NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER
HOUSTON, TEXAS 77058

REPLY TO
ATTN OF: DF

FEB 0 6 1975

MEMORANDUM

TO: Distribution

FROM: DA/Director of Life Sciences

SUBJECT: Mass-Measurement Requirements for Shuttle

Services have been developed to perform mass-measurement in the weightless condition. Two of these were used in Skylab. One had a range from zero to 1000 g and the other had a range from zero to 100 kg.

This Center is currently in the process of reviewing known mass-measurement requirements and existing mass-measurement devices to determine the needs for modification of existing equipment or development of new devices for Shuttle. As an obvious preliminary, the gamut of investigator and user requirements is needed. A questionnaire is enclosed for use in recording requirements. Any comment, information, or questions concerning the techniques and measurements from the science, engineering, and technology communities will be welcome.

Please send completed forms or inquiries to this Center marked for Dr. W. E. Thornton, code DF.

Richard S. Johnston

Enclosure

Distribution:
See attached

DF/WEThornton:ar:1/31/75:2421

QUESTIONNAIRE

Mass-Measurement Requirements for Space Shuttle

Mass range: _____ to _____ g, mg, g, kg

accuracy or precision required:

_____ g, mg, g, or _____% of load

Sensitivity or resolution required:

_____ g, mg, g, or _____% of load

Nature of sample (e.g., organism, item of equipment): _____

Size of sample: _____ cm

State of sample (e.g., solid, liquid, gel): _____

Special handling requirements: _____

_____

Additional comments: _____

_____

_____

NAME: _____

MAIL CODE: _____

CENTER: _____

Return to: W. E. Thornton, M.D.
Code DF
Johnson Space Center
Houston, Texas 77058

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