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To: Distribution
From: K. W. Greene
Date: 19 December 1969
Subject: Notes on the 34th SCB Meeting, Held at MSC on 18 December 1969.

All Action Items from the previous meetings were closed.
The following action was taken on the COLOSSUS PCRs:

<u>PCR/N #</u>	<u>Effectivity</u>	<u>Title</u>	<u>Action</u>	<u>Comments</u>
PCR 865	2E	Rate Damping in V46E.	Disapproved	Capability not needed.
PCN 962	2D	Describe Error Check in P23.	Approved	
PCR 970.1	2E	Modify Gyro Torquing Routing	Approved	
PCR 292	2E	Add Time Display to V79.	Approved	
PCN 977	2D	Alignment Star Aberration Constant Change.	Approved	
PCN 980	2D	Termination of R60.	Approved	
PCR 291.1	2E	Fourth Order Potential Model.	Disapproved	
PCR 293.1	2E	70-71 Ephemeris Data.	Withdrawn	
PCR 295	2E	AK's in Powered List.	Approved	
PCR 975.1	2E	Modification of R63.	Disapproved	It was felt that this change should be made with the complete package change for Automatic Rendezvous. It was also suggested that the displays might be better if displayed Y (CM) \dot{Y} (CM) \ddot{Y} (LM) instead of the way PCR 975.1 showed.

<u>PCR/N #</u>	<u>Effectivity</u>	<u>Title</u>	<u>Action</u>	<u>Comments</u>
PCR 978	2E	Check OPTMODES BIT 3 when V37 Requested.	Approved	
PCR 981.1	2E	L1 Potential Model.	Disapproved	
PCR 984	2D	Avoid Coarse Align during Saturn.	Approved	When the PCR for Colossus 2E is prepared, if immediate action by the SCB is required to allow implementation into Colossus 2E, a special SCB meeting will be held.
PCR 986.1	2E	70-71 Ephemeris Data.	Approved	
PCR 987	2E	Rate-aided-optics Change.	Approved	MSC is to investigate whether or not there are any procedural problems in restricting optics coarse align (V41N91) to P00.

GENERAL: At the next SCB, MIT/IL should present a detailed presentation of the word storage status on COLOSSUS and any recommendations.

The following action was taken on the LUMINARY PCRs:

<u>PCR/ #</u>	<u>Effectivity</u>	<u>Title</u>	<u>Action</u>	<u>Comments</u>
PCR 291.2	1D	Fourth Order Potential Model.	Disapproved	
PCR 293.2	1D	70-71 Ephemeris Data.	Withdrawn	
PCR 294	1D	Update Fixed Memory Mass.	Approved	MIT should investigate the inertia curve changes resulting from this change to see if any problems of overflows, etc., might take place in the computation.
PCR 296	1D	Set "G" Vector Parallel to RLS Vector.	Pending	
PCR 297	1C	P66 Changes.	Withdrawn	

PCR/N #				
PCR 970.2	1D	Modify Gyro Torquing Routine.	Pending	MSC questioned the value of this change in Luminary. MIT/IL (R. Larson) is going to investigate this change further.
PCR 979	1D	Delete 521 Alarm.	Approved	
PCR 976	1C	Erasable Program for LM Deorbit.	Approved	
PCR 981.2	1D	L1 Lunar Potential Model.	Disapproved	
PCR 982	1D	Extend Capability of Lunar Surface Star Acquisition Routine R59.	Approved	
PCR 983	1D	Unit Vector Capability for N88.	Approved	
PCR 986.2	1D	70-71 Ephemeris Data.	Approved	
PCR 975.2	1D	Modification of R36.	Disapproved	The change to check major modes during R36 for the operation of P12 should be resubmitted. R. Covelli suggested that instead of checking major modes that checking to see if Ave-G was on would be a better method.
PCR 988	1C	Auto P66.	Tentatively Approved	This PCR was tentatively approved pending the results of simulations on the LMS on 12/23/69. If these results are favorable and retesting has been completed at MIT/IL, it is planned to re-release Luminary 1C on about 1/5/70. This change also incorporates PCR 942 which was originally written for 1D. The inhibiting of LR updates

PCR 988, cont'd.

below 50 ft. should be examined by both MIT/IL and MSC to see if 50 ft. is the desired height before releasing the rope to manufacturing. This change should also contain the capability to have x-axis override in the P66 auto mode.

The necessity of auto P66 to provide astronaut adjustment of the Forward and Lateral components of horizontal velocity was discussed. The general opinion was that this capability was not needed.

The possibility of the vehicle pitching over to obtain the astronaut requested ROD velocity was discussed at length. G. Cernan requests that a detailed study of this possibility be conducted and that the safe-guards incorporated to prevent this from happening be well tested and understood by all.

KWG:jds



K. W. Greene

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