PS. Int. LIN. 59-7
May 22nd, 1959.
PL/ac.

Notes on the Linac Running-In Committee Meeting No 3

May 20th, 1959

1. Errata on the notes of meeting No 2 (PS. Int. LIN. 59-6) of May 15th, 1959.

Page 2 first line : read

The corresponding $H\varphi$ on the wall then decreases 23 o/o from input to output.

Page 2 c) second paragraph, last sentence : read

This shape looks to be very sensitive to the pressure and the vacuum in the column (of the order of $8 \cdot 10^{-6}$) oscillates; the reason for this pressure variation is not known but it looks to be correlated with the changes in current pulse shape.

2. Log Sheets

A log sheet for accelerating structure and vacuum has been prepared by P.H. Standley. This one will be used in conjunction with a check sheet filled up twice a day for maintenance.

For operation of tanks I and II with beam, one can use at the beginning spare lines on RF log sheets for tanks I and II instead of preparing immediately the beam log sheet.

The copying machine has not yet been ordered (P.L.)

3. Progress

a) F. James has made a report on low power measurements on tank I. Four copies have been made; one of them is in the file in Linac control centre.

b) C. Taylor will prepare a report on RF tests with tank II.

c) Tank I has been closed and pumped. Pressure is down to 5 nenons on untrapped gauges with liquid nitrogen traps filled on the tank. Leak rate is about 5 to 10 lusecs. Major leaks are on one of the diffusion pump shut off

valve shafts and on one quadrupole lead flange.

d) Tank II has been repaired (leaks, short and open circuits).

e) Quadrupoles in tank I have been adjusted on local racks. The tests are in progress from control centre.

f) Ion source has been tested with HT. The new log sheet has been used. For 38 mA from the source, 32 mA were measured at the end of the column.

The beam is not perfectly aligned in the column and is about 2,5 mm from the centre.

Measuring and focusing equipment has only been mounted between column and Tank I on the 19th because of alignment difficulties : the column had eventually to be displaced 5 mm downwards in order to enable parts to be clamped together.

One steering coil supply has still also to be modified.

Ion source is operated with remote controls except for matching adjustments.

One monitoring scope out of three is in operation. The final installation is to be made during the following weeks.

4. Programme

I Week - 18/22,5.1959.

a) RF tests on tank I
- Operation from control centre up to 800 KW.

b) Ion source
- Check equipment (lenses - steering coils - lenses) and measure the beam at the end of the column.
- Inject into tank I for acceleration check up to 10 Mev.
- Improve alignment between column and linac.

c) RF for tanks I and II
- Prepare the RF chain for feeding tanks I and II simultaneously.

d) Servo-tuners checks (F.J.).

II Week - 25/29.5.1959.

a) RF for tanks I and II
- Tests of the RF chain
- Feed tanks I and II together

b) Ion source
- Finish alignment
- Measure beam properties

c) Servo-tuners checks (continued)

d) Acceleration up to 30 Mev.

III Week - 1/5.6.1959.

Investigation of the acceleration up to 10 and 30 Mev.

5) Operating crew

A rotating shift for operators will be tried in case the linac has to be run at night (P.H.S.).

This system will start on the 25th May, 1959.

6) Lectures to Linac Group

C. Taylor will prepare a description of the RF system.

Following lecture should be on Ion Source.

7) Next meeting

On Tuesday 26th May, 1959 at 10.30 a.m.

P. Lapostolle.

PL/ac.

Distribution (closed)

Parameter Committee

MM. Bramham	MM. Kracht	MM. Standley
Hereward	Lapostolle	Tallgren
Huguenin	Marsicanin	Taylor
PS/636. James	Montague	Vosicki.