Massachusetts Institute of Technology Charles Stark Draper Laboratory Cambridge, Massachusetts

COLOSSUS Memo # 271

TO: Distribution

FROM N. Brodeur

DATE: June 3, 1970

SUBJECT: The Last of the Comanches

Revision 108 of COMANCHE was released for manufacture on May 28, 1970 and is also known as Colossus 2E. The following changes were incorporated into Revisions 105 - 108.

- 1. Routines SVDWN1 and SVDWN2 were moved to bank 4 from bank 36 where they had been inadvertently switched in a previous revision.
- 2. P24 constants TRUNSF and SHAFTSF were redefined to be pad loaded erasables. (PCR 869)
- 3. A bug generated by the implementation of PCR 289 was corrected by moving one line of code so that the entrance RHCMINP includes the masking of the low 6 bits.
- 4. A restart point in P23 was relocated to prevent a recalling of R52 if the restart occurred after the mark was taken but before the processing began. (PCR 868)
- 5. A branch instruction "TCF VARGAINS +5" was changed to "TCF VARGAINS +4" to correct a bug caused by the deletion of 1 line of code in the implementation of PCR 995.
- 6. Coding was added to check for coarse align before attempting gyro torquing. (ACB 116)
- 7. The time delay for CDUZERO was changed from 10.24 secs. to 7.9 secs. (PCN 1046)
- 8. The "bad return" logic in IMU Pulse Torquing Routines was modified to zero

LGYRO and wake any sleeping gyro torquing request before exiting. (ACB 117)

Changes to COLOSSUS GSOP

The following items should be examined for inclusion in the GSOP sections indicated.

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Section 2 (Item 2) Section 4 (Item 7)

Changes implemented for COLOSSUS 2E:

Anomalies: COM31, COM32, COM33, COM34, COM35, COM36, COM 37

ACB's: 100, 101, 102, 103, 104, 105, 106, 107, 110, 111, 112, 113, 114, 116, 117

PCR's: 288, 289, 290, 292, 295, 302.1, 315.1, 821.1, 822, 857, 859, 860, 867, 868, 869, 872.1,874.1, 916, 917, 921, 956, 970.1, 973, 974, 978, 984, 985, 986.1, 987, 991.1, 993, 1020, 1034

PCN's: 994, 995, 1041, 1046.

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