

<b>APOLLO SPACECRAFT SOFTWARE CONFIGURATION CONTROL BOARD</b> <b>PROGRAM CHANGE REQUEST</b>				NUMBER (Completed by RSB) <span style="font-size: 1.5em;">751</span>	
<b>1.0 COMPLETED BY ORIGINATOR</b>					
1.1 ORIGINATOR		DATE	1.2 ORGANIZATION		APPROVAL
D. EYLES		3/5/69	MIT/IL		<i>J. W. Cherry</i>
1.3 EFFECTIVITY			1.4 TITLE OF CHANGE		
LUMINARY 1A			Make 1406 Alarm non-abortive.		
1.5 REASON(S) FOR CHANGE					
Undesirability of POODOO abort during landing.					
1.6 DESCRIPTION OF CHANGE					
Make 1406 Alarm non-abortive: ALARM, not POODOO.					
<b>2.0 SOFTWARE CONTROL BOARD OR FLIGHT SOFTWARE BRANCH</b> <b>DECISION FOR VISIBILITY IMPACT ESTIMATE BY MIT</b>					
2.1 <input type="checkbox"/> APPROVED <input type="checkbox"/> 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		
0					
3.3 STORAGE IMPACT			3.4 REMARKS:		
3.5 MIT COORDINATOR					
<i>George W. Cherry</i>					
DATE					
<b>4.0 SOFTWARE CONTROL BOARD ACTION</b>					
4.1 <input type="checkbox"/> IMPLEMENT AND PROVIDE DETAILED CHANGE EVAL. <input type="checkbox"/> PROVIDE DETAILED CHANGE EVALUATION <input type="checkbox"/> DIS-APPROVED			4.2 REMARKS		
4.3 SOFTWARE CONTROL BOARD SIGN OFF					
DATE					
<b>5.0 MIT DETAILED PROGRAM CHANGE EVALUATION</b>					
5.1 MIT COORDINATOR			5.2 MIT EVALUATION		
DATE					
<b>6.0 SOFTWARE CONTROL BOARD DECISION ON MIT</b> <b>DETAILED PROGRAM CHANGE EVALUATION</b>					
6.1 <input type="checkbox"/> START OR CONTINUE IMPLEMENTATION <input type="checkbox"/> DISAPPROVED OR STOP IMPLEMENTATION			6.2 REMARKS:		
6.3 SOFTWARE CONTROL BOARD SIGN OFF					
DATE					

Massachusetts Institute of Technology  
Instrumentation Laboratory  
Cambridge, Massachusetts

ATT:  
PCN 751

LUMINARY Memo #68

TO: Distribution  
FROM: George W. Cherry  
DATE: February 20, 1969  
SUBJECT: Lunar Landing Guidance Equations Program Alarms

In the present LUMINARY 1A, TGO computations which fail to converge cause the program to flash V37 and the astronaut cannot select P66 (Alarm 1406). If the astronaut is exercising his new ATT HOLD option (PCR 737) in P63, P64, P65 and allows a very large attitude error to develop, the TGO computations may fail to converge. We do not want Alarm 1406 or any other alarm of this nature which might be caused by large attitude errors to toss the crew irrevocably out of the landing programs. We also do not want any landing guidance equations unhappiness to do anything except turn on a program alarm. No POODOOs!

Action: Don Eyles, Allan Klumpp, please scrutinize the equations performance with large attitude error and implement the above philosophy. Alarm 1406 should not do a POODOO, certainly at least not in ATT HOLD mode.