# Real Property Transaction Voucher

<table>
<thead>
<tr>
<th>1. NAME OF INSTALLATION</th>
<th>2. SITE LOCATION CODE</th>
<th>3. DATE</th>
<th>4. VOUCHER NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARC</td>
<td>23</td>
<td>11/30/98</td>
<td>98-3</td>
</tr>
</tbody>
</table>

5. TYPE OF TRANSACTION (Check only one.)

- [ ] NEW ACQUISITION
- [ ] DISPOSAL
- [ ] IMPROVEMENT
- [ ] TRANSFER IN
- [ ] TRANSFER OUT
- [x] OTHER (Specify)

6. DESCRIPTION OF PROPERTY

A. BUILDING/FACILITY NO. | B. NASA FACILITY CLASSIFICATION CODE
-------------------------|-------------------------
1244                     |                         

C. DESCRIPTIVE DATA

- FLT OPS/US ARMY/GWU/ASA/AST/AFS

7. CLASSIFICATION OF PROPERTY

- [ ] LAND
- [x] BUILDING
- [ ] OTHER STRUCTURE AND FACILITIES
- [ ] LEASEHOLD IMPROVEMENT

8. REFERENCE DOCUMENTS

Letter from Code BF dated 11/5/98 (Heritage Assets)

<table>
<thead>
<tr>
<th>9. DATE OF TRANSFER/ACCEPTANCE</th>
<th>10. CONTRACT/PROJECT NO.</th>
<th>11. DESCRIPTION OF ACTION OR WORK PERFORMED</th>
<th>12. CHANGE IN ASSET VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>National Historic Landmark—Rendezvous Docking Simulator</td>
<td>$329,000.00</td>
</tr>
</tbody>
</table>

13. REMARKS

Dec

INC 1521

14. CERTIFICATION

Entries of Adjustment were made in the Real Property Inventory Records. A copy of this voucher was submitted to the Financial Management Office for use as appropriate in posting to the Asset Accounts.

15. TYPED NAME OF REAL PROPERTY ACCOUNTABLE OFFICER

ANGELA D BROWN

16. SIGNATURE

ANGELA D BROWN

17. DATE

11/30/98

NASA FORM 1045 AUG 80 PREVIOUS EDITION MAY BE USED.
1. REPORTING INSTALLATION: Langley Research Center
   Hampton, Virginia

2. FACILITY NAME: Rendezvous Docking Simulator

3. LOCATION (if other than in 1. above): Same as 1.

4. FUNCTIONAL NAME: Rendezvous Docking Simulator

5. TECHNOLOGICAL AREAS SUPPORTED: Rendezvous docking studies, Apollo project docking studies, separation techniques; aircraft visual landing approaches.

6. NARRATIVE DESCRIPTION OF FACILITY CAPABILITIES & FUNCTIONS:
The Rendezvous Docking Simulator is made up of a three-axis gimbal frame suspended by eight cables from an overhead carriage/dolly system travelling on tracks in the top of the Langley flight hangar. This system is linked electronically to an analog computer and an amplitidyne control center in a closed-loop manner such that the pilot inside the gimbal experiences all six degrees of freedom. The eight cables, which provide an essentially weightless link between the 5000 pound attitude gimbal and the overhead-carriage dolly unit, are angled so as to prevent sway and are hydraulically counterbalanced to provide smooth vertical travel with minimum control power.

The dynamic facility is used both for space and aeronautical vehicle studies. Gemini and Apollo docking studies are made in support of space flights, and
6. NARRATIVE DESCRIPTION

Aircraft landing problems are studied through the use of scaled runways and closed-circuit TV.

Gimbal-Hydraulic drive

<table>
<thead>
<tr>
<th></th>
<th>Rate (Radians/sec)</th>
<th>Accel (Radians/sec.²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitch</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yaw</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Roll</td>
<td>2</td>
<td>2</td>
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Translation - Electric drive

<table>
<thead>
<tr>
<th></th>
<th>Length of travel (ft.)</th>
<th>Velocity (max) (ft/sec.)</th>
<th>Accel (max) (ft/sec.²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitudinal (bridge)</td>
<td>210</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Lateral (dolly)</td>
<td>16</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Vertical (cable)</td>
<td>45</td>
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Control-Pilot, closed loop analog.

Application - Aeronautics and Space

Category - Guidance and Controls Simulators

7. POTENTIAL:

8. PLANS:

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<tr>
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<tr>
<td>1244</td>
<td>1963**</td>
<td>310-40</td>
<td>$320** K</td>
<td>1963</td>
<td>Active</td>
<td>$320** K</td>
<td>Indef.</td>
<td>NASA</td>
<td>NASA</td>
<td></td>
</tr>
</tbody>
</table>

** This apparatus only.


21. COGNIZANT ORGANIZATIONAL COMPONENT: Space Mechanics Division

22. LOCAL OFFICE TO CONTACT FOR FURTHER INFO:
Chief, Research Models and Facilities Division (Code 56.000)
Phone: (Area Code 703) 722-7961, extension 4745
6. NARRATIVE DESCRIPTION

Aircraft landing problems are studied through the use of scaled runways and closed-circuit TV.

Gimbal-Hydraulic drive

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Control-Pilot, closed loop analog.

Application - Aeronautics and Space

Category - Guidance and Controls Simulators

7. POTENTIAL:

8. PLANS:

9. BLDG. NO.  1244
10. YR. BUILT: 1963**
11. FAC. CAT. CODE: 310-40
12. INITIAL COST: $320**
13. NASA B.O.D. 1963
14. STATUS CODE: Active
15. ACCUM. COST: $320**
16. LIFE EXPECT. Indef.
17. OWNER CODE: NASA
18. OPER. CODE: NASA
19. CONTRACTOR NAME (if contr. oper.):

** This apparatus only.


21. COGNIZANT ORGANIZATIONAL COMPONENT: Space Mechanics Division

22. LOCAL OFFICE TO CONTACT FOR FURTHER INFO:
Chief, Research Models and Facilities Division (Code 56.000)
Phone: (Area Code 703) 722-7961, extension 4745
TO: 136/Chief, Financial Management Division

FROM: 446/Head, Facilities Program Development Office

SUBJECT: Heritage Assets – National Historic Landmarks

Enclosed are four real property transaction vouchers showing the decrease in heritage assets for Building 643 – Full Scale Wind Tunnel ($14,896,337); Building 1226 – Variable Density Tunnel ($61,686); Building 1244 – Rendezvous Docking Simulator ($320,000); and Building 1297 – Lunar Landing Research Facility ($5,346,295).

Also enclosed is a Technical Facilities Résumé dated July 1, 1966, for the Rendezvous Docking Simulator. This apparatus is a part of Building 1244 that was built in 1963 with an initial cost of $320,000, which is considered a National Historic Landmark.

If you need additional information, please let me know.

Alan L. Farrow
46856

5 Enclosures

cc (w/o Encls.):
446/FPDO
147/R. Wallace
446/A. D. Brown

446/ADBrown:clg 11/30/98 (46856)
We have completed our review of your recommendations regarding the Langley Research Center's (LARC) property, plant and equipment which should be considered heritage assets under the provisions of Statement of Federal Financial Accounting Standards (SFFAS) Number 6, "Accounting for Property, Plant, and Equipment," and Number 8, "Supplementary Stewardship Reporting."

We agree that 47 items identified on the lists you submitted, totaling $45,685,224, are heritage assets. As you know, we subsequently agreed that Building 641, the Eight Foot High Speed Tunnel, will not be considered a heritage asset, since it is in use as an office building, i.e., a multi-use asset predominantly used for general government operations. In accordance with the provisions of SFFAS Number 6, paragraph 63, the value of the 47 heritage assets must be removed from NASA's asset accounts. The contra entry to the reduction in capitalized assets should be 3850 (Prior Period Adjustments) and the analysis of 3850 should separately identify the amounts related to heritage assets.

We will count these 47 items as heritage assets in the Required Supplementary Stewardship Information which will be part of our statements for Fiscal Year 1998.

Enclosure