Description of Anomaly:

Selection of P22 before the CSM has entered Mode 2 Radar Coverage can result in an erroneous 530 Alarm.

Description of Run:

P22 Digital Simulation, nominal G Mission orbit.

MIT Analysis:

2.1 Cause:

The Radar Pre-designation routine does not work.

2.2 Recognition:

Alarm 530 when the CSM should be coming into coverage.

2.3 Mission Effect:

None.

2.4 Avoidance Procedure:

Do not select P22 until CSM is within RR coverage. This time can be supplied from the ground or inferred from the range, range-rate display...

2.5 Recovery Procedure:

If alarm 530 is displayed, answer display and reselect P22 when CSM is within RR coverage.

2.6 Program Correction:

Fix coding in Pre-designate.

2.7 Recommended Disposition (Fix, Work-around, etc.):

Work-around in LUMINARY 1B; fix in LUMINARY 1C.

2.8 Recommended Re-testing:


3.1 NASA Direction:


4.1 Closing Action Taken:


3.2 NASA/MSC Signature: 3.3 Organization: 3.4 Date: 4.2 Signature: 4.3 Organization: 4.4 Date:

MSC Form 1409 (Rev May 68)
2.4 Avoidance Procedure, cont'd.

...of R31 (V83). When the range-rate is negative, there is a known range at which the vehicle enters radar coverage, assuming nominal CSM orbit and LM orientation.