APOLLO SPACECRAFT SOFTWARE CONFIGURATION CONTROL BOARD PROGRAM CHANGE REQUEST

NUMBER (Completed by FSB)

1.0 COMPLETED BY ORIGINATOR

1.1 ORIGINATOR	DATE	1.2 ORGANIZATION	APPROVAL	DATE
EYLES	Aug.24,'70	MIT		

1.3 EFFECTIVITY: LUMINARY 1E (Apollo 15)

1.4 TITLE OF CHANGE: Simpler LR turn-on logic.

1.5 REASON(S) FOR CHANGE: See attached sheet.

1.6 DESCRIPTION OF CHANGE: See attached sheet.

2.0 SOFTWARE CONTROL BOARD OR FLIGHT SOFTWARE BRANCH DECISION FOR VISIBILITY IMPACT ESTIMATE BY MIT

2.1 ☐ APPROVED ☐ DISAPPROVED

2.2 REMARKS:

2.3 SOFTWARE CONTROL BOARD OR FLIGHT SOFTWARE BRANCH SIGN OFF

DATE

3.0 MIT VISIBILITY IMPACT EVALUATION:

3.1 SCHEDULE IMPACT

3.2 IMPACT OF PROVIDING DETAILED EVALUATION

3.3 STORAGE IMPACT: -21 words

3.4 REMARKS:

3.5 MIT COORDINATOR

DATE

4.0 SOFTWARE CONTROL BOARD ACTION

4.1 ☐ IMPLEMENT AND PROVIDE DETAILED CHANGE EVAL. ☐ PROVIDE DETAILED CHANGE EVALUATION ☐ DIS-APPROVED

4.2 REMARKS

4.3 SOFTWARE CONTROL BOARD SIGN OFF

DATE

5.0 MIT DETAILED PROGRAM CHANGE EVALUATION

5.1 MIT COORDINATOR

DATE

5.2 MIT EVALUATION

6.0 SOFTWARE CONTROL BOARD DECISION ON MIT DETAILED PROGRAM CHANGE EVALUATION

6.1 ☐ START OR CONTINUE IMPLEMENTATION ☐ DISAPPROVED OR STOP IMPLEMENTATION

6.2 REMARKS:

6.3 SOFTWARE CONTROL BOARD SIGN OFF

DATE

APOLLO SPACECRAFT SOFTWARE CONFIGURATION CONTROL BOARD

-DATA AMPLIFICATION SHEET -

PAGE_____OF_____

PROGRAM CHANGE REQUEST NO. _____	PREPARED BY: EYLES DATE: August 24, 1970	ORGANIZATION: MIT

CONTINUATION SECTION (REFER TO BLOCK NUMBER AND TITLE ON PROGRAM CHANGE REQUEST FORM)

1.5 Reasons for Change:

(1) To provide DELTAH, a more useful quantity, instead of VI as part of the normal P63 DSKY display.

(2) To simplify the Landing Radar turn-on procedure.

(3) To eliminate the ambiguities in the present V57 logic, particularly the inappropriate uses of V06 and V50.

1.6 Description of Change:

(1) Put DELTAH in R1 of N63 in place of VI. Put VI in R3 of N68 in place of DELTAH. Thus the descent on-call displays become:

N63 -	RANGE	and	N92 - %FC
	TG		H
	VI		H

(2) Flash V06N63 from ignition in P63. The correct response is V57E which immediately enables LR updates and stops the flashing. Other responses (PROCEED, ENTER, V33E, V34E) are ignored. A subsequent V58E disables LR updates and makes V06N63 flash again until another V57E. Thus the flashing of V06N63 in P63 always indicates that the LR has not been enabled. V57 returns to its ancient form, needing to have no displays of its own because DELTAH appears in N63. (To turn on the LR in a phase other than P63 — if ever necessary — a V16N63 would be used to look at DELTAH, followed by V57E to enable updates.)

REMARKS

This change carries a step further suggestion B in Dave Scott's June 25 memo on "Luminary Improvements". It has been implemented in the off-line version ZERLINA.

TP#21812