

# Project Progress Summary

Injector and Front End Test - No report received.

## WBS 1

- Fourteen Interatom cavities were received; these are the December delivery. We now have 53 Interatom cavities (one did not pass acceptance test and was returned) and 16 in-house cavities.
- One-hundred gate valves were shipped from Lesker before the holidays. The bellows for the dish-valve assemblies are also due.
- The cryomodule has been moved out of the test cave. Two leaks had been identified. The bridging joints have been opened and HOM flange clamps will be added to each cavity pair to correct the leaks. One pair will be cycled several times to low temperature to check the effectiveness of the clamps.
- Five flanges for the HOM loads were made Friday. They were brazed using 35% gold and 65% copper alloy to avoid copper erosion. They are being cycled and leak checked.
- To prevent recurrence of leaks, corrective flange clamps will be added for all HOM loads in existing cryounits. These cryounits are now disassembled for this rework; there will be a one-month delay in the third cryomodule.
- Six moly-manganese windows have been brazed. Twelve will be ready for electron beam welding this week. Vacuum limitations are interfering with sputter metallization, so the equipment is being upgraded.

## WBS 2

Magnets:

- Ten of the 1-m arc dipoles (BE) were received from Process Equipment Corp. and 22 more sets of coils are available for assembly.
- The die for the lamination for the linac quadrupole (QB) was qualified as producing laminations within tolerance, and production was ordered to proceed.

Survey and Alignment:

- The positions of the magnet stands in the east arc and south linac were marked in the tunnel.
- The spectrometer for the Front End Test was rough aligned.

Magnet Measurement:

- The tests of the arc dipole magnetic measurement stand have shown repeatability of  $5 \times 10^{-6}$  in absolute field.

Vacuum:

- The bellows assemblies for use in the arc vacuum tubes were signed off.

## WBS 3

RF Controls:

- RF control modules were delivered to the injector and tested over the weekend.
- The problem that had been plaguing the operation of the math co-processor for the RF on-board microprocessor has been solved. The microprocessor board now functions properly and with a factor of 60 speed improvement.

RF Power:

- Waveguide components and klystrons continue to arrive on schedule.

## WBS 4

- Six bulk power supplies have successfully passed an acceptance "burn-in test."
- Received shunt regulator printed circuit boards and started to load them.
- 4" x 4" box duct installation is about 90% complete.
- Cable tray installation is complete through the north linac.
- Rack support steel installation is complete in the north linac.

WBS 5 - No report received.

WBS 6 - No report received.

### WBS 7

- Working on FET punch list.
- Piping south linac wall pipe.
- Leak in 4-K cold box identified and being repaired -- pin hole in valve leads.
- Installation of 80-K purifier 90% complete at CTF, and purifier/recovery compressor in shed.
- Leak checking the inner vessel of the 30,000-gallon LHe dewar.

### WBS 8

#### Accelerator Enclosure:

- Testing of the LCW equipment in the south access building is in the final stages. Anticipate completion 11 January.
- Continued correcting punch list items; 80% of the original list has been corrected.

#### End Stations:

- Forms for reinforced concrete truck access tunnels are on site.
- Completed waterproofing beamline tunnel C. Continued backfilling as weather permits.
- Continued placing concrete walls in Hall A. Seven sections are now complete to elevation 27'-2".
- Installation of the mechanical portions of the dewatering pumps in the counting house basement is completed. The electrical work is in process.
- Now placing concrete walls in Hall C. Three sections are complete to elevation 24'-6".
- Continued backfilling counting house and beamline A rework area as weather permits.

### SURA Visiting Committee:

The review committee convened by SURA to evaluate CEBAF progress and status will be at CEBAF on Thursday, January 17, 1991. Members of this review committee include directors of similar DOE laboratories. The review committee will be touring the test lab and accelerator site in the early afternoon.

### Environment, Health, Safety, and Quality Assurance:

A multidisciplinary DOE/ORO appraisal team will be on site January 22 to February 1 to appraise our programs and activities in ES&H and QA.

### Training:

- New Employee Orientation, 9:30-11:30, Friday, 8 January, Room 53.
- COTR Procedures, 8:30-noon, Monday, 14 January, Room 53.
- For additional training information, see the Personnel Office's blue flyer for December and January.

### Volunteer Needed:

For the five monthly CEBAF Science Series evening presentations January through May, a volunteer is needed to operate the videocamera from the back of the auditorium. Easy to learn how. Total voluntary time commitment: one hour per month. Please call Steve Corneliussen at 7582.