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COLOSSUS Memo # 182

TO: Distribution

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SUBJECT: Notes on the Lunar Surface Flag (SURFFLAG) in Colossus 2A

1. SURFFLAG is set by keying in V44E and reset by keying in V45E.
2. Any extrapolation, using orbital integration, of the LM state vector when SURFFLAG is set results merely in the conversion of the landing site (RLS) to inertial coordinates of position and velocity at the desired (input) time.
3. When SURFFLAG is set:
  - a. In P00 and in AVETOMID, the LM state vector is not integrated nor are the "permanent" LM state vector registers changed.
  - b. In R31, base state vectors are not used for LM extrapolations.
  - c. In P21, first computation for N43 on LM state vector is valid, re-cycles are not meaningful and may result in alarm 430.
  - d. In P20, selection of P20 and mark processing cause the interial state vector to be written into the permanent LM state vector register.