

get procedure

J. Dunbar

MIT/IL SOFTWARE ANOMALY REPORT

REC REPORT NO. <i>COM-12</i>
PROGRAM <i>COLOSSUS 2, 2A, 2B</i>
PROGRAM REVISION <i>COMINCHESL5558</i>

1.1 ORIGINATOR: <i>Engel</i>	1.2 ORGANIZATION: <i>MIT</i>	1.3 DATE: <i>5/5/69</i>	1.4 ORIGINATOR CONTROL NO.
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1.5 DESCRIPTION OF ANOMALY:
 The S40.8 code which enables TVC cg-tracking does not distinguish between pre- and post-switchover (V46, docked) TVC DAP states; hence it continues to load the cg-tracking gain REPPFRAC from the high-bandwidth pad load erasable EREPPFRAC + 1, instead of from the low-bandwidth fix-memory constant FREPPFRAC. Obviously the logical differences produce observable differences only when the pad-load value is different from the fixed memory value

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1.6 DESCRIPTION OF RUN:
 eyeball of code; confirmed via basic code tracing in COLOSSUS 2 level 6 test FLOI1.4CX

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- MIT ANALYSIS -

2.1 CAUSE:
 code error (inadequate discrimination)

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2.2 RECOGNITION:
 improper REPPFRAC values after V46 when pad-load and fixed memory values are not equal

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2.3 MISSION EFFECT:
 none, if EREPPFRAC + 1 = FREPPFRAC; otherwise possible stability or performance degradation

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2.4 AVOIDANCE PROCEDURE:
 make pad-load EREPPFRAC + 1 equal to FREPPFRAC (as planned for F and G missions anyway)

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2.5 RECOVERY PROCEDURE:
 After a V46 switchover, load EREPPFRAC + 1 equal to FREPPFRAC as soon as possible.

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2.6 PROGRAM CORRECTION:
 insert code in the cg-tracking-enable logic to: check for switchover; if post-switchover use FREPPFRAC + 1 otherwise check IM-ON/OFF etc. as currently coded

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2.7 RECOMMENDED DISPOSITION (Fix, Work-around, etc):
 fix for COLOSSUS 2C; constrain the EREPPFRAC + 1 pad load for earlier releases to be the FREPPFRAC value.

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2.8 RECOMMENDED RE-TESTING:
 unit testing plus FLOI1.4CX

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2.9 MIT/IL SIGNATURE: *Michael L. Lillis* 2.10 DATE: *5/21/69*

3.1 NASA DIRECTION:

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4.1 CLOSING ACTION TAKEN:
fix in next formal release (which will be Colossus 2C in July).

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3.2 NAS/WMSC SIGNATURE:	3.3 ORGANIZATION:	3.4 DATE:	4.2 SIGNATURE:	4.3 ORGANIZATION:	4.4 DATE:
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