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COLOSSUS Memo #127

To: Distribution
From: W. F. Ostanek
Date: 16 December 1968
Subject: Preliminary COLOSSUS II Level 4 Test Plan for CSI/CDH

Ten additional Level 4 test sequences have been devised to test interfaces between CSI/CDH/TPI targetting, navigation and powered flight. The test sequences are modified forms of the Sundance/Luminary Level 4 tests. The earth orbital cases were taken from Sundance Level 4 and the lunar orbital cases were taken from Luminary Level 4.

C4.32a CSI-CDH Sequence

 Select P00
P00 Do V48, V46
 Select P20

P20
 Select P32, operate before and after optics marks (Recycle)

P32 Start VHF (V87)
 Make n optics marks
 Do V83, V90, V06N52
 Select P41

P41 Do burn, V82
 Select P33 operate before and after optics marks, start VHF

P33 Make n optics marks
 Do V83, V90, V06N52, V67
 Select P40

P40 Do burn
 Select P00

C4.32b Same as C4.32a for Lunar
 except navigation corrections for CSM (V81)
 CSM state vector errors

C4.33a	CDH-TPI Sequence Select P00
P00	Do 48, V46 Select P20
P20	Select P33, operate before and after optics marks (Recycle) Start VHF
P33	Make <u>n</u> optics marks Do V83, V90, V06N52, V67 Select P41, V82
P41	Do burn Select P34 - before and after optics marks
P34	Start VHF Make <u>n</u> optics marks Select P41
P41	Do burn, V82 Select P00
C4.33b	Same as C4.33a for Lunar except navigation corrections for CSM (V81) CSM state vector errors

C4.34a	CSI, CDH back up Select P00
P00	Do V48, V46 Select P20
P20	Select P72, operate before and after optics marks (Recycle)
P72	Start VHF Make <u>n</u> optics marks V85, V90, V06N52 Select P76
P76	Target ΔV Select P73, before and after optics marks
P73	Start VHF Make <u>n</u> optics marks V85, V90, V67, V06N52 Select P76
P76	Target ΔV Select P00
C4.34b	Same as C4.34a for Lunar

C4.35a	CDH-TPI back up Select P00
P00	Do V48, V46 Select P20
P20	Select P73, operate before and after optics marks (Recycle)
P73	Start VHF Make <u>n</u> optics marks V83, V90, V67, V06N52 Select P76
P76	Target ΔV Select P74, before and after optics marks
P74	Start VHF Make <u>n</u> optics mark V85, V67 Select P76
P76	Target ΔV
C4.35b	Same as C4.35a for Lunar

C4.36a	CSI-SPS burn Select P00
P00	Uplink, do V48, V46 Select P20
P20	Select P32
P32	Start VHF, take <u>n</u> marks Select P40
P40	Do burn
C4.36b	Same as C4.36a for Lunar