

MIT Instrumentation Laboratory

MEMORANDUM

TO: DISTRIBUTION  
FROM: R. Larson *R.L.*  
DATE: 15 February 1968  
SUBJECT: Data Priority Meeting - DOI - February 14, 1968

- A. The DPS program currently stays at 10% thrust for 26 secs and then goes to full thrust. The program also makes a calculation to determine if the  $\Delta V$  would be greater than 95 sec at 10% - (26 sec at 10% + 6.9 sec at 100% = 26 sec + 69 sec at 10%. Approximately six seconds required for outer TVC loop closure.) If not greater than 95 sec equivalent the engine is not throttled. The present DOI burn looks like 60 sec at 10%.

MSC says the  $3\sigma$  DPS gimbal alignment uncertainty for DOI is  $1.8^\circ$ . 26 sec to throttle up looks questionable.

The following decisions were made:

1. The time to throttle up (TUP) which is now in erasable (octal load V21 N01E XXXXE XXXXE) will be put in R3 of Roll trim, Pitch trim Noun in R03 (Dap data load).
2. The % throttle commanded at TUP will be displayed with the mass display noun of R03.

3. The 95 sec test will be deleted.

PCR's will be generated by MSC for LUM & DANCE.

B. The question of whether or not the engine should be shut down for a P63 abort was dwelt on for some length but no conclusion was reached. GAEC states there may be an icing problem on short burns but really don't know.

Notes:

1. DPS engine constraint: must be started and held at 10% for approximately 5 secs (fuel settling, mixture, etc.)
2. R60 maneuver and display (Roll, Pitch, Yaw) does not include gimbal trim values for P40- George Cherry says a PCR will get it.

Lights - attendees: S. Copps; N. Sears, G. Cherry, R. Larson, M. Kayton - MSC, Clark Hackler - MSC, Pete Conrad.

The following possibilities were discussed:

ZERO/RADAR	ENGINE FAIL
DATA GOOD (VHF & RADAR)	DAP ON
FRESH START	STATE VECTOR IS OLD
AVE G	K̄K̄K̄
R60 Prio Display	STICK RATE
R22 Prio Display	DEAD BAND
ANTENNA POS	RATE CMD/MIN IMP

Conclusion: The new lights will be.

RANGE/ALT
/VEL
BLANK
BLANK

Tracker alarm will be used for Rendezvous Radar only on LM.