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COLOSSUS Memo # 180

TO: Distribution
FROM: Steve Copps SC 5/9/69
DATE: May 9, 1969
SUBJECT: Technique for Loading the Landing Site On Board

This memo describes two methods for changing the value of the landing site ($\underline{R}_{LS}$) in the CMC. The first method is to directly load the erasable locations and the second is to use P22 in an unorthodox way so as to load latitude, longitude/2, and altitude.

In the first method the astronaut would load locations 2025_8 through 2032_8 (Colossus 2 and 2A) (via V21 N01) with the desired numbers which may have been called over from the LM. The equivalent locations in the LGC are 2022_8 through 2027_8 (Luminary 1 and 1A).

In the second method the CMP may have gotten the data in engineering units. In this case he may load it as follows:

1. He must first record the contents of three erasable locations which are used in the W-matrix to weight the measurement. After recording them they must be set to zero. These locations are 2004_8 (WORBPOS), 2005_8 (WORBVEL), and 2006_8 (S22WSUBL).
2. Turn on P22 and at V05N70 load 10000 (known landmark whose coordinates are not stored) and PROCEED.
3. Load the new landing site data into V06N89 and PROCEED.
4. At V51 flash press MARK and then PROCEED (it makes no difference where the optics are pointing).

5. PROCEED through V05N71 R2 = 10000 and V06N89 (containing the new landing site coordinates).

6. PROCEED on V06N49. The ΔR and ΔV data will be zero because of step 1.

7. PROCEED on V06N89 (containing the new landing site coordinates). This will have the effect of storing the new landing site in $\underline{R}_{LS}$.

8. Replace the old values back into locations 2004, 2005, and 2006 (recorded in step 1).

To verify that this procedure has had the desired effect he may select option 4 of P52 and observe that the display of the landing site (V06N89) is correct.