

PS. Int. LIN. 59-15
June 25th, 1959.
PL/ac.

Notes on the Linac Running-In Committee Meeting No 8

June 23rd, 1959

Present : H.G. Hereward - F.H. James - P. Lapostolle - B. Marsicanin
U. Tallgren - C.S. Taylor - B. Vosicki.

1. Log Sheets - Instruction Notices.

Instruction notice for pre-injector including a general block diagram is ready. A vacuum block diagram is still to be added (B.M.) and the notice should be translated into French.

Instruction notice for R.F. must be typed and translated.

Instruction notice for vacuum is being typed. It will have to be translated.

Instruction notice for beam focusing is ready. It will be translated into English.

A provisional notice will be made for the temporary beam measuring equipment (B.V.).

Block diagrams for R.F, vacuum and beam focusing and measuring will be prepared.

A log sheet for beam focusing and measuring has been made.

2. Operation.

A note (PS. Int. LIN. 59-11) has been issued with a rota (PS. Int. LIN. 59-13) for a period up to July 24th, 1959.

This regular operation of the Linae seemed to work satisfactorily on the first two days.

In order to follow the principles stated in the note and run the system smoothly in the future, there should always be a comprehensive programme for the following week including the name of X for all items.

After a discussion, the IRIC decided (at least for the time being) to give in the programme a list of items to be done with the name of X for each of them; but it leaves to the various X and to the chief operator (F.H.J.) to decide upon the most appropriate time to do the experiments and if necessary to choose the team of operators with whom a given item is to be performed.

3. Progress.

a) The transformer between tanks I and II has been put in place and tested.

A shielding is being put on the temporary modulator cable.

b) Tilting and R.F. experiments on tank II have not been possible last week during the installation of transformer (a).

c) Multipactoring. More statistics have been obtained confirming the low breakdown percentage but the strong effect of the beam on multipactoring of tank I (going up to 60 o/o). Timing of the modulators had been adjusted to optimum, giving a very sharp rise of the R.F. pulse.

One would like to see the effect of focusing, pressure and of repetition rate. For the last point it is necessary to remember that the firing of the source is also sensitive to repetition rate and much more reliable with e.g. 2 pps or more. It is proposed to consider the use of a shutter at the input end of tank I.

d) The repair of the solenoid lens is not finished. The lens will not be ready before the end of the week.

4. Programme.

I. - Week 22/26.6.1959.

- a) Tilt experiments on tank II (F.H.J.).
- b) Intensity/R.F amplitude and phase in tank II (C.S.T.).
- c) Transparency of tank I with and without R.F. (B.V.).
- d) Multipactoring experiments. Sensitivity to repetition rate and pressure (C.S.T.).

II. - Week 29.6/3.7.1959.

- a) Put in place solenoids and transformers (B.V.).
- b) Test solenoid lenses and new current transformers (B.M. + U.T.).
- c) Emittance measurements (B.M. + U.T.).
- d) Multipactoring. Sensitivity to focusing.

III. - Week 6/10.7.1959.

- a) Emittance measurements (B.M. + U.T.).
- b) Acceptance measurements (B.M. + U.T.).
- c) Focusing measurements on tank I (B.V.).
- d) Multipactoring (continued).
- e) Low power measurements on tank III. (Agoritsas).

IV. - Week 13/17.7.1959.

- a) Acceptance measurements (B.M. + U.T.).
- b) Focusing experiments on tank I (B.V.).
- c) Focusing experiments on tank II (B.M.).
- d) Multipactoring (continued).
- e) Final cleaning - Finishing - Pumping of tank III.

5. Next meeting.

On Tuesday June 30th, 1959 at 10.30 a.m.

P. Lapostolle.

Distribution : (closed)

Parameter Committee - Machine Operation Committee.
Linac Group - (Linac Control Centre File).

PS/711.