

PROJECT PROGRESS SUMMARY

January 14, 1992

Next Week's Blue Sheet

The schedule for next week's Project Progress Summary will be slipped one day. Please send all input by close of business Tuesday (rather than by close of business Monday).

FET Operations

- 180° magnet rails will be moved to give better range on return path length adjustment.
- Completed modification of beam viewers for recirculator.

SRF

Cavity Pairs:

- The ultra-pure water is leaving stains on the niobium cavities during air drying. Analysis of this problem indicates three changes are necessary in the chemistry processing: the rinsing time needs to be increased, the assembly instructions modified, and the flange surfaces inspected to ensure there is no water on them.
- The cavity pair IA131/IA132 was successfully assembled Wednesday with no stain on the flange assembly. It was vertical tested Friday.
- Another cavity pair, IA094/IA096, was assembled Friday.

HOM Loads:

- QA testing of the 100 loads continues. Received some electropolished flanges from the vendor that will be used as spares.

RF Windows:

- The first production braze assemblies are due in from Omley.
- Ceradyne will ship complete braze assemblies this week for qualification. The RF test stand work is almost finished. This will allow six windows to be tested at the same time.

Cryomodules:

- The third cryounit was moved to the cryomodule area and is having the beam pipe assembly put on and the helium circuits welded. The other two cryounits are closed up, leak checked, and rough aligned. The fourth cryounit was moved over last Friday. This is cryomodule #010.

Niobium Pair Parts:

- The machinery and equipment have been moved to the old fabrication room. FPC (fundamental power coupler) bodies and flanges work continues.

Arcs

Magnets:

- The first articles for the QA, QB and QC received from United Magnet Technologies passed mechanical acceptance tests. The BT was rejected for an easily fixable mechanical inaccuracy.
- The east spreader stands were signed and the recombiner stands were plotted.

Survey/Alignment:

- Began the remeasurement of the skeleton traverse. Looking for movements in the horizontal control network caused by the tunnel.

DC Power:

- Worked on relocation and new installation of conduit and boxes for security system in stair exits.
- Completed trim load cable pulls for service building E-2.
- Completed update of trim rack system prints.

Linac

RF:

- Checkout is underway for the first HPA in the north linac. Mass production approaches are being developed.
- All arc/IR cables are manufactured and either installed or waiting for racks.
- Fabrication of 55 foot coax is in high gear.
- Golden Assy. has been checking out ten midplane/rearplane assemblies/week.
- Installation of cross-connect blocks through south linac zone 12 is complete.
- Ninety-three converter boards assembled; intra-rack cabling ready through SL13.
- Twenty LVDT boards ready for installation (1 per zone).
- Baseline testing of klystron vacuum underway using klystron as a triode ion gauge.

Ops Electronics:

- FET CARM rewiring being completed. Safety system software modifications in progress and should be complete in two weeks
- East arc FSD (fast shutdown) fibers complete. South linac fiber completion contingent on rack installation. East arc BLM (beam loss monitor) cabling complete to the extent permitted by tray installation.
- Harp and viewer system drawings for entire machine in final CAD check. South linac viewer cabling complete to zone 13.
- All parts received for 150 arc BPM (beam position monitors) CAMAC modules. Final preproduction changes being made to tunnel module schematics and artwork.

Software and Controls:

- HP technical support was successful in getting GPIB to work on 720 machines. Will require some software link rewrites, but we are now sure the 720s can be used as originally proposed.
- CTF software was updated to same version as CHL. Alarms are functional. Two frame buffers were replaced as was one Ethernet extender.
- First version of macro copy routine now usable.
- Logic for six trim power supplies was updated.

Cryogenics:

- Proceeded with maintenance of the CHL and installation of return transfer line expansion can. Leak testing is progressing well.
- CTF operated for VTA (vertical test area) tests.
- ESR (end station refrigerator) design is progressing.
- CVI now says T4 turbine will not be back at CEBAF until 12 February (best estimate).

Support Services

Stockroom:

- Total monthly expenditures: \$66,034.
- Inventory complete. Database updated. Final balance being calculated.
- New Stockroom procedures will be distributed to all WBSs through their weekly meetings. A formal document will be issued.

Fabrication Planning:

- One ME 5000 prism floor mount has been input into the machine shop for WBS 2.
- Input hex key flat wrench for alignment group into machine shop.

Physics:

- Approximately 145 people attended collaboration meetings held for all three halls at CEBAF last week.

Civil Construction

End Stations Underground (Package A):

- Tested and accepted the crane in Hall C. Continued working on the installation of crane brackets and rails in Hall B.
- The punch list is now completed for the entire project, and the subcontractor continues working on noted defects.

End Stations Above Ground (Package B):

- Preparing to place the floor slab for SB #1.
- Continued working on the sprinkler system and interior electrical in the ESR/SB #2.
- Continued roughing in the sprinkler system and interior electrical in SB #3 and SB #5 buildings.
- Preparing to place the floor slab for the counting house/SB #3 building.
- Continued underground utilities. The water and sanitary sewer systems are completed and have been tested.

Miscellaneous Projects:

- Continued relocating sprinkler lines and installing LCW and instrument air lines in the accelerator tunnel. Application of the floor coating in the tunnel is now about 85% complete.

Winter/Spring 1992 CEBAF Science Series

The next presentation, on Thursday, 20 February will be "From Acne to Suntans: Dermatology for the Teenager," by Dr. Susan E. Mackel. Any CEBAF spouse or staff member interested in volunteering to help at this or future Science Series presentations should call Steve Corneliussen at 249-7582. Science Series videotapes will soon be available to be borrowed; call Marla Lehman at 249-7623.