Blumberg
NO. 51

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At the beginning of the period the machine was operating at $>7\times10^{12}$ per pulse. Considerable time was spent on photographing various signals at this intensity level. Very minor readjustments of the 88 parameters were made and only the 9th harmonic low-field corrections were trimmed. The latter produced a few pulses $>8\times10^{12}$ accelerated. Considerable transition loss ($\approx 1.5\times10^{12}$) was present at these levels when attempts were made to carry the beam to higher energies. At 1000 the AGS was turned off to install shorts across 8 of the ten 88 stations. By 1200 beam was again injected. Acceleration for ≈ 50 msec was possible but the early capture using the low voltage capture mode was still $\approx 7.5\times10^{12}$. A faster rise from level 1 to level 2 than what had been used previously gave $\approx 6.7\times10^{12}$ while a slow rise with a level 1 and programmed frequency gave $\approx 7.3\times10^{12}$. Since it appeared that level 2 was not high enough with two stations on the shorts were removed from 2 of the 8 loaded cavities. The results with four were no better than two or ten stations and increasing instability of the injection conditions made further tests useless. The remaining stations were put back on the air and after some lineup time ~~and~~ beam was again accelerated with peak intensities of $>7\times10^{12}$. However the instabilities at injection became worse and tuning was not possible ~~[illegible]~~