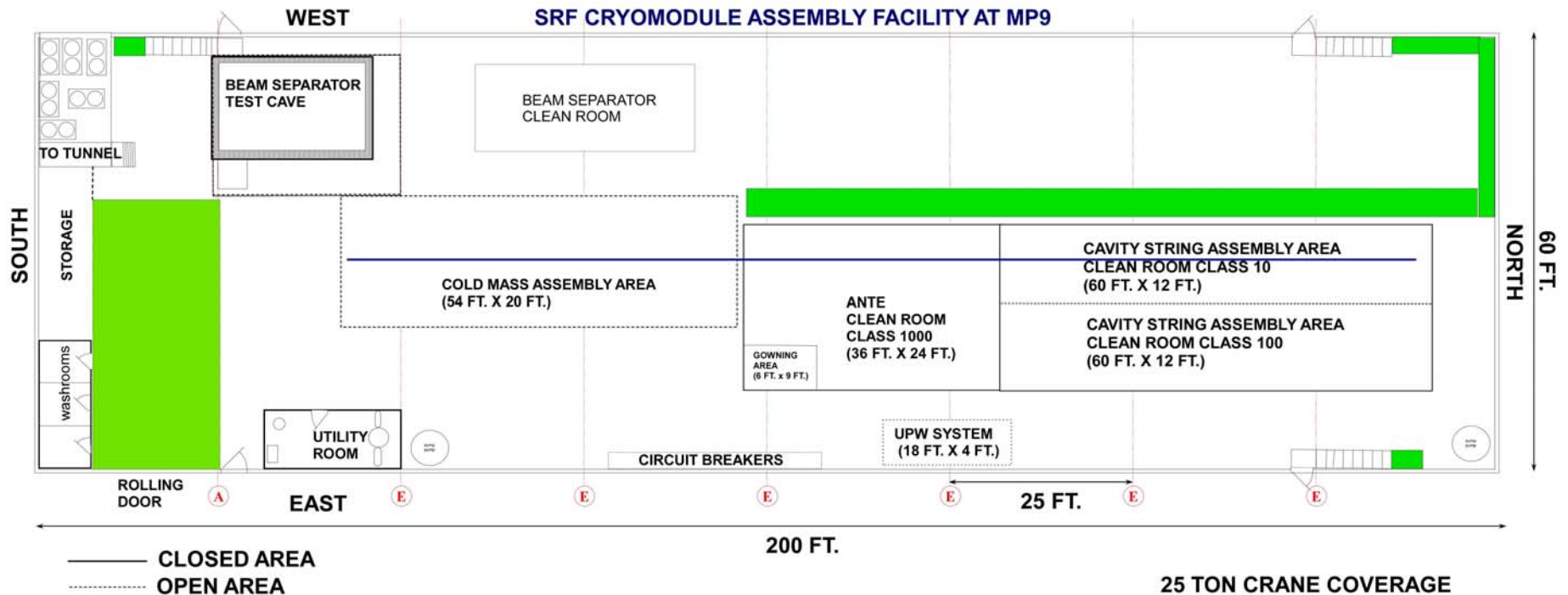
- Construction was started on January 12, 2006:
- 70-80 days construction period
- Certification of the clean rooms: April 28, 2006
- Punch list items addressed: May-June 2006
- Final Acceptance by FNAL: June 21, 2006
- **Total Project Cost: \$1,030,000**





CAF-MP9 Infrastructure

1.3 GHz Elliptical Cryomodules Assembly Facility (CAF) Infrastructure at MP9



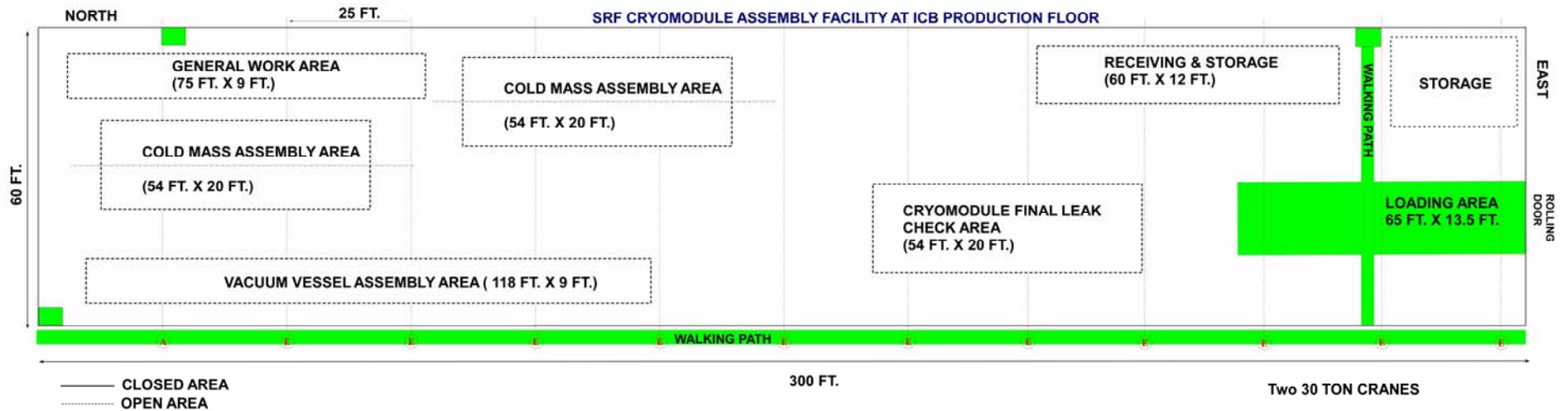


Fixtures Installation Plans & Schedule

- Cavity String Assembly Rail (under the clean room floor) was assembled and aligned during the week of March 2006. The remainder of the Rails were installed in June after the completion of the Clean room (under the cold mass assembly area).
- Cold Mass Assembly Fixture is being currently installed.
- We are planning to install the Vacuum Vessel Assembly Fixture (Big Bertha) at ICB instead of MP9. [Late CY2006]
- Cavity String Assembly Fixtures are being currently designed /procured. We plan to install them during Summer 2006.



CAF-ICB Infrastructure Plans



FY06 Procurement Plans for CAF-MP9

- MP9 Building Floor Epoxy coating (\$25K) [completed]
- MP9 Building inside ceiling cleaning (\$10K) [completed]
- Construction of the clean rooms: (\$80K)
 - T&M work to tie the clean rooms to the MP9 house power (\$20K) [completed]
 - Fire sprinkler tie-in (\$5K) [completed]
 - Metasys DDC Controls network for the clean rooms (\$5K) [completed]
 - Clean room consultant services (\$25K) [75% completed]
- Complete remaining fixturing: (\$225K) [need \$100,000 in FY06]
 - Cavity String Assembly Fixturing ~30 fixtures [50% completed]
 - Additional Fixturing & Tooling
- UPW (\$20K) [completed]
- Equipment & components for the clean rooms: (\$125K)
 - Vacuum hardware (\$50K) [50% completed] [need \$25,000 in FY06]
 - Clean room attire & furniture (\$35K) [70% completed]] [need \$15,000 in FY06]
 - Ultrasonic cleaner (\$50K) [contract awarded, delivery: August 2006]
 - Portable clean room (\$10K) [need \$10,000 in FY06]
 - Clean room cart for cavity transport (\$15K) [need \$15,000 in FY06]
- Miscellaneous (\$40K) [need \$50,000 in FY06]

Total: \$475K asked beginning of FY06

Total needed to complete purchases in FY06: \$210,000

1st Cryomodule Assembly Plans

- Cavity String Assembly Procedures & Fixtures Learning at DESY (February 20 –March 3, 06) [Completed]
- CAF-MP9 Clean Rooms operational: [Completed]
- Install Cold Mass Assembly Fixture at CAF-MP9: **June-July 2006**
- Cryomodule #6 Assembly Procedures Learning at DESY [Completed]
- CAF-MP9 Infrastructure ready & operational: **Summer 2006**
- Install Vacuum Vessel Assembly Fixture (Big Bertha) at CAF-ICB (**late CY 2006**)
- Practice assembly procedures (learned at DESY during Module #6 assembly) with mockups and new installed infrastructure at CAF-MP9 (**Summer 2006**)
- Assemble 1st Cryomodule (4 months): Start date depends when we receive the kit from DESY (**~ November 2006**):
 - 2 spare cavities (dressed, horizontal tested at 25MV/meter gradient) for Module #6 at DESY will be sent to FNAL. It will be good to use one of these 2 cavities to shake down the CAF-MP9 Clean Rooms infrastructure.

