

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LYNDON B. JOHNSON SPACE CENTER

HOUSTON, TEXAS 77058

REPLY TO ATTN OF:

EW5-75M-6

JAN 2 0 1975

MEMORANDUM

TO:

DF/J. P. Kerwin

FROM:

EW5/P. F. Horsman

SUBJECT: Shuttle Exercise Device (SED)

EW has included 20 pounds in the operational baseline crew accommodations weight for the SED. This item is listed under GFE, Accessories, Off-Duty Kit (which also includes voice recorder, batteries, tapes and binoculars).

The enclosed sketch shows the stowage locker inside dimensions as best we know them at this time (OV102 drawings won't be started until 1/1/76). It appears that if the width of the SED were slightly reduced (say to 17 inches), the height reduced and/or a collapsing or folding feature incorporated, the unit could be 36 inches long when deployed and still be stowed in the standard lockers.

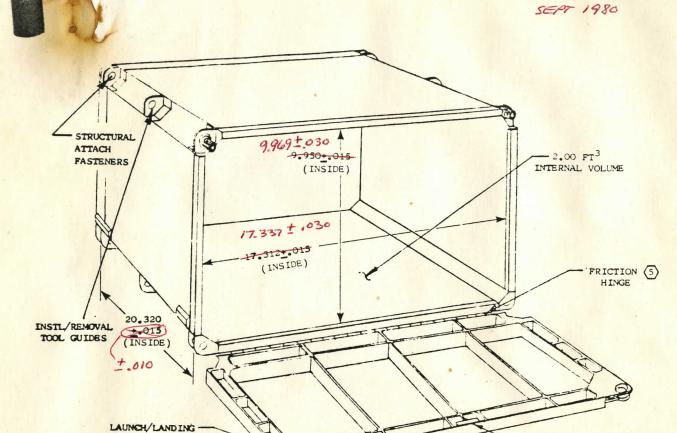
Various mid-deck use locations are being considered at this time; the writer will be coordinating with the developer/users on this and other points in the near future.

Enclosure

DA/R. S. Johnston

EW52/PFHorsman:eq:1/20/75:3431

- ON-ORBIT LATCH (5)



NOTES

LOCKS (2)

- 1. STOWAGE CONTAINER HAS A DESIGN DENSITY OF 30 LBS/FT3
- 2. LOCKER CONTENTS MUST BE PACKAGED TO PREVENT LOAD SHIFTING
- 3. INTERNAL LOCKER RESTRAINTS WILL NOT BE DESIGNED FOR CRASH CONDITIONS
- 4. DOOR IS FLUSH WITH BOTTOM OF LOCKER WHEN POPENED 90 DEGREES AND CAN OPEN 180 DEGREES (STRAIGHT DOWN)
- 5 DOOR HAS FRICTION HINGE FOR ZERO-G OPERATION
 AND A MAGNETIC LATCH FOR TEMPORARY CLOSURE OF DOOR

Figure 3.4.2.1-1 Modular Stowage