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LUMINARY Memo #179

To: Distribution
From: D. Densmore
Date: 27 October 1970
Subject: LUMINARY Revisions 184 & 185

Revision 184 corrected two errors in the implementation of items in Revision 183.

- a) When the extended verb routine DSPRRLOS was moved from Bank 40 to Bank 41 to make room for the implementation of PCR 317, 2, a constant used by it, V16N56, was left in Bank 40. This constant was deleted in Bank 40 and defined in Bank 41. It was referenced only by DSPRRLOS.
- b) The last card of the implementation of L-26 was lost when the deck was listed and so didn't get in. It was a "TC JOBWAKE" at the end of the routine DONTPULS. It was replaced in Revision 184.

Revision 185 implemented ACB L-37, PCR 1066 and PCR 338. Additional changes were made in connection with PCR 324, and some clean-up and cosmetic changes were made.

- 1) ACB L-37 (Have IMUSTALL bad return in 1/GYRO continue and do rescaling).

The bad end return was changed to do the same as the good end return instead of going directly to ENDOFJOB. This way if the ISS warning channel bit failed on and the pulses were still getting out the remainder would get rescaled properly for use by 1/GYRO. If the pulses didn't get out properly the registers won't have meaningful contents anyway so no harm is done by not going directly to ENDOFJOB. This also would save the good remainder if the coarse or cage channel bit failed after the pulses had already gone out properly.

- 2) PCR 1066 (Eliminate display of N59 and display N81 on all passes in P34, P35, P74, P75).
 - a) The N59 display (put up in routine FLAGOFF) was deleted.
 - b) In the case where FINALFLG is off when S34/35.5 is entered, instead of setting UPDATFLG and branching to FLAGOFF, it sets UPDATFLG and falls into FLAGON, the N81 display logic which is branched to directly if FINALFLG is on. This falls into FLAGOFF (now minus N59 display).

- 3) PCR 338 (Change LPD scaling to 1.0° in all directions).

Two constants were changed. AZEACH, which had formerly been two degrees was changed to one degree. ELEACH, formerly 1/2 degree, was changed to be equal to AZEACH.

- 4) PCR 324 (PGNCS/AGS RR data transfer).

AGSCODE was reset on a V37 and V56 and a phase change was put into READRDOT after the radar information is stored for the down-list before AGSCODE is set, in order to prevent the downlink information being loaded again later on a restart.

- 5) A "READ 31" in LLGE log section was changed to a "READ CHAN31" so that the channel reference will show up in the back of the listing.
- 6) The comment definition for the 1466 alarm was put into the alarm list in the assembly and operation log section. Three corrections were made to entries in the alphabetic flag table.

The following items should be examined for possible impact on various GSOP sections:

Section 2 - item 4

Section 4 - item 2

Section 5 - item 3