NATIONAL AERONAUTICS AND SPACE ADMINIS MANNED SPACECRAFT CENTER

> 2101 WEBSTER-SEADROOK ROAD HOUSTON, TEXAS 77058

IN REPLY REFER TO: EG25-65-1725

RECEIVED CONTRACTOR OCT 1 5 1066

QUT 1 1 1385 :--

THROUGH: NASA Resident Apollo Spacecraft Program Office

Massachusetts Institute of Technology

Instrumentation Laboratory

RECEIVED COT 14 1985

· Cambridge, Massachusetts 02142

APOLLO DIRECTOR

: Massachusetts Institute of Technology Instrumentation Laboratory

Cambridge, Massachusetts 02142

Attention: M. B. Trageser, Director, Apollo G&N Program

FROM

TO

: Project Office, Guidance and Navigation

Apollo Spacecraft Program Office

SUBJECT: Contract NAS 9-4065, shielding of LEM Guidance Computer (LGC)

interface wiring

MIT/IL has recommended that certain LEM Guidance Computer (LGC) interface wiring, which is not presently shielded, be shielded to prevent EMI problems associated with electrostatic discharge. MSC does not feel that the weight penalty can be justified on this basis.

MIT/IL is requested to provide a report stating the shielding requirements for each of the forty-two signal wires involved. This report shall document (a) the shielding requirements for these wires to meet normal operating requirements and specifications, (b) the consequences of no shielding, and (c) alternate recommendations for electrostatic discharge protection. The technical analysis supporting each requirement for shielding shall also be provided.

This report is required at MSC by October 20, 1965 and copies shall be provided directly to Messrs. R. A. Gardiner (EG4), W. Rhine (EG44), C. Brady (EG25), R. Lewis (EG43), and A. Cohen (PS

October 14, 1965 Date_ Document Identification EG25-65-725 action - Hory Subject: Shielding of LEM Guidance Computer (LGC) Interface Wiring Date Received___ October 14th Action Responsibility Hoag Requested Completion Date Oct. 20th h Info. Copies Sent to Hall, Wilk,

Lawrence