

d. E. D.

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To: Distribution
From: K. W. Greene
Date: 15 October 1969
Subject: Unofficial Results of the SCB Meeting, Held on 9 October 1969.

Below are the unofficial results of the SCB Meeting, held at MIT/IL on 9 October 1969.

CODE: A = Approved; D = Disapproved; P = Pending; C = Cancelled.

COLOSSUS

<u>Disposition</u>	<u>Apollo</u>	<u>Number</u>	<u>Title</u>	<u>Remarks</u>
A	12	960	Change constant in R52	
A	12	961	CMC start of TB6 (E-memory routine)	MSC to investigate with MSFC for flights after Apollo 12. MIT recommends fix memory change for Apollo 14 & subsequent if MSFC can't handle the problem.
C	12	949	CH13STAL	
A	13	806.1	Allow N07 to address output channels	
A	13	863.1	Make P76 set NODO flag	
A	13	936.1	Initialize V90 time to TIG	
A	13	963	R52 - Delete 407 alarm & drive trunnion to 50°	
A	13	966	Clear preferred orient. flag in P40/41	
P	13	967	CALGTA fix for 90° Δ MGA	MIT recommends disapproval
A	14	869	Rate aided optics drive	Downlink changes need to be defined.
A	14	822	Delete stroke test	
P	14	929	COLOSSUS POODOOs terminate guid.	FSB & MIT to investigate.

<u>Disposition</u>	<u>Apollo</u>	<u>Number</u>	<u>Title</u>	<u>Remarks</u>
A	14	921	N38 and N06 on downlist (LUM modification)	
P	14	906.1	COLOSSUS (LUM) R00 initialization	MIT to reevaluate based on new information.
A	14	859	Modify rate drive in R61	
A	14	868	P23 changes	
A	14	821.1	Move AZO to fixed Ephemeris constants	
A	14	872.1	Initiate TFI in P40s	
A	14	874.1	Change decimal load technique	
A	14	917	Delete P31	
A	14	916	Delete P17P77	
A	14	857	Save 300 performance test words	
A	14	867	Make R64 Y rotation fix	
A	14	956	Time of longitude	Approved for an MIT evaluation.
A	14	860	Modify VECPOINT during P20	

The following PCRs were considered as candidates for off-line assembly development. The SCB decisions are as noted.

<u>Disposition</u>	<u>PCR</u>	<u>Title</u>	<u>Remarks</u>
A	876	New Prelaunch Alignment Technique	
A	927	Universal Pointing Routine	To be available for Apollo 16
A	954	Revised Manual Booster	MIT to continue work-effectivity to be decided later.

The following PCRs were disapproved at the SCB. These PCRs were disapproved for Apollo 12, 13 and 14. They may be resubmitted again at a future date for consideration in Apollo 15 and subsequent.

Disapproved PCRs, cont'd.

<u>Disposition</u>	<u>PCR</u>	<u>Title</u>	<u>Remarks</u>
D	850	Add RCS firing time to downlink.	
D	873. 1	Change BAILOUTs and POODOOs to two digits	
D	903. 1	COLOSSUS (LUM) E-load redefinition	
D	904. 1	COLOSSUS (LUM) E-loads to fixed memory	
D	919	COLOSSUS (LUM) E-load eliminations	
D	907. 1	COLOSSUS (LUM) POODOO display	
D	908. 1	COLOSSUS (LUM) P27 same vector option	
D	923. 1	COLOSSUS (LUM) P27 validity tests	
D	926. 1	COLOSSUS (LUM) alignment torque time and angles	
D	933. 1	COLOSSUS (LUM) POODOO's loading of ALMCADR's	
D	861	Gimbal lock avoidance during KALCMANU	
D	920	ALMCADR's on downlist	
D	922	Add N49 and N12 to RV list	
D	932. 1	No IMU compensation during torquing.	
D	911. 1	Shorter, faster lunar orientation routine	
D	935. 1	Display/response flagbit	
D	794. 1	COLOSSUS E-load deck sum	
D	930. 1	COLOSSUS variable downlist	
D	924. 1	Software restart counter	
D	925. 1	Program alarm counter	

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Disapproved PCRs, cont'd.

<u>Disposition</u>	<u>PCR</u>	<u>Title</u>	<u>Remarks</u>
D	786	Delete checks and alarms in P61, P62	
D	918	Delete P38, P78, P39, P79	
D	789	PIPA threshold (new P47)	
D	862	Gimbal lock avoidance during	
D	866	Modify R60 call in P20	
D	928	P11 with V16 and V82	
D	931.1	Blank DSKY with double "KRLS"	
D	870	TEI targeting	
D	913	9-D state vector for CMC P20	
D	914	Altitude display in P67	
D	939	Reduce stop rate during R00	
D	952	Gyro torque extended verb with REFSMMAT calculation	
D	953	Runaway thruster detection	

LUMINARY

<u>Disposition</u>	<u>Apollo</u>	<u>Number</u>	<u>Title</u>	<u>Remarks</u>
A	13	968	LPD bias	
A	13	882	Replace VHORIZ with something better	
A	13	895	V59E allow use of LR in position #2 in P63	
A	13	863.2	P76 set NODO flag	
A	13	936.2	Initialize V90 time to TIG	
A	13	893	Abort flagbit	
A	13	285	Remove check of auto throttle discrete	MIT to evaluate the impact of adding a noun for GTC.
A	13	806.2	Allow N07 to address output channels	
A	13	943	Velocity reasonability test	
A	14	821.2	Move AZO to fixed Ephemeris constants	
A	14	899	N38 in C/A, LS, and R/P lists	
P	14	906.2	R00 initialization	MIT to reevaluate based on new information.
A	14	896	LR velocity read centered at PIPTIME	
A	14	944	Read X-pointer input from CDUs	
A	14	945	Descent downlist change	
A	14	872.2	Initiate TFI in P40s	
A	14	874.2	Change decimal load technique	
A	14	892	Delete R29	Do not fix anomaly in LUM 1B
D	14	894	Delete FLV50N25, R1 = 00500 from P63	
A	14	898	LR velocity read	
P	--	942	LR update cutoff	C. Hackler to investigate and respond to C. Kraft.
A	14	897	Delete PCR 775	

The following PCRs were considered as candidates for off-line assembly development. The SCB decisions are as noted.

<u>Disposition</u>	<u>Number</u>	<u>Title</u>	<u>Remarks</u>
A	969	Δ-guidance	PCR to be written by A. Klumpp.
A	884	Directional stability and turn coordination during manually controlled lunar landing	
D	885	Attitude command during manual landings	
A	941	Landing radar pre-filter	
A	940	Improved determination of LM on lunar surface	To be developed with 941 above.
A	888	Mod. DAP control authority model to include effect of jet plume deflectors	
A	890	Improve slosh stability of CSM docked DAP	

The following PCRs were disapproved at the SCB. The PCRs were disapproved for Apollo 13 and 14. They may be resubmitted again at a future date for consideration in Apollo 15 and subsequent.

<u>Disposition</u>	<u>PCR</u>	<u>Title</u>	<u>Remarks</u>
D	935.2	Display/response flagbits	
D	883	Improve AVERAGE-G accuracy during unaccelerated flight	
D	852	Sun angle check improvement	
D	951	Elevation angle in N54	
D	900	ALMCADRs on downlist	
D	902	Add N49 to RV downlist	
D	932.2	No IMU compensation during torquing	

<u>Disposition</u>	<u>PCR</u>	<u>Title</u>	<u>Remarks</u>
D	887.2	Eliminate GEE-WHIZ display from V67	
D	873.2	Change BAILOUTs and POODOOs to two digits	
D	907.2	POODOO display	
D	908.2	P27 same vector option	
D	923.2	P27 validity tests	
D	926.2	Alignment torque time and angles	
D	933.2	POODOOs loading of ALMCADRs	
D	931.2	Blank DSKY with double "KEYREL"	
D	901	Option 1 and Option 2 in C/A list and LS list	
D	889	Elimination of potential control instability and improvement of control authority in the CSM docked configuration	
D	930.2	Variable downlist	
D	794.2	E-load check sum	
D	924.2	Software restart counter	
D	925.2	Program alarm counter	
D	911.2	Shorter, faster lunar orientation routine	
D	881	Onboard program for accurate, operationally simple CSM docked LM IMU alignment	
D	903.2	LUMINARY E-load redefinitions	
D	904.2	LUMINARY E-loads to fixed memory	
D	905	LUMINARY E-loads eliminated	

NOTE: The planned release dates for Apollo program are as follows:

Apollo 13

COLOSSUS 2D	20 October 1969
LUMINARY 1C	5 November 1969

Apollo 14

COLOSSUS 2E	20 February 1970
LUMINARY 1D	5 March 1970

KWG:jds



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