MEMORANDUM TO: Records

FROM : PP/Assistant Chief, Program Control Division

SUBJECT : Apollo 13 Accident Related Cost

Subsequent to June 1970, at which time the modifications to Apollo CSM's were defined in CCA 3781, substantial revisions have been made to the Statement of Work for this activity, These revisions and associated impact on spacecraft schedules have increased the estimated cost considerably.

I am in receipt of preliminary data from NR which reflects their cost estimate for the Apollo 13 activity. MSC has not received the NR proposal with supporting rationale; therefore, a position on the validity of this cost estimate is not feasible at this time. The NR preliminary cost data is attached to this memorandum.

On receipt of the firm proposal, an evaluation will be made to support subsequent negotiations.

R. C. Hood

Enclosure

cc: PP/J. McClintock PP/D. Haulbrook PP7/R. Leezer PP/Apollo 13 Files

PP:mly 8-27-70

## APOLLO 13 REDESIGN CSM - NR COST

| BEECH CHANGES  |        |       |              |
|--|--------|-------|--------------|
| REMOVE FANS  | 1,063  |       |              |
| SHEATHED WIRE LEADS  | 941    |       |              |
| (3) HEATER ELEMENTS  | 1,093  |       |              |
| HEATER TEMP. SENSOR  | 1,067  |       |              |
| s/s qty gage   | 1,081  |       |              |
| REMOVE THERMO SWITCH                                       | 287    |       |              |
|  | 6,342  |       |              |
| NR MPC/G&A   | 2,132  |       |              |
| TOTAL FOR BEECH ACTIVITY                                   |        |       | 8,474        |
| NR CHANGES   |        |       |              |
| THIRD O TANK AND SHELF                                     |        | 1,388 |              |
| CONTINGENCY PUMP   |        | 832   |              |
| SHELF STATIC TEST  |        | 13    |              |
| O <sub>2</sub> TANK SYSTEM FILTER                          |        | 134   |              |
| ADD PRESSURE TRANSDUCER                                    |        | 143   |              |
| TIME LIMITING HEATER POWE                                  | R(GSE) | 1     |              |
| REMOTE CURRENT MONITORING                                  | BY ACE | 9     |              |
| ELECT, & D&C CHANGES                                       |        | 1,174 |              |
| FUEL CELL REACTANT VALVE                                   |        | 1,241 |              |
| F/C VAL  |        | 239   |              |
| MISC. CHANGES  |        | 95    |              |
| NR- G&A  |        | 950   | 6,217        |
| APOLLO 13 INVESTIGATION<br>NR-DISASSEMBLY, RETEST, STORAGE | £      |       | 931<br>4,000 |