MARK IV REDESIGN COMMITTEE
MINUTES OF MEETING NO. 14
April 28, 1960

In attendance: A. Crabtree, P. Edwards, G. Loew, R. Neal

Discussion

The MK IV program schedule was discussed in reference
to availability of machine shop personnel to assist in this work.

The "MK IV Master Osc. & RF Driver" bids by Granger
Associates, Hughes Inc., and Sperry Inc. were discussed by members present.

Decision

Due to extra work in MK IV the start of retest of T/2 sections will be delayed until May 5, 1960. (ref. attachment one.)
MK - IV PROGRAM

To May 4, 1960

K-1 Station klystron (Mk III unit) installed.
Status:
13 Mw at sat. drive & 300 kv beam pulse. Process completed.
Window on vac protection.
Phase shift.
2 micro.sec period: 10° excursion.
Mid 1 micro.sec. period: 4° excursion.
Spark gap serviced.
Tank filled with marcol oil.
Beam pulse current transformer installed.

May 4. Completion PFN adjustments

K-2 Station klystron in place.
Status:
Window on vac. protection.
Spark gap serviced.
Beam pulse current transformer installed.

Completion PFN adjustments.

Accel.
Status:
Vac. gage #1 reads 5 x 10^-6 mm.
Accel. alignment checked ± 1/16".
Sect. I & II remote oper. collimators installed.
Accel. operation checked using Ta gun.

May 4. Check defl. curr. regulator.
Design magnet flux detector.
Arrange degaussing system.

Electron Gun
Status:
Ta gun and assembly removed.
Prebuncher focus coil removed.
Gun pulse transformer installed.
Gun section vac. pump-out installed.
Gun pulser rack in place on concrete shielding over trench.
April 30
Gun controls.
Install inj. control at console.
" dual grid control at rack and console.
Connect grid & inj. pulse cables.
Provide combination 50 ohm pulse load and 50/1
res divider for conn. at PT.
Connect grid & inj. pulse monitoring cables to console.
Connect grid and inj. trigger cables to rack.
Provide safety features:
Wire cage over gun using 8" metal to metal elect. clear.
Grid & Inj. rectifier contractor stop buttons in
trench at gun.
Inj. rectifier contractor stop button at rack.

May 3 . Completion of gun pulser installation.
Check gun pulser on dummy load.

Gun Vacuum System
April 30  Install vac control & mon.
Install remote vac. meter at gun pulser rack.
Connect present A-2 vac-meter at console to gun vac.
Run in power from trench vac. control panel
emergency power.

May 2 . Make up & install vac manifold.

May 3 eve. Gun cath conversion.

May 4 Check operation gun.

May 5 - May 23: Retest pi/2 sections.
Measurements to be made with and without pre-buncher.
1. Behavior of accelerator tubes under rf power.
2. Spectra Test and Phasing.
3. Loading tests.
4. Current transmission tests.
5. Reradiation experiments.
6. Reactance loading.
7. Beam break-up tests.

May 24 - 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 and shakedown of new system.