Controls Section Activities in the months to come

1. Main Control Room

1.1 Control Desk (see PS/Int. MG/CO 60-9) (J. Sharp).

The work should start by studying in details the following points :

a) Space, in terms of units of 19" panels, occupied by the equipment to be put in the Main Control Position and in the Internal Beam Observation, as proposed by J. Sharp. (J. Sharp).

b) First tentatives to allocate the equipment in a) in a possible desk (J. Sharp).

c) Investigation of the possible positions.

d) Mechanical attachements, as in sketch 2, 3A, 3B of PS/Int. MG/CO 60-9 (J. Robert). Help can be obtained from the Mechanical Drawing Office.

Prototypes, possibly firstly in wood, have to be prepared.

Possibly, other solutions (to be discussed).

e) Cabling (J. Thorlund).

1.2 Signals Distribution

a) Timing Signals - Extension and putting in order of the present system (J. Sharp - J. Thorlund).

b) Counter Signals - Standardisation and layout of the counters. Suitable controls and distribution. (J. Sharp - J. Thorlund).

c) Rearrangement of the General Observation Part for more steady displays.

1.3 Interlocks

a) Production of the new panels (M. Mary - F. Hoffmann).

b) Preparation of the cabling for a) (J. Thorlund). The new system for doors should be put into service during the next shut-down (September).

c) Addition of a second micro-switch on doors equipped only with one and not with lock (J. Thorlund).

d) Appropriate shades on the warning lights of doors 28, 29 (J. Thorlund).

e) Warning lights for external fence.

2. Telecommunications (J. Robert)

2.1 Improvements on the present installations according to a programme to be established.

2.2 Study of a suitable system for the South Hall to be used for :

a) communications between South Hall, M.C.R. Counting Room, South Generator Building, South Bubble Chambers Area with possibility of extensions to the East Area (2 or 3 lines).

The first system to be considered is the Control Centre Intercomm., modified as appropriate (may be separated from the present one, but with M.C.R. in common).

2.3 Establishment of procedures for regular checks and preparation of "ad hoc" equipment.

2.4 Call-in Telephones on doors 2, 4 and 6 , and in the Ring tunnel (outside wall).

2.5 Loudspeakers on doors 2 and 4.

3. Television (J. Robert)

3.1 Camera Selector panel, to use only one receiver for up to 10 cameras.

3.2 Preparation of equipment for regular checks.

3.3 Modification of the cameras and receivers to accept Tuchel socket and interphone equipment for direct communications between the two ends.

4. Installations in the Bubble Chamber Area (J. Robert).

4.1 Beam Intensity Meter (already installed).

4.2 Telecommunications.

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4.3 Beam warning lights panel, fed from the local mains and enclosed in a box in a slight air overpressure.

Pillars in the West side have to be considered for installation.

Possibility of having the box pivoting.

4.4 Distribution of 10 timing signals (M.C.R. cellar to the three enclosures in the Bubble Chambers Area, where pulse repeaters will be put) and of 10 general purpose cables (M.C.R. Patch-Panel to the three enclosures).

5. Magnet Pulse Counting System (K. Kohler)

Installation of the printer, relating the magnet cycle number to the absolute time.

The one minute pips from the CERN master clock could be used to drive the clock of the printer as well as a digital clock (uniselector unit) to be installed in about 3 centres.

6. Documentation (L. Brouwers, B. Sagnell)

6.1 Complete Systems

a) 48 V. d.c.

b) Interlocks.

c) Beam Intensity Measuring Equipment.

6.2 References

Trials on a punched card system. Proposal to be presented by the end of September.

7. Electronic Laboratory (J. Sharp)

7.1 A transistorised blocking oscillator with the same performances as the valve circuit.

7.2 A transisterised Multiar.

7.3 New Transition Timer.

7.4 New Stepping Integrator.

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7.5 A statistical Panel for counting the most relevant pulses during the cycle.

7.6 An Ext. Monitor, working on standard counter signals with possibly a discrimination on integrated signal (higher than) and on height (lower than).

7.7 One range delays, made in form of plug-in boxes, to be used in series.

7.8 General fault unit giving an audible signal associated with indicating lamps when certain machine parts (essential for operation) are not working.

8. Operation (All operators)

Completion of the instructions on the various equipment. Trials on more direct system of notices and labels on the equipment itself.

9. Radiation Monitors (J.Y. Freeman - K. Kohler)

9.1 Order of more "Landis & Gyr" equipment (Already passed) :

- 10 preamplifiers
- 10 main amplifiers
- 1 remote control panel
- 4 integrators

Some of the channels with higher and some with smaller sensitivities than the present ones.

9.2 Extension of the present network of plug-in boxes in South Hall and for the rest of the machine, according to a plan to be finally established.

9.4 Order of equipment for investigation on the opening of the East Area. This may cover partly 9.3.

G. Brianti

Distribution : (open)

Machine Group Committee
Controls Section

PS/1801
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