

MIT/IL SOFTWARE ANOMALY REPORT

REPORT NO. LNy 76
PROGRAM LUMINARY
PROGRAM REVISION 99

1.1 ORIGINATOR: C. Schulenberg	1.2 ORGANIZATION: MIT/IL	1.3 DATE: 6/9/69	1.4 ORIGINATOR CONTROL NO.
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1.5 DESCRIPTION OF ANOMALY:

During P66 only R1 (horizontal velocity) and R2 (altitude rate) of noun 60 will be updated at the advertised frequency of once per second. Due to a program error R3 (altitude) will be updated only once every two seconds.

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1.6 DESCRIPTION OF RUN:

Visual inspection of coding.

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- MIT ANALYSIS -

2.1 CAUSE:

The noun table for noun 60 in PINBALL is referencing the wrong erasable register.

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2.2 RECOGNITION:

In P66 an examination of noun 60 will show that altitude is being changed only once every 2 seconds.

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2.3 MISSION EFFECT:

Negligible.

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2.4 AVOIDANCE PROCEDURE:

If it is desired to have altitude available on the DSKY at an update rate of once per second then the astronaut.....

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2.5 RECOVERY PROCEDURE:

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2.6 PROGRAM CORRECTION:

Change the PINBALL noun table for noun 60 to reference the erasable HCALC1 instead of HCALC.

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2.7 RECOMMENDED DISPOSITION (Fix, Work-around, etc):

Fix problem in Luminary 1B. For Luminary 1A see 2.4.

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2.8 RECOMMENDED RE-TESTING:

Digital test of P66.

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2.9 MIT/IL SIGNATURE: <i>Henry W. Cherry</i>	2.10 DATE: <i>6/10/69</i>
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3.1 NASA DIRECTION:

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4.1 CLOSING ACTION TAKEN:

FIXED
REV 102

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3.2 NASA/MSD SIGNATURE:	3.3 ORGANIZATION:	3.4 DATE:	4.2 SIGNATURE:	4.3 ORGANIZATION:	4.4 DATE:
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2.4 Avoidance Procedure:

could key in V16N63E at entry to P66 and simply use this noun as an alternative to the noun 60 put up automatically. The V16 monitor will update the DSKY at a once per second frequency. Noun 63 differs from noun 60 only in the first component:

	NOUN 60	NOUN 63
R1	HORIZONTAL VELOCITY	SPEED
R2	ALTITUDE RATE	ALTITUDE RATE
R3	ALTITUDE	ALTITUDE

Instead of displaying the LM horizontal velocity with respect to the lunar surface, noun 63 displays the magnitude of the LM velocity referenced to inertial space.