

## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION MANNED SPACECRAFT CENTER

HOUSTON, TEXAS 77058

IN REPLY REFER TO: 70-PA-S-10

JUN 24 1970

MEMORANDUM TO: Distribution

FROM : PA/Chief, Apollo Data Priority Coordination

SUBJECT : Status of DPS castellation phenomena for Apollo 14

The good guys, Allen Klumpp (MIT), Jim Alphin (MPAD), Jerry Suddath and Clarke Hackler (G&C) have continued to pursue the castellation problem we saw on Apollo 12 during P66. All the information now at hand indicates that compensating for IMU offset and optimizing control system gains will result in about one-eighth of the Apollo 12 problem. Changes to some hard-wired constants, such as throttle lag ( $T_{\rm TH}$ ), are therefore not mandatory for Apollo 14, but they should all be squared away for Apollo 15.

G&C thinks they will have some good preliminary gains to start testing on the various simulators by late July.

Philip C. Shaffer

PCS:ewp