

PROJECT PROGRESS SUMMARY

June 4, 1991

FET Operations

- 27.5 MeV was reached on weekend of 1 June, using the quarter-cryomodule and the second injector cryomodule. Time from installation to full acceleration for this cryomodule was less than two and a half weeks. The Q's of the cavities were two to three times the design value.
- Phone communications to accelerator site:
 - Operations crew chief 879-3367 (portable phone)
 - CHL control room 7405
 - MCC control room 7047
 - MCC safety console 7050

WBS 1

- Four sets of pair parts were completed last week.
- Installed a new (stainless steel) poppet valve and a cold baffle on the electron beam welder. It was back in operation by Friday evening.
- One HOM load is ready for delivery to the cavity assembly group; three are being held for additional QA, because the fourth load from the same batch had a ceramic come loose. Five loads were brazed Friday.
- Fixtures made to protect the window during chem polish are working fine. Five windows with lapped flanges were chem polished and returned to the cavity assembly group. One more will be ready today. Two windows are ready for RF testing this week.
- Assembled three cavity pairs last week. One is being cooled down for testing today; the other two will be tested this week. Two more cavity pairs will be assembled this week.

WBS 2

Stands:

- The third shipment of 500 adjustment cartridges (out of 2802) and the second shipment of 144 tops and bases (out of 430) were received.

Survey and Alignment

- Cryomodule #7 and the quadrupoles for the recirculation experiment were fiducialized.
- The alignment system (and its software) for positioning arc stands was developed and validated.

WBS 3

RF Power:

- Varian has received klystron serial number 106 and has determined the cathode is not contaminated, but is running cold. Varian changed cathodes (and inserted a resistor in the heater lead) after serial number 21. Three technical people from Varian were to visit on 3 June to discuss the problem and their proposed solution. Meanwhile, seven more klystrons have arrived.
- The latest HOM filters have poor welding and finish, and bits of filter load material were found in the waveguide section. Gamma Microwave will be here Wednesday, 5 June to discuss.
- Hipotronics will be here next week to rework the six power supplies.
- Line reactors are being redesigned for cooler operation.
- The CAMAC stepper driver modules were awarded to Highland Technology.

Fabrication/Installation:

- Cryomodule heater regulators have been received and are being QA'd. First article of the +12, +5 V power supply was received. Twenty will be delivered one week after first-article approval.
- Temperature of the work environment (north linac building) is being monitored.

RF Controls:

- Version 15 of embedded code has been released. Twenty changes were made. Version 16 is in the works and will include calibration table uploads to verify the download.
- Twelve new CPU boards were received. Two are being stuffed. Seventy rear planes arrived. Three more will complete the order.

WBS 4

- Installed seventh trim rack (located in east end of north linac service building).
- Continued installation of HPA supports in south linac.
- Wrote PR for transformers to be installed in west arc service buildings.

WBS 5

Safety:

- South linac access card reader boxes installed.
- BLM digital boards received from vendor.
- South linac and access building racks installed.
- ODH system master rack wiring complete.

Diagnostics:

- Layout of east arc BPM electronics has begun.
- New version of harp successfully tested.

Software:

- Started display for radiation monitors.

Controls:

- 10 HP 700 series computers on order for RF (CR 208); due 1 September.

WBS 6 - No report received.

WBS 7

- Return transfer in the injector area is in final leak check of the outer vacuum jacket.
- CHL operating at 2 K on the injector's two and one-quarter cryomodules.
- Fabrication and installation continuing as planned.

WBS 8

- Placed the first lift of Hall A dome concrete (about 1150 cubic yards, or 2300 tons).
- Completed the first-lift wall sections in Hall B and continued forming and placing second-lift wall sections.
- All first-lift wall sections are now complete in Hall C. The remaining second-lift sections should be complete by 12 June.
- Concreting continues on the walls and roof slab for truck access tunnel B. The walls are about 90%, and the roof is about 50% complete.
- Backfilling continues around Halls A, B, and C.

Support Services

Machine Shop:

- Began assembly of second 180-degree bend for the recirculation table.
- Began manufacture of welding fixture of the M-20 BPM (WBS 5).
- Completed an arc dipole reference fixture for WBS 2.

Stockroom:

- Weekly activity: \$27,341.25.
- Monthly activity: \$89,394.41.
- Met with bar-coding company to evaluate implementation for improved parts tracking and replenishment.

External Fabrication:

- A bid package for 3000 breaker lockout devices will be prepared this week (WBS 4).
- HOM filter support bracket design complete and ready for sign-off (WBS 3).

Technical Illustration:

- Color version of "Accelerator Production" and "Large Acceptance Spectrometer" completed for Semi-Annual review.
- New design for "Training Opportunities Bulletin" was drafted for review.

Document Control:

- One hundred fifty Plant Services drawings are ready for microfilming this week.

Training

Among the courses described in Personnel's June/July Training Opportunities Bulletin are the following:

- Oxygen Deficiency Hazard (ODH), 11 June, 2:00-3:00, Rooms 53/55
- Procedures for Sole Source Procurement, 18 June, 9-10:30, Room 53
- Procurement User Orientation, 19 July, 9-11:00, Room 53
- Forklift Certification, 25 June (repeated 23 July), 8:30-noon, SRF conference room
- Incidental Crane Operator, 27 June (repeated 25 July), 8:30-noon, SRF conference room
- Radiation Worker, 10 June, 8:30-11:30, auditorium
- Safety Orientation, 19 June (repeated 10 July, 7 August), auditorium, 8:30-noon
 - Radiation Protection, 8:30-9:25
 - Emergency Management/Hazard Communication, 9:30-10:25
 - Oxygen Deficiency Hazard (ODH), 10:30-11:10
 - Lock and Tag, 11:15-noon

For details on these and other courses, see the bulletin.