

R. LARSON

MIT/IL SOFTWARE ANOMALY REPORT

MSC REPORT NO. L-1B-04
PROGRAM LUMINARY
PROGRAM REVISION 116

1.1 ORIGINATOR: B. McCoy	1.2 ORGANIZATION: MIT/IL	1.3 DATE: 9/17/69	1.4 ORIGINATOR CONTROL NO.
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1.5 DESCRIPTION OF ANOMALY:

During the Descent, switching the RR Mode Control into LGC position and then out disables the X-pointer meter for FORWARD and LATERAL VELOCITY display.

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R. A. LARSON

1.6 DESCRIPTION OF RUN:
Normal Descent, with closed RR CBs, the RR mode was changed from SLEW-to-LGC-to SLEW. The X-pointers then stayed at the null center position.

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- MIT ANALYSIS -

2.1 CAUSE:
Routine R10 sets the RR Error Counter ENABLE bit (Chan 12 bit 2). T4RUPT sees that RR mode went into LGC and removes the RR Error Counter Enable. R10 doesn't subsequently set this bit.

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2.2 RECOGNITION:
Observing no display on X-pointers after cycling RR mode switch.

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2.3 MISSION EFFECT:
No FORWARD or LATERAL VELOCITY displayed on X-pointers; makes final landing phase difficult.

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2.4 AVOIDANCE PROCEDURE:
Keep RR CBs open during Descent or leave RR mode switch out of LGC mode.

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2.5 RECOVERY PROCEDURE:
Cycle the MODE SELECT switch from PGNS to AGS to PGNS.

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2.6 PROGRAM CORRECTION:
Set RR Error Counter Enable every time SPEEDRUN is called in SERVICER, if it is not already set.

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2.7 RECOMMENDED DISPOSITION (Fix, Work-around, etc):
Fix for LUMINARY 1C.

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2.8 RECOMMENDED RE-TESTING:
Do run of 1.6 and verify X-pointers display velocity data.

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2.9 MIT/IL SIGNATURE: <i>R. A. Larson</i>	2.10 DATE: 9-22-69
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3.1 NASA DIRECTION:

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4.1 CLOSING ACTION TAKEN:

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3.2 NASA/MSC SIGNATURE:	3.3 ORGANIZATION:	3.4 DATE:	4.2 SIGNATURE:	4.3 ORGANIZATION:	4.4 DATE:
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