

# MIT/IL SOFTWARE ANOMALY REPORT

*XIA*

MIT REPORT NO. <b>COM 10</b>
PROGRAM <b>COMANCHE</b>
PROGRAM REVISION <b>49</b>

1.1 ORIGINATOR: <b>A. ENGEL</b>	1.2 ORGANIZATION: <b>MIT/IL</b>	1.3 DATE: <b>3/28/69</b>	1.4 ORIGINATOR CONTROL NO.
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1.5 DESCRIPTION OF ANOMALY:  
P40 and P41 calculation of central angle  $V_g$  rotation for external  $\Delta V$  burns may be inaccurate.

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1.6 DESCRIPTION OF RUN:  
Run C6.5.10 (F - LOI1-B) yielded a  $.06^\circ$  central angle error, resulting in about a 3 ft/sec. error in  $V_g$ .

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- MIT ANALYSIS -

2.1 CAUSE:  
Truncation and round-off error.

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2.2 RECOGNITION:  
Comparison of AGC results with mathematical model shows this error.

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2.3 MISSION EFFECT:  
About 3 ft/sec. cut off error.

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2.4 AVOIDANCE PROCEDURE:  
None

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2.5 RECOVERY PROCEDURE:  
None

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2.6 PROGRAM CORRECTION:  
Change DMP instruction to DMPR in S40.1 X  $\Delta V$  logic. This will effect a factor of two improvement.

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2.7 RECOMMENDED DISPOSITION (Fix, Work-around, etc):  
Fix for COLOSSUS 2A.

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2.8 RECOMMENDED RE-TESTING:  
Rerun of C6.5.10.

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3.1 NASA DIRECTION:  
  
*FIX FOR COLOSSUS 2A*

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2.9 MIT/IL SIGNATURE: <i>Michael C. ...</i>	2.10 DATE: <b>4/1/69</b>
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4.1 CLOSING ACTION TAKEN:  
*Fixed in Colossus 2A*  
**CLOSED**  
*PROGRAM NOTE*

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3.2 NASA/MSC SIGNATURE: <i>Leinhardt</i>	3.3 ORGANIZATION: <b>NASA/MSC/FSS</b>	3.4 DATE: <b>4/1/69</b>	4.2 SIGNATURE: <i>Leinhardt</i>	4.3 ORGANIZATION: <b>NASA/MSC/FSS</b>	4.4 DATE: <b>4/1/69</b>
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