

MARK IV REDESIGN COMMITTEE  
MINUTES OF MEETING NO. 13*Special*

April 21, 1960

In attendance: K. Brown, B. Bunker, A. Crabtree, P. Edwards,  
D. Goerz, G. Loew, R. Neal

The minutes for meeting No's 11 and 12 were distributed and accepted as written.

Discussion

The discussion centered around the Mark IV schedule and was accepted as shown in inclosures one and two with this copy of the minutes. In general the present schedule is moved back by three weeks. The "Operating Schedule for Mark IV Accelerator" is a guide to scheduling the people for the  $\pi/2$  retest period.

The new Zeolyte trap is in operation at the present time. The zeolyte required a twelve hour initial bake and pressure was in the  $10^{-8}$  scale within a 24 hour period. After the trap had been in operation for one week the pressure was  $2 \times 10^{-8}$  and slowly falling.

The experimental wave guide valve has matched out at a VSWR of 1.01 - 1.02 and will be modified for test in Jasberg's "rat race".

The "key slot" dimpled water jacket proposed by Colberg Boat Works was discussed and a sample jacket made by Colberg was shown.

Decisions

To change the schedule for MK IV changeover as shown in attachment 1.

To move the accelerator position toward the "gun end" of the accelerator by 6" in order to add available space before the 10' magnet.

To consider using the dimpled water jacket proposed by Colberg.



April 30;    Install gun pulser on top of trench.  
              Connect heater, grid pulse and injection  
                                  pulse cables.  
              Connect grid & injection pulse monitor cables  
                                  to console.

              Convert & process oxide gun.

May 2;        Accel. & Gun oper. check.

May 2 - May 20 :    Retest  $\pi/2$  sections.

Measurements to be made with and without pre-buncher.

1. Behavior of accelerator tubes under rf power.
2. Spectra Test & Phasing.
3. Loading tests.
4. Current transmission tests.
5. Re-radiation experiments.
6. Reactance loading.
7. Beam break-up tests.

May 23 - May 28 .    Install 2  $\pi/3$  sections.

May 30 - June 20.    Test 2  $\pi/3$  sections.

June 20 - Aug. 15    MK-IV Changeover.

Aug. 15 - Oct. 15    Test & shakedown of new system.

