

Notes on the Linac Running-In Committee Meeting No 11

July 14th, 1959.

Present : H.G. Hereward - B. Marsicanin - B.W. Montague -  
P.H. Standley - U. Tallgren - B. Vosicki.

1. Instruction Notices

- (a) The Vacuum notice has not yet been translated into French (PHS).  
" Preinjector " " " " " (BM).  
" Beam measuring notice is being " English (BV).
- (b) The index of instruction notices, log and check sheets has been prepared.
- (c) Instructions for the handling of radioactive targets will be prepared (BV).
- (d) Instructions for the new beam measurement rack have been prepared (in English). (BV).

2. Operation

- (a) According to SB (Dinkel) the doors for the space behind the pulsed quadrupole racks should be installed in two weeks.
- (b) The instruction notice for the radiation interlock system is being prepared (PHS).
- (c) The hygrometers in the Linac wing and Faraday cage will be checked against a whirling hygrometer.  
A self closing mechanism will be fitted to the door between the South Hall and the Linac wing.

- (d) The question of time for modifications, maintenance and repair was discussed.

Monday mornings (08.30 - 13.00) will be reserved for doing such work without prior notice.

Proposals for other time out of service must be made to the LRIC so that the work can be fitted into the programme with as little disturbance as possible.

### 3. Progress

- (a) The 4 jaw aperture has been repaired and is now back in service. The overtravel springs on the jaws have been removed so that the local counters should always read true.

- (b) Preinjector emittance.

The preliminary measurements made last week have been repeated more fully and the previous results confirmed. A report will be produced by Marsicanin and Tallgren.

The 500 KeV beam is parallel to the axis. By tilting the source the beam has been centred in the transverse direction. This has not been possible vertically and the centre is 7 mm high (at the first 4 jaw aperture). This cannot yet be explained.

- (c) Tank I acceptance.

Nothing has been done.

- (d) Adjustments of beam measuring equipment.

Will not be finished till next week.

- (e) Multipactoring in Tank I.

A 200 MHz amplifier has been inserted between the Tank monitor loop and the Tektronix so that the multipactor pulses can be photographed. It appears that multipactoring occurs at the end of all normal pulses. (Intertank valves shut and multipactoring induced by mistiming modulators).

Further investigations will be made with an injected beam and the 4 jaw apertures adjusted to give only a small reduction of accelerated beam current.

4. Programme.

I. - Week 13/17.7.1959.

- (a) Preliminary tank I acceptance measurements (BM - UT).
- (b) Adjustment of beam measuring equipment (BV).
- (c) Multipactoring (BWM - EM).
- (d) 30 MeV runs for von Dardel. Tuesday evening and possibly other evenings (PHS).

II. - Week 20/24.7.1959.

- (a) Acceptance measurements (BM + UT).
- (b) Focusing experiments Tanks I, then II (BV - BWM).
- (c) Multipactoring (CT-BM).
- (d) Low power measurements on Tank III (FHJ).

III. - Week 27/31.7.1959.

- (a) Focusing experiments (BV - BWM).
- (b) Repeat tilting experiments (FHJ).
- (c) Repeat RF (amplitude and phase experiments) (CT).
- (d) Multipactoring (CT).
- (e) Final cleaning and pumping Tank III.

IV. - Week 3/7.8.1959.

- (a) Focusing experiments (BV - BWM).
- (b) Multipactoring (CT).
- (c) High Power into Tank III.

5. Next meeting.

On Tuesday July 21st, 1959 at 10.00 a.m.

P.H. Standley.

PHS/ac.

Distribution : (closed).

Parameter Committee - Machine Operation Committee

Linac Group - (Linac Centre File).