VISIT TO LINTOTT ENGINEERING, HORSHAM

on 13 and 14 May, 1971

1. Coils

The elements of 6 multipoles were presented for inspection before final casting. From six quadrupole coils mounted and glued into the outer steel cylinder, one (No. 4) had to be rejected, because of bad positioning of the coils, owing to the positioning slots. From six octupole and sextupole lenses mounted and glued onto the aluminium cylinder, five did show a visible positioning error and had to be rejected.

The individual coils may be recuperated, but new coils shall be used for the production of the following multipoles.

One multipole (No. 3) was excepted for potting.

Six to eight multipoles will be prepared for inspection until 25th May, followed by about the same number each week.

Agreement was obtained about the following points:

- i) Each lens will be mounted and glued individually in its positioning jig and shall not be taken out before the araldite has completely polymerized.
- ii) The positioning jigs for sextupole and octupole have small errors which shall be corrected.
- iii) More care shall be taken during coil winding in order to avoid damage to the insulation.
- iv) All lenses shall be numbered and the numbers be correlated to

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the final multipole number. All intermediate tests and measurements shall be recorded on a protocol which, in the absence of the CERN inspector, shall be signed by the responsible engineer or inspector from Lintott.

- v) Without special permission from CERN, no multipole shall be potted before it was checked by a CERN inspector.
- vi) The test voltage between coils and ground will be raised to 2.5 kV dc for the tests made before casting. For the finished multipoles the values as given in the specifications i.e. 1.5 kV rms or 2.1 kV dc are valid.
- vii) The diameters of each steel and aluminium cylinder shall be measured on several points and the values shall be recorded.

2. Frames

Eight frames are welded and annealed. The first frame is being machined and shall be ready for inspection by 25th May. The inspection procedure has been discussed.

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