

# MIT/IL SOFTWARE ANOMALY REPORT

MIT REPORT NO. <span style="float: right; font-weight: bold;">LNY63</span>
PROGRAM <span style="float: right; font-weight: bold;">LUMINARY</span>
PROGRAM REVISION <span style="float: right; font-weight: bold;">97</span>

1.1 ORIGINATOR: <b>C. SCHULENBERG</b>	1.2 ORGANIZATION: <b>MIT/IL</b>	1.3 DATE: <b>4/28/69</b>	1.4 ORIGINATOR CONTROL NO.
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1.5 DESCRIPTION OF ANOMALY:

If the DPS engine fails to ignite in P40 or if the DPS fails in P40 prior to the time throttle-up was to occur (normally 26 seconds after ignition), then an attempt to relight the DPS by keying in ENTER to the flashing V97N40 followed by a PROCEED to the flashing V99N40 may cause the DPS to throttle-up within a few seconds of ignition instead of at the nominal time.

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1.6 DESCRIPTION OF RUN:

Anomaly pointed out in TRW memo entitled Questionable Items in LUMINARY 97 Listing (A-201, 4/23/69).

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**- MIT ANALYSIS -**

2.1 CAUSE:

Programmer Error.

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2.2 RECOGNITION:

See Section 1.5.

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2.3 MISSION EFFECT:

Possible loss of attitude control, if trim gimbal is located too far from center-of-gravity.

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2.4 AVOIDANCE PROCEDURE: Wait at least a total of 12 seconds between the time the flashing V97N40 first appears and the time a PROCEED is keyed in to the flashing V99N40.

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2.5 RECOVERY PROCEDURE:

See Section 2.4.

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2.6 PROGRAM CORRECTION:

Correct code executed on ENTER response to V97N40 that is supposed to cancel the pending throttle-up.

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

Use avoidance procedure. Fix on subsequent releases.

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2.8 RECOMMENDED RE-TESTING:

Engine fail test during P40.

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2.9 MIT/IL SIGNATURE: <i>James S. Kerman</i>	2.10 DATE: <b>5-1-69</b>
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3.1 NASA DIRECTION:

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2.11 CLOSING ACTION TAKEN:

FIXED MEMO 91

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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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