

R. LARSON

Potential Deletion List
Colossus-Sundance
August 29, 1967

Fixed Memory
Words

Colossus	Sundance
(CMC)	(LGC)

I Jan. 13, 1967 List (Category B & C)

MSC

1. P-21 Ground Track Det.	50	IN	IN	50
2. P-17, P-77 TPI Search Prog.	480	IN	OUT	470
3. Self Check	687	OUT	OUT	687
4. P-33 Lunar Orbit Plane Change Targeting Prog.	370	OUT		-
5. P-22 Lunar Surface Navigation	-		IN	120
6. R-24 RR Search Routine	-		IN	215
7. P-25 CMC, P-60 LGC Predicted Lunar Landing Time Prog.	330	OUT	OUT	330
	1917			1872

II Jan. 13, 1967 Possible Additions Incorporated (Category D)

1. R-05 S-Band Antenna Prog.	85	IN	/	IN	105
2. P-50 Docked IMU Coarse Align't	-			OUT	100
3. COAS Backup Marking (IMU Algn't)	50	IN		IN	50
4. R-24 Backup Rendezvous Tracking (COAS)	100	IN			-
5. Erasable Memory on Downlink	20	IN		IN	20
6. LRR Reasonable Test					
	255				275

calc alt WRT
Finkert ellipsoid

P 61 - 44

S 61.1 88 - state Vector update + IMU status
12 141 - display subroutine (N 60 N 63)
13 34 - gimbal angles for up

 307

MSC

III MSC-MDRB Additions or Direction to MIT Since Jan. 13, 1967

	CMC	IN	LGC
1. R-34 Rendezvous Parameter Display ($\dot{R}$, $\ddot{R}$ and θ_{SXT})	20		-
2. R-63 Rendezvous Final Attitude Display (X axis along LOS)	30		30
3. P-38, P-78 Stable Orbit Rendezvous Pre-thrust	100		100
4. P-39, P-79 Stable Orbit Rendezvous Midcourse			
5. P-27 LGC Update Prog.	-		320
6. R-XX Rendezvous Out-of-Plane Display ($\dot{Y}$, $\ddot{Y}$ and ψ)	120		120
	270		570

IV MIT Additions Since Jan. 13, 1967

1. R-35 Lunar Landmark Selection Routine	190		-
2. P-04 Lunar Surface Checkout	-	OUT	200
3. P-46 LM/ CSM Separation Monitor Prog.	-		50
	190		250

V MSC Additional Suggestions (GSOP Review 8-16-67)

1. P-70 Safe Perilune	200	OUT	-
2. P-61 Descent Orbit Injection (DOI)	-	OUT 415	295
3. P-32 Lunar Orbit Insertion (LOI)	200	OUT	-
4. P-10, P-11 Predicted Launch Time Prog's.	-	IN 850	
5. Kayton Lunar Surface Lat. Long. Prog.	-		50
	400		1315

Grand Total

3032

4282

insert TPI time and
have canned profile

from P22 tracking
of closest
PCR to c/csm
up

CMC 1695

P33 370

Self Check 687

P25 330

P32 200

P70 200
1787

LGC 1965

P17 470

Self Check 687

P60 330

P04 200

P61 295

~~lunch~~ ~~supper~~

P50

50

100

2132

BLACK FRIDAY AUG 29

Program Durations

<u>CMC (UGS)</u>			<u>LGc (2035):</u>		
(MIT)	Self Check	687	(MIT)	Self Check	687
	P25	330		P60	330
	P33	370		P04	200
	P34	<u>200</u>		P61	295
		1587		Lunar Surf. Lat Long	<u>50</u>
					1682
(MSC)	P70	<u>200</u>			
		1787		P17	<u>470</u>
					2032
			(MSC)	P50	<u>100</u>
					2132

Action Items:

1. Comparing:

- MIT to see if this can be put into erasable
- MSC to investigate ABE handling

2. P10, 11:

- MSC to check feasibility of using these to calc TPI
- give time of closest CSN approach (from P22, LGE)