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Repeat of 5/2/73 Study of Low Field Orbit Harmonics

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AGS Studies

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Orbit Harmonics

5-SEPT-73

0001 - 0600

actual start of work ~ 0125

This effort directed towards repeat of 2-MAY-73 experiment but with more harmonics and horizontal orbit also.

1. Found slight improvement by decreasing $\cos 90$ vertical by 1000 units, and increasing $\sin 90$ by 1000.
2. No improvement in changing 80 or 100 .
As should be expected, found these $\sim 3-4$ times less sensitive than 90 corrections.
3. Horizontal 90 corrections not very helpful. Sensitivity comparable to vertical case.
4. Saw a somewhat anomalous situation on horizontal 80 & 100 . In both cases $\sin n\theta$ much more sensitive than $\cos n\theta$. May indicate an obstruction but data are not sufficiently convincing to point to it.
5. This method needs a new computer program which would run automatically and could be parasited on HEP.