# PROJECT PROGRESS SUMMARY

April 16, 1991

FET Operations

- Two shifts of operation were performed this period. The other days were devoted to RF and software checkout for the 8-seater in preparation of the cryomodule Q test and work on the beamline vacuum.
- In the first run, a repeat of running beam through the cryounit was performed. Beam energy was 6 MeV. Many beam-loss monitors were calibrated.
- In the second run, beam was successfully transported through the recirculation chicane.

WBS 1

- Completed welding on four fundamental power coupler extensions. Source of erratic beam deflection in the electron-beam welder has been traced to the viewing camera. Performance is fine if the camera is turned off.
- Four cavities arrived from Interatom last week, raising the on-hand total of production cavities to 110. The 12 cavities received in March are going through pre-processing and QA verification.
- Three cavity pairs were turned over to the cryounit assembly area. An additional pair is being tested today. These will be assembled and tested as a "test" cryomodule.
- The first end can shipment is expected in two weeks, after the end cans pass their leak check this week.
- Four more heated HOM loads will be delivered this week.
- The first two solid-flange RF windows have the RF testing completed and will be turned over for cavity pair assembly. Three additional RF windows with solid flanges have been thermally cycled and are ready for coating.

#### WBS 2

Magnets:

The design review for the extraction corrector dipole (BM) was held.

Stands:

- The bidders conference was held for the contract for east arc stand installation. System Integration:
  - Continuing the progression around the accelerator, the INGRES database of lattice elements has been compiled from the DIMAD lattice for the east arc, south linac, and west arc. The outputs from the report generator have been verified for the arcs and are being submitted for approval.

#### WBS 3

RF Systems/Front End Test:

- IR and arc detector modules for the first cryomodule have been verified as operational. The order for all arc and IR boards will be placed this week.
  - Ran 5-MeV beam.

RF Power:

- Directional coupler and transition shipments to ETM for assembly into HPAs are continuing. CEBAF test data on similar components received here last week looks good.
- Responses to questions were received from the two CAMAC stepper driver offerors. Fabrication:
  - Buffer boards, midplanes, and backplanes sent out for assembly. The revised schedule for replacing rejected boards from Tri-Circuits calls for boards to be in hand by the end of this week.

#### WBS 4

- Wired P2 panel in north linac service building for WBS 7.
- Finished cable pull for WBS 7.
- Completed installation of south linac cable tray.
- Finished 1000-MCM cable pull in east arc.
- Third trim rack went through burn-in test.

- Received 130 trim regulator boards from vendor and about 60 of them have been tested.
- Cable tray in the east arc tunnel will be hung from the ceiling in the dipole stand region and affixed to the quad stands elsewhere in the east arc section.

#### WBS 5

Safety:

- Twenty-three interface chassis received from vendor.
- Began testing FET BLMs with beam.

Diagnostics:

- North linac BPM tunnel chassis are completed and are being tested.
- North linac zone 1 cross-connect wiring completed.

Software:

- Checkout continued with cryomodule software.

WBS 6 - No report received.

#### WBS 7

- Running at 2 K for FET.

- L'Air Liquide to arrive this Wednesday, 17 April, for checkout and warm test of the cold compressors.

### WBS 8

- The dome subcontractor has started erecting 28 tractor trailer loads of scaffolding in Hall A in preparation for constructing the concrete domes.

- Placed the first concrete wall sections in Hall B.

- Forming is under way for second-lift sections in Hall C.

- The walls for truck access tunnel C are 70% complete.

#### Computer Center

- CASE tool VAXSET installed on CEBAF 6 and CEBAF 7.
- New PCLINK handout available.
- Operating system for CEBAF 9 and its satellites upgraded from Ultrix 4.0 to 4.1.
- For the month of March there were 64 completed hardware service requests, four PCs built, and three new Accelerator Division trailers wired for computers.
- REQSTAT, new program running on CEBAF 4, checks the status of POs and PRs.
- Introduction to EDT editor class: May 13, 9:00 a.m. noon.

## Support Services

Machine Shop:

- Fabrication of a wire test fixture for Physics Division is in progress.

- Modified several ceramic feedthroughs for SRF.

- Fabrication of "return tee" pipe details for a transfer line for WBS 7 is in progress.

Stockroom:

- Weekly withdrawal activity: \$24,734.23.
- Total monthly expenditures: \$41,623.46.

External Fabrication:

- Delivered the seven monument plugs and an assembly fixture to WBS 2.
- A special "E" miter has been designed and input into the CEBAF machine shop to avoid interference with the transfer line (WBS 3).
- Four hundred cable-tray dividers are going out for bid this week (WBS 4).
- Thirty-five of the sixty-eight quartz recessed viewports have been delivered to CEBAF (WBS 5).
- Placed order for various assembly parts for the recirculator 180-degree bend magnet stand this week.

Technical Illustration:

- Created new machine configuration illustrations.
- Designing a three-color 1991 Accelerator Instrumentation Workshop poster for October 28-31.

Build and commission CEBAF safely, within cost and on schedule to meet performance objectives.

- Produced organization and site plans for the new administrative manual.

Training Opportunities

- The Radiation Worker Training scheduled for this morning has been rescheduled to 23 April. Among the other courses detailed in Personnel's current (blue cover) flyer on training opportunities are:
  - Incidental Crane Operator Training, 8:30 noon, 18 April (SRF conference room) (to be repeated 23 May)
  - ČEBAF Safety Orientation (4 courses), 8:30 noon, 8 May (auditorium) (to be repeated 19 June)

**Announcements** 

- All-staff meeting and Service Awards luncheon, Monday, 29 April will include State of the Laboratory Address by Hermann Grunder, Director.
- Next CEBAF Science Series presentation (for kids of all ages): "Aerodynamics in a Tabletop Wind Tunnel," Wednesday, 24 April.