

LIST OF P.S. TIMING PULSES

I. Pulses related to MPS Generator rotational Frequency. <sup>\*)</sup>

1. M Rotational frequency of MPS Generator.  $\approx$  100 p.p.s.
2. W1 Warning pulse, 0,8 sec. before F.
3. W2 Warning pulse 30 msec before F.
4. F Magnet Firing Pulse.
5. X1 End of rise of magnetic field.
6. X2 Start of discharge of magnetic field.
7. X3 End of magnetic field.
8. A1 Adjusting pulse. Adjustable from 1 to 9999 cycles.
9. F+FL1 Train of pulses for Linac Timing only. (See PS/Int. MG 60-9).
10. F+FL2 Train of pulses for Linac Timing only.

II. Pulses related to Magnet Field.

1. B10 Pulses, spaced at 10 Gauss intervals, from Stepping Integrator.
2. B30 Pulse at 30 Gauss from Peaking Strip.
3. B140 Pulse at 140 Gauss from Peaking Strip.
4. B147 Pulse at 140 Gauss from Peaking Strip.
5. TIT-435 Delayed 140 G. pulse. 435  $\mu$ sec before TIT.
6. TIT-35 Pulse delayed 400  $\mu$ sec after TIT-435.
7. TIT Pulse delayed 35  $\mu$ sec after TIT-35. Theoretical injection time.
8.  $\Phi$  1 Pretransition pulse at 2690 G. Derived from B10.
9.  $\Phi$  2 Transition pulse at 2700 G. Derived from B10.

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III. Pulses connected with Frequency.

1. f2850 Pulse at 2850 kcs.
2. f2950 Pulse at 2950 kcs.
3. f4000 Pulse adjustable between 4300-4477 kcs.
4. f7000 Pulse adjustable between 7000-7300 kcs.
5. f inj. Pulse at 2997 kcs (Theor. Inj. freq. for 50 MeV Linac output).

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<sup>\*)</sup> All times; machine time.

IV. Pulses connected with Beam.

1. PC Beam control switched ON.
2. PL Beam lost. Beam control switched OFF.
3. PET Ion Source Extraction Time. Derived from Ion Source Pulse.
4. PIT True Linac Injection Time. Derived from Linac output current.

V. Pulses connected with Targets.

T 98 Target placed at section 98 for instance.

This is a list of pulses existing or foreseen for the moment. Another list will follow in which particular details will be indicated such as present uses of pulses, selected pulses useful to experimentalists, etc.

A. Cheretakis.

Distribution: (open)

- P.S. Parameter Committee members.
- P.S. Machine Group Scientific and Technical staff.

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