

**APOLLO SPACECRAFT SOFTWARE CONFIGURATION CONTROL BOARD  
PROGRAM CHANGE REQUEST**

NUMBER (Completed by FSB)

**1.0 COMPLETED BY ORIGINATOR**

1.1 ORIGINATOR J. H. Alphin	1.2 DATE 9/29/70	1.3 ORGANIZATION MPAD	1.4 APPROVAL	1.5 DATE
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1.6 TITLE OF CHANGE Apollo 15	1.7 TITLE OF CHANGE Landing Radar Reasonability Test
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1.8 PROPOSED TEST SCENARIOS  
The landing radar reasonability test can lock out valid altitude updating, especially if the lunar terrain model is inhibited (V68) during the approach phase.

1.9 DESCRIPTION OF CHANGE  
See attached page.

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

<input type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED	2.1 REMARKS
2.2 SOFTWARE CONTROL BOARD OR FLIGHT SOFTWARE BRANCH SIGN OFF		
DATE		

**3. MIT VISIBILITY IMPACT EVALUATION:**

3.1 INITIAL IMPACT	3.2 IMPACT OF PROPOSED DETAILED EVALUATION
3.3 STORAGE IMPACT	
3.4 MIT COORDINATION	3.5 REMARKS
DATE	

**4.0 SOFTWARE CONTROL BOARD ACTION**

<input type="checkbox"/> PROVIDE DETAILED CHANGE EVALUATION	<input type="checkbox"/> DISAPPROVED	4.1 REMARKS
4.2 SOFTWARE CONTROL BOARD SIGN OFF		
DATE		

**5.0 MIT DETAILED PROGRAM CHANGE EVALUATION**

5.1 MIT COORDINATION	5.2 MIT EVALUATION
DATE	

**6.0 SOFTWARE CONTROL BOARD DECISION ON MIT  
DETAILED PROGRAM CHANGE EVALUATION**

<input type="checkbox"/> PART OF CONTINGENCY IMPLEMENTATION	<input type="checkbox"/> DISAPPROVED BY STOP IMPLEMENTATION	6.1 REMARKS
6.2 SOFTWARE CONTROL BOARD SIGN OFF		
DATE		

APOLLO SPACECRAFT SOFTWARE CONFIGURATION CONTROL BOARD  
DATA AMPLIFICATION SHEET

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PROGRAM CHANGE REQUEST NO.

PREPARED BY

DATE

ORGANIZATION

J. H. Alphin

9/29/70

MPAD

INITIATION SECTION: (Refer to Block Number and Title on Program Change Request form.)

1.6 DESCRIPTION OF CHANGE

Increase the slope and eliminate the constant term in the landing radar reasonability test so that less chance for lock out will occur. The recommended slope is 0.3 instead of the present 0.125. This number would reject updates which cause guidance interface problems, but would accept values that would not cause interface problems. The current slope excludes many cases that are acceptable from a guidance standpoint. In addition, this reasonability test will protect for cross lobe lock up to lower altitudes.

A. H. W. P. EQUATION

0 1000 2000 3000 4000 5000 6000 7000

CRITICAL POINT

CRITICAL POINT

CRITICAL POINT

CURRENT

