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To: Distribution

From: K.W. Greene

Date: 10 April 1970

Subject: Notes on the Mainline Apollo SCB Meeting #37, Held at MSC on 9 April 1970.

APOLLO 13 LUMINARY 1C

It was announced at the meeting that two of the erasable load parameters that had been in question for Apollo 13 had been set as follows:

HLROFF = 50 FT
DLQFIX = 400 FT

The problem of velocity errors seen on the cross-pointers at GAC upon entering Auto-P66 was discussed. MIT was given an action item to see if the problem of the cross-pointer errors could be cleaned up for future flights.

APOLLO 14 COLOSSUS 2E

PCR 308	Improved Short Burn Logic. 175 Words.	Status: Pending. This is to be considered as a possible candidate for Apollo 15.
PCN 1002	GSOP Section 2 Rev 10 Editorial Changes.	Status: Approved.
PCR 1034	Deletion of Time of Longitude (P29) Saves 183 Words.	Status: Approved.

APOLLO 14 LUMINARY 1D

In response to the action item as to when the A-Priori Terrain Model is to be terminated in respect to the landing site, MIT informed the SCB that the terrain model is being terminated at the entry of P66. In addition an extended verb (V68) is being provided to allow termination of the terrain model prior to entering P66.

Action Item: MIT is to prepare a PCN for SCB aprroval of the addition of an extended verb (B68) for the termination of the terrain model.

PCR 301	Eliminate Taking Marks in Pairs.	Status: Disapproved for Apollo 14. MIT was asked to rewrite the PCR and include a similar capability for P57 which would be considered for Apollo 15.
PCR 309	PIP Time In P57.	Status: Disapproved. It was reported at the meeting that the current GSOP (Section 2) is incorrect in that it presently indicates PIP time in equal to TNOW on the lunar surface align list which is incorrect and thus should be fixed.
PCR 310	Time to Call 511 Alarm.	Status: Approved. Impact - 3 days, 4 fixed words, 1 erasable.
PCR 1029	Timing Indicators.	Status: Approved.
PCR 303	DAP Changes.	Status: Disapproved. This PCR had been previously approved but it now disapproved pending the results of a team to be organized by FSB to review all discretes in both Colossus and Luminary. This team is to give priority to an evaluation of the discretes contained in this PCR.
PCR 1012	Multiple Servicers Avoidance.	Status: Disapproved. This PCR had been previously approved, but upon MIT recommendation, at the board, it is now disapproved.
PCR 1024	Variable Guidance Period Servicer.	Status: Disapproved. MIT/CSDL and other organizations should continue to examine the Luminary program for ways to eliminate the timing problem. Variable servicer is still continuing as a candidate and other NASA groups are to investigate this change. It was the feeling at the board meeting that a decision such as this, at this time, was unwise, and that additional study and evaluation was needed.

Action Item: MIT/CSDL was asked to evaluate the throttle oscillation that seems to be occurring about every second in P66 on the GAC simulator.

ARTEMIS:

The advantages of Artemis were explained by MIT/CSDL, and it was decided that Artemis should be developed and tested with the idea of flying it on Apollo 15. The general plan discussed was to release an Artemis equivalent to Colossus 2D immediately for review and evaluation on the CSM simulators. In addition, it was tentatively agreed that MIT would release Artemis on about July 1st which would be equivalent to Colossus 2E. At that point, MIT would start to incorporate Auto-rendezvous and Universal Tracking into Artemis and be ready to release on about September 1st. The present plan is that if Artemis does not work out for Apollo 15, that the Apollo 14 program (Colossus 2E) would be flown again on Apollo 15. It was stressed that the decision to fly either 2E or Artemis should be made as early as possible so that two ropes would not have to be maintained at MIT and so that two ropes would not have to be level 6 tested. It was agreed that more mandatory-type changes for Apollo 15 would only be accomplished in Artemis.

The original plan to transfer the Prelaunch Program into erasable was brought up by MIT/CSDL. Originally it was planned to do this in Comanche to conserve fixed memory but with the deicision to go to Artemis, this idea was questioned. W. Tindall stated that he felt it was a good idea to continue this effort with the possibility of incorporating it after Apollo 15 when again word storage may be a problem even with Artemis.

(FSB is planning to issue a memo in more detail which will describe the details of the decision on the Artemis development.)

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KWG:jds

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