Equipment Management Manual
PREFA

The NASA Equipment Management Manual (NHB 4200.1) is issued pursuant to Section 203(c)(1) of the National Aeronautics and Space Act of 1958, as amended (42 USC 2473), and sets forth policy, uniform performance standards, and procedural guidance to NASA personnel for the acquisition, management, and use of NASA-owned equipment.

This revision is effective upon receipt. This is a controlled Manual, issued in loose-leaf form, and revised through page changes. Additional copies for internal use may be obtained through normal distribution.

Comments or suggestions concerning this Manual should be addressed to the Chief, Supply and Equipment Management Office, Code JIE, NASA Headquarters, Washington, DC 20546.

NHB 4200.1C, dated June 25, 1987, and Change 1, dated February 19, 1988, are canceled.
This checklist is provided for recording the receipt of NHB 4200.1D changes.

<table>
<thead>
<tr>
<th>CHANGE NUMBER</th>
<th>DATE OF CHANGE</th>
<th>INITIALS</th>
<th>DATE OF POSTING</th>
<th>BRIEF DESCRIPTION OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
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<td>13</td>
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<tr>
<td>14</td>
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<td>15</td>
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<tr>
<td>16</td>
<td></td>
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<tr>
<td>17</td>
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<tr>
<td>18</td>
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<tr>
<td>19</td>
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</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1-1</td>
</tr>
<tr>
<td>II</td>
<td>2-1</td>
</tr>
<tr>
<td>III</td>
<td>3-1</td>
</tr>
<tr>
<td>IV</td>
<td>4-1</td>
</tr>
<tr>
<td>V</td>
<td>5-1</td>
</tr>
<tr>
<td>VI</td>
<td>6-1</td>
</tr>
</tbody>
</table>

## APPENDICES

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A-i</td>
</tr>
<tr>
<td>B</td>
<td>B-i</td>
</tr>
<tr>
<td>C</td>
<td>C-i</td>
</tr>
<tr>
<td>D</td>
<td>D-i</td>
</tr>
<tr>
<td>E</td>
<td>E-i</td>
</tr>
<tr>
<td>F</td>
<td>F-i</td>
</tr>
<tr>
<td>G</td>
<td>G-i</td>
</tr>
<tr>
<td>H</td>
<td>H-i</td>
</tr>
<tr>
<td>I</td>
<td>I-i</td>
</tr>
<tr>
<td>SECTION</td>
<td>APPENDICES (Cont'd)</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------</td>
</tr>
<tr>
<td>J</td>
<td>Agency Minimum Standard Sensitive Items List</td>
</tr>
<tr>
<td>K</td>
<td>NASA Equipment Control Number Tag Samples</td>
</tr>
<tr>
<td>L</td>
<td>Commonly Used Items Covered by GSA Regional Service Contracts</td>
</tr>
<tr>
<td>M</td>
<td>Equipment Management Review Criteria</td>
</tr>
</tbody>
</table>
SUBJECT INDEX

Subject | Paragraph Reference
---|---
Accountable records, control of documents | 3.209
Accounts, equipment type (see Federal Supply Groups) | Appendix D
Acquisition of equipment | 1.204
policy for, | 2.101
justification for, | 2.106
procedures for approval of capital equipment | 2.110
in mission support under Space Tracking and Data Systems Program | 4.313b
ADPE, special controls and reporting requirements | 2.109c
excess ADPE screening requirements | 4.313b
Aircraft, special controls and reporting requirements | 2.109b
Buildings, relocatable | 3.111
Calibration of equipment | 1.208
Cannibalization of equipment | 2.211
requirement to cannibalize ADPE | 2.211a
request for (NASA Form 1617) | Appendix G
Contractors and Contracting Officers, responsibilities | 1.309
Contractors proposal for equipment, approval of | 2.108
Contractor use of NEMS | 4.400
centrally reportable equipment | 4.401
policy | 4.402
equipment records | 4.403
contractor reporting | 4.404
data acquisition | 4.405
data review and verification | 4.406
review of contractor equipment acquisitions | 4.407
DD Form 1419 certificate of nonavailability | 4.408
Controlled equipment | 3.101
Cost estimates, development of | 2.102
Definitions of terms | Appendix C
Delegees, responsibilities | 1.320
Deviations, request for | 1.108
Direct Deliveries to Nonfunding Installations | 3.105
Disciplinary Action, Government Employee | 3.304
Disposal of equipment, policy on | 1.210
Division Director/Chief, responsibilities | 1.306
Employee, removal and use of equipment by | 3.500
policy | 3.501
approval | 3.502
procedures | 3.503
removal of | 3.504
shipment by Installation | 3.505
# SUBJECT INDEX (Cont'd)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Paragraph Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>employee, responsibilities</td>
<td>1.308</td>
</tr>
<tr>
<td>employee - owned equipment, on site</td>
<td>3.113</td>
</tr>
<tr>
<td>Equipment Acquisition Documents (EAD's), policy</td>
<td>2.105</td>
</tr>
<tr>
<td>request for (NASA Form 1511)</td>
<td>Appendix F</td>
</tr>
<tr>
<td>report to Congress of major R&amp;D equipment acquisitions</td>
<td>2.105i</td>
</tr>
<tr>
<td>Equipment Control Number</td>
<td>3.202</td>
</tr>
<tr>
<td>tag sample</td>
<td>Appendix K</td>
</tr>
<tr>
<td>register for</td>
<td>3.203</td>
</tr>
<tr>
<td>Fabrication of equipment</td>
<td>2.111</td>
</tr>
<tr>
<td>fabricated and experimental equipment</td>
<td>3.103</td>
</tr>
<tr>
<td>Financial Management Officer, responsibilities</td>
<td>1.316</td>
</tr>
<tr>
<td>Fixed Assets Report, Analysis of (NASA Form 1490)</td>
<td>3.208</td>
</tr>
<tr>
<td>Found on Station equipment (FOS)</td>
<td>3.108</td>
</tr>
<tr>
<td>investigation of (NASA Form 1618)</td>
<td>Appendix H</td>
</tr>
<tr>
<td>Furniture, acquisition of</td>
<td>2.112</td>
</tr>
<tr>
<td>noncontrolled furniture and furnishings</td>
<td>3.110</td>
</tr>
<tr>
<td>GSA regional service contracts, commonly used terms</td>
<td>Appendix L</td>
</tr>
<tr>
<td>Inactive equipment, retention of</td>
<td>2.212</td>
</tr>
<tr>
<td>control of</td>
<td>2.213</td>
</tr>
<tr>
<td>Industrial Property Officer/Property Administrator</td>
<td>1.310</td>
</tr>
<tr>
<td>responsibilities</td>
<td></td>
</tr>
<tr>
<td>Information Resources Management Office</td>
<td>1.302</td>
</tr>
<tr>
<td>Assistant Associate Administrator, responsibilities</td>
<td>1.304</td>
</tr>
<tr>
<td>Installation Directors, responsibilities</td>
<td>1.304</td>
</tr>
<tr>
<td>Inventories</td>
<td>5.000</td>
</tr>
<tr>
<td>general</td>
<td>1.209</td>
</tr>
<tr>
<td>policy</td>
<td></td>
</tr>
<tr>
<td>purpose and objectives</td>
<td>5.101</td>
</tr>
<tr>
<td>types and frequency of</td>
<td>5.102</td>
</tr>
<tr>
<td>personnel</td>
<td>5.104</td>
</tr>
<tr>
<td>cyclic inventory</td>
<td>5.103</td>
</tr>
<tr>
<td>pre-inventory actions</td>
<td>5.201</td>
</tr>
<tr>
<td>actions during</td>
<td>5.202</td>
</tr>
<tr>
<td>reconciliation and adjustment</td>
<td>5.203</td>
</tr>
<tr>
<td>sensitive item inventory</td>
<td>5.204</td>
</tr>
<tr>
<td>new property custodian inventory</td>
<td>5.205</td>
</tr>
<tr>
<td>special inventory procedures</td>
<td>5.206</td>
</tr>
<tr>
<td>reports</td>
<td></td>
</tr>
<tr>
<td>to division directors/chiefs and property custodians</td>
<td>5.301</td>
</tr>
<tr>
<td>to management</td>
<td>5.302</td>
</tr>
<tr>
<td>files to be maintained</td>
<td>5.303</td>
</tr>
</tbody>
</table>
SUBJECT INDEX (Cont’d)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Paragraph Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans of equipment</td>
<td></td>
</tr>
<tr>
<td>policy, outgoing</td>
<td>3.400</td>
</tr>
<tr>
<td>policy, incoming</td>
<td>2.208</td>
</tr>
<tr>
<td>authority</td>
<td>1.213</td>
</tr>
<tr>
<td>applicability</td>
<td>3.401</td>
</tr>
<tr>
<td>general</td>
<td>3.402</td>
</tr>
<tr>
<td>procedures</td>
<td>3.403</td>
</tr>
<tr>
<td>to profit making organizations</td>
<td>3.404</td>
</tr>
<tr>
<td>inventory control of outgoing loans and leases</td>
<td>3.405</td>
</tr>
<tr>
<td>control of incoming loans and leases</td>
<td>3.406</td>
</tr>
<tr>
<td>identifying equipment on lease</td>
<td>3.407</td>
</tr>
<tr>
<td>leased equipment converted to purchase</td>
<td>3.408</td>
</tr>
<tr>
<td>control of borrows between custodians</td>
<td>3.409</td>
</tr>
<tr>
<td>and NASA Installations transfer procedure</td>
<td>3.410</td>
</tr>
<tr>
<td>Location equipment, other than funding Installation</td>
<td>4.311</td>
</tr>
<tr>
<td>Maintenance, repair, rehabilitation, and reclamation</td>
<td>3.104</td>
</tr>
<tr>
<td>maintenance policy</td>
<td></td>
</tr>
<tr>
<td>off-site repair, calibration, and under warranty</td>
<td></td>
</tr>
<tr>
<td>Manual, Equipment Management (NHB 4200.1)</td>
<td></td>
</tr>
<tr>
<td>purpose of</td>
<td>2.209</td>
</tr>
<tr>
<td>applicability</td>
<td>1.207</td>
</tr>
<tr>
<td>arrangement</td>
<td></td>
</tr>
<tr>
<td>content</td>
<td>3.214</td>
</tr>
<tr>
<td>changes</td>
<td></td>
</tr>
<tr>
<td>amendment</td>
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<tr>
<td>deviations</td>
<td></td>
</tr>
<tr>
<td>implementation</td>
<td></td>
</tr>
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<td>Manufacturer code</td>
<td></td>
</tr>
<tr>
<td>Management data and statistical records</td>
<td></td>
</tr>
<tr>
<td>Micrographic systems, special control and reporting requirements</td>
<td></td>
</tr>
<tr>
<td>Motor Vehicles, special control and reporting requirements</td>
<td></td>
</tr>
<tr>
<td>optional accident investigation report (NASA Form 91A)</td>
<td></td>
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<td>NASA Equipment Management System (NEMS)</td>
<td></td>
</tr>
<tr>
<td>requirement</td>
<td></td>
</tr>
<tr>
<td>description</td>
<td></td>
</tr>
<tr>
<td>operational description</td>
<td></td>
</tr>
<tr>
<td>roles and relationships</td>
<td></td>
</tr>
<tr>
<td>NEMS Cataloger, responsibilities</td>
<td></td>
</tr>
<tr>
<td>NEMS Central Data Base (CDB), prescreening of</td>
<td></td>
</tr>
<tr>
<td>NEMS Configuration Control Board (CCB)</td>
<td></td>
</tr>
<tr>
<td>NEMS CCB Charter</td>
<td></td>
</tr>
<tr>
<td>NEMS Control</td>
<td></td>
</tr>
</tbody>
</table>

ix
<table>
<thead>
<tr>
<th>Subject</th>
<th>Paragraph Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEMS data standardization</td>
<td>Appendix B</td>
</tr>
<tr>
<td>NEMS Equipment Manager responsibilities</td>
<td>1.311</td>
</tr>
<tr>
<td>role</td>
<td>4.104c(1)</td>
</tr>
<tr>
<td>NEMS, Operation of</td>
<td>4.500</td>
</tr>
<tr>
<td>mandatory data elements</td>
<td>4.501</td>
</tr>
<tr>
<td>operating schedule</td>
<td>4.502</td>
</tr>
<tr>
<td>output products</td>
<td>4.503</td>
</tr>
<tr>
<td>microfilm/microfiche requirements</td>
<td>4.504</td>
</tr>
<tr>
<td>Installation transaction information</td>
<td>4.506</td>
</tr>
<tr>
<td>NASA Form 1602, Transaction Document</td>
<td>4.507</td>
</tr>
<tr>
<td>Central Data Base (CDB) transaction information</td>
<td>4.508</td>
</tr>
<tr>
<td>Transfer File</td>
<td>4.508b(6)</td>
</tr>
<tr>
<td>NEMS Reutilization Coordinator responsibilities</td>
<td>1.314</td>
</tr>
<tr>
<td>role</td>
<td>4.104c(2)</td>
</tr>
<tr>
<td>Noncapital, Nonsensitive Controlled Equipment</td>
<td>3.101b</td>
</tr>
<tr>
<td>Noncontrolled equipment</td>
<td>3.102</td>
</tr>
<tr>
<td>property of U.S. government decal (NASA Form 1517)</td>
<td>3.102</td>
</tr>
<tr>
<td>Nonavailability, Certificate of (DD Form 1419)</td>
<td>4.408</td>
</tr>
<tr>
<td>Policy statements for</td>
<td></td>
</tr>
<tr>
<td>general equipment managements</td>
<td>1.200</td>
</tr>
<tr>
<td>planning equipment requirements</td>
<td>1.201</td>
</tr>
<tr>
<td>budget for equipment</td>
<td>1.202</td>
</tr>
<tr>
<td>acquisition of equipment</td>
<td>1.203</td>
</tr>
<tr>
<td>record keeping of equipment</td>
<td>1.204</td>
</tr>
<tr>
<td>utilization of equipment</td>
<td>1.205</td>
</tr>
<tr>
<td>calibration</td>
<td>1.207</td>
</tr>
<tr>
<td>inventory of equipment</td>
<td>1.208</td>
</tr>
<tr>
<td>disposal of equipment</td>
<td>1.209</td>
</tr>
<tr>
<td>equipment loans by NASA</td>
<td>1.210</td>
</tr>
<tr>
<td>equipment acquired with reimbursable funds</td>
<td>1.211</td>
</tr>
<tr>
<td>from other Federal agencies</td>
<td></td>
</tr>
<tr>
<td>equipment on lease or loan to NASA</td>
<td>1.212</td>
</tr>
<tr>
<td>equipment transfer</td>
<td>1.213</td>
</tr>
<tr>
<td>Pools, for laboratory and research equipment</td>
<td>1.214</td>
</tr>
<tr>
<td>Program and Institutional Associate Administrators, responsibilities</td>
<td>2.206</td>
</tr>
<tr>
<td>Property condition codes</td>
<td></td>
</tr>
<tr>
<td>Property Custodians</td>
<td>1.307</td>
</tr>
<tr>
<td>responsibilities</td>
<td></td>
</tr>
<tr>
<td>assignments and function of control of sensitive items</td>
<td>2.203</td>
</tr>
<tr>
<td>records</td>
<td>2.207</td>
</tr>
<tr>
<td>Property Management Areas</td>
<td>3.210</td>
</tr>
<tr>
<td>Property Survey Board</td>
<td>2.202</td>
</tr>
<tr>
<td></td>
<td>1.319</td>
</tr>
</tbody>
</table>
# Subject Index (Cont'd)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Paragraph Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property Survey Officer</strong></td>
<td></td>
</tr>
<tr>
<td>Receiving and inspection of equipment</td>
<td>3.211</td>
</tr>
<tr>
<td>Reconciliation, adjustment, and reporting of property records</td>
<td>3.208</td>
</tr>
<tr>
<td>Reconciliation, adjustment, and reporting of property records and</td>
<td></td>
</tr>
<tr>
<td>financial account balances</td>
<td></td>
</tr>
<tr>
<td>Records of equipment, for each unit of controlled equipment</td>
<td>3.205</td>
</tr>
<tr>
<td>Policy on record keeping</td>
<td>1.205</td>
</tr>
<tr>
<td>Reimbursable authority from other Federal agency to acquire equipment</td>
<td></td>
</tr>
<tr>
<td>Reimbursable authority by NASA for equipment</td>
<td>3.106</td>
</tr>
<tr>
<td>Reimbursable authority by NASA for equipment acquired by another</td>
<td></td>
</tr>
<tr>
<td>Federal agency</td>
<td>3.107</td>
</tr>
<tr>
<td>Replacement of equipment</td>
<td>2.210</td>
</tr>
<tr>
<td>Responsibilities, equipment management</td>
<td>1.300</td>
</tr>
<tr>
<td>Review criteria, equipment management</td>
<td>Appendix M</td>
</tr>
<tr>
<td>Review program, equipment management</td>
<td>6.100</td>
</tr>
<tr>
<td>Types of reviews</td>
<td>6.101</td>
</tr>
<tr>
<td>Prior installation notification</td>
<td>6.102</td>
</tr>
<tr>
<td>Review team</td>
<td>6.103</td>
</tr>
<tr>
<td>Installation notification</td>
<td>6.104</td>
</tr>
<tr>
<td>Self-evaluation</td>
<td>6.105</td>
</tr>
<tr>
<td>Entrance and exit meetings</td>
<td>6.106</td>
</tr>
<tr>
<td>Report of findings</td>
<td>6.107</td>
</tr>
<tr>
<td>Purpose of findings</td>
<td>6.108</td>
</tr>
<tr>
<td>Use of review report</td>
<td>6.110</td>
</tr>
<tr>
<td>Review report, supply and equipment management</td>
<td>6.201</td>
</tr>
<tr>
<td>Followup (reassessment)</td>
<td>6.202</td>
</tr>
<tr>
<td><strong>Sample Decals</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Screening, NEMS</strong></td>
<td></td>
</tr>
<tr>
<td>New procurement requests</td>
<td>4.300</td>
</tr>
<tr>
<td>Informal procurement requests</td>
<td>4.301</td>
</tr>
<tr>
<td>Formal procurement requests</td>
<td>4.302</td>
</tr>
<tr>
<td>Supplemental</td>
<td>4.303</td>
</tr>
<tr>
<td>Approved contractor requirements</td>
<td>4.304</td>
</tr>
<tr>
<td>New starts or expanding programs</td>
<td>4.305</td>
</tr>
<tr>
<td>Before excess</td>
<td>4.306</td>
</tr>
<tr>
<td>Excess requirements for ADPE</td>
<td>4.312</td>
</tr>
<tr>
<td>For NASA excess</td>
<td>4.313</td>
</tr>
<tr>
<td><strong>Security Officer, responsibilities</strong></td>
<td>4.313b</td>
</tr>
<tr>
<td><strong>Sensitive items, control of</strong></td>
<td>1.317</td>
</tr>
<tr>
<td><strong>Shipment of equipment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Space property</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Space tracking data system program, equipment acquired for</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Specifications for equipment, preparation of</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Appendix K**

4.300
4.301
4.302
4.303
4.304
4.305
4.306
4.312
4.313b
4.313
1.317

**Appendix J**

2.207, 3.212

**Appendix M**

1.300

**Appendix**

3.109
2.110
2.103
# SUBJECT INDEX (Cont’d)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Paragraph Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status codes for Equipment description</td>
<td>4.201</td>
</tr>
<tr>
<td>status code A</td>
<td>4.202</td>
</tr>
<tr>
<td>status code B</td>
<td>4.203</td>
</tr>
<tr>
<td>status code C</td>
<td>4.204</td>
</tr>
<tr>
<td>status code D</td>
<td>4.205</td>
</tr>
<tr>
<td>Supply and Equipment Management Office</td>
<td></td>
</tr>
<tr>
<td>Chief, responsibilities</td>
<td>1.301</td>
</tr>
<tr>
<td>Supply and Equipment Management Officer responsibilities</td>
<td>1.305</td>
</tr>
<tr>
<td>Survey of equipment</td>
<td></td>
</tr>
<tr>
<td>procedure for submitting survey reports</td>
<td>3.300</td>
</tr>
<tr>
<td>time limit for submittal</td>
<td>3.305</td>
</tr>
<tr>
<td>register for survey reports</td>
<td>3.306</td>
</tr>
<tr>
<td>procedures for routing survey reports</td>
<td>3.307</td>
</tr>
<tr>
<td>investigations and findings by</td>
<td>3.308</td>
</tr>
<tr>
<td>Property Survey Officer or Property Survey Board</td>
<td>3.309</td>
</tr>
<tr>
<td>recommendations of Property Survey Officer or Property Survey Board</td>
<td>3.310</td>
</tr>
<tr>
<td>approvals by Property Survey Officer</td>
<td>3.311</td>
</tr>
<tr>
<td>distribution of survey reports</td>
<td>3.312</td>
</tr>
<tr>
<td>reporting to Installation Director</td>
<td>3.313</td>
</tr>
<tr>
<td>optional form for motor vehicle accidents</td>
<td>3.314</td>
</tr>
<tr>
<td>GSA motor pool vehicles in accidents</td>
<td>3.315</td>
</tr>
<tr>
<td>other property damage reporting and investigation requirements</td>
<td>3.316</td>
</tr>
<tr>
<td>return of previously surveyed items</td>
<td>3.317</td>
</tr>
<tr>
<td>sample survey report form and register</td>
<td>Appendix E</td>
</tr>
<tr>
<td>Tagging of equipment</td>
<td>3.204</td>
</tr>
<tr>
<td>systems, subsystems and components</td>
<td>3.101e,</td>
</tr>
<tr>
<td>removal of tags</td>
<td>3.204b</td>
</tr>
<tr>
<td>sample Equipment Control Number (ECN) tags (standard, mini, loan-leased, calibration)</td>
<td>Appendix K</td>
</tr>
<tr>
<td>Transaction audit trail</td>
<td>3.206</td>
</tr>
<tr>
<td>additional management data and statistics</td>
<td>3.207</td>
</tr>
<tr>
<td>Transfer of equipment, policy</td>
<td>1.214</td>
</tr>
<tr>
<td>Transfer, NEMS</td>
<td>4.307</td>
</tr>
<tr>
<td>of equipment as available</td>
<td>4.307</td>
</tr>
<tr>
<td>errors, correction of holding of and acquiring Installation responsibilities</td>
<td>4.309</td>
</tr>
<tr>
<td>redistribution reports</td>
<td>4.308</td>
</tr>
<tr>
<td>loans of equipment</td>
<td>4.310</td>
</tr>
<tr>
<td>Unique equipment, identification of</td>
<td>4.311</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.104,</td>
</tr>
<tr>
<td></td>
<td>4.505</td>
</tr>
</tbody>
</table>
## Subject Index (Cont'd)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Paragraph Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilization of equipment policy utilization review</td>
<td>2.204, 1.206</td>
</tr>
<tr>
<td>Vendor-owned equipment, on site</td>
<td>Appendix I</td>
</tr>
<tr>
<td>Walk-through inspections</td>
<td>3.112</td>
</tr>
<tr>
<td>Word processing equipment, special controls and reporting requirements</td>
<td>1.206, 2.205</td>
</tr>
<tr>
<td></td>
<td>2.109d</td>
</tr>
</tbody>
</table>
INTENTIONALLY LEFT BLANK
### SECTION I
GENERAL PROVISIONS

**CONTENTS**

<table>
<thead>
<tr>
<th>Par.</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td>Scope of Section</td>
</tr>
</tbody>
</table>

**PART 1 - INTRODUCTION**

| 1.100 | Scope of Part | 1-1 |
| 1.101 | Purpose of Manual | 1-1 |
| 1.102 | Applicability and Scope of Manual | 1-1 |
| 1.103 | Arrangement of Manual | 1-2 |
| 1.104 | Content of Manual | 1-2 |
| 1.105 | Amendment of Manual | 1-2 |
| 1.106 | Effective Date of Changes to the Manual | 1-3 |
| 1.107 | Field Installation Instructions and Implementation of the NASA Equipment Management Manual | 1-3 |
| 1.108 | Deviations From This Manual and Other Equipment Management Publications | 1-3 |

**PART 2 - GENERAL EQUIPMENT MANAGEMENT POLICIES**

| 1.200 | Scope of Part | 1-5 |
| 1.201 | General Policy | 1-5 |
| 1.202 | Planning | 1-6 |
| 1.203 | Budgeting | 1-6 |
| 1.204 | Acquisition | 1-7 |
| 1.205 | Record Keeping | 1-7 |
| 1.206 | Utilization | 1-7 |
| 1.207 | Maintenance | 1-8 |
| 1.208 | Calibration | 1-8 |
| 1.209 | Inventory | 1-9 |
| 1.210 | Disposal | 1-9 |
| 1.211 | Equipment Loan Policy | 1-9 |
| 1.212 | Equipment Acquired With Reimbursable Funds From Other Federal Agencies | 1-11 |
| 1.213 | Equipment on Lease or Loan to NASA | 1-11 |
| 1.214 | Equipment Transfer | 1-11 |

**PART 3 - EQUIPMENT MANAGEMENT RESPONSIBILITIES**

| 1.300 | Scope of Part | 1-13 |
| 1.301 | Chief, Supply and Equipment Management Office | 1-13 |
| 1.302 | Director, Information Resources Management Division | 1-13 |
| 1.303 | Program and Institutional Associate Administrators | 1-13 |
### PART 3 - EQUIPMENT MANAGEMENT RESPONSIBILITIES (Cont'd)

<table>
<thead>
<tr>
<th>Par.</th>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.304</td>
<td>Installation Directors</td>
<td>1-14</td>
</tr>
<tr>
<td>1.305</td>
<td>Supply and Equipment Management Officer</td>
<td>1-14</td>
</tr>
<tr>
<td>1.306</td>
<td>Division Director/Chief</td>
<td>1-16</td>
</tr>
<tr>
<td>1.307</td>
<td>Property Custodians</td>
<td>1-16</td>
</tr>
<tr>
<td>1.308</td>
<td>Responsibility of the Individual</td>
<td>1-17</td>
</tr>
<tr>
<td>1.309</td>
<td>NASA Contractors and Contracting Officers</td>
<td>1-18</td>
</tr>
<tr>
<td>1.310</td>
<td>Industrial Property Officer/Property Administrator</td>
<td>1-19</td>
</tr>
<tr>
<td>1.311</td>
<td>NEMS Equipment Manager</td>
<td>1-19</td>
</tr>
<tr>
<td>1.312</td>
<td>NEMS Cataloger</td>
<td>1-22</td>
</tr>
<tr>
<td>1.313</td>
<td>NEMS Control</td>
<td>1-22</td>
</tr>
<tr>
<td>1.314</td>
<td>NEMS Reutilization Coordinator</td>
<td>1-22</td>
</tr>
<tr>
<td>1.315</td>
<td>NEMS Configuration Control Board</td>
<td>1-22</td>
</tr>
<tr>
<td>1.316</td>
<td>Financial Management Officer</td>
<td>1-23</td>
</tr>
<tr>
<td>1.317</td>
<td>Security Officer</td>
<td>1-23</td>
</tr>
<tr>
<td>1.318</td>
<td>Property Survey Officer</td>
<td>1-23</td>
</tr>
<tr>
<td>1.319</td>
<td>Property Survey Board</td>
<td>1-24</td>
</tr>
<tr>
<td>1.320</td>
<td>Designees</td>
<td>1-24</td>
</tr>
</tbody>
</table>
SECTION I
GENERAL PROVISIONS

1.000 Scope of Section

This section sets forth the purpose of this Manual, instructions for its use, equipment management policies, and the responsibilities of appropriate personnel.

PART 1 -- INTRODUCTION

1.100 Scope of Part

This part sets forth introductory information pertaining to the Manual (its purpose, applicability, arrangement, and content); and, instructions for amending, implementing, disseminating, and deviating from the Manual.

*1.101 Purpose of Manual

This Manual, issued under the authority of the National Aeronautics and Space Act of 1958, as amended, and other statutory authority, by the Supply and Equipment Management Office, Logistics, Aircraft and Security Division (Code JI), establishes uniform policies and procedures relating to the acquisition, use, maintenance, and management of all NASA-owned equipment for the National Aeronautics and Space Administration (NASA).

*1.102 Applicability and Scope of Manual

This Manual applies to NASA Headquarters, Field Installations, and NASA equipment wherever located. When the provisions of the Manual conflict with provisions of international agreements and property manuals covering property at tracking stations in foreign countries, or the Federal Acquisition Regulation (FAR) and NHB 5100.4, NASA/FAR Supplement (NFS), for contractor-held property, the provisions of these latter documents prevail. For the purpose of this Manual, the Deputy Associate Administrator for Management Systems and Facilities (Operations) is considered a Director of a NASA Field Installation.
Arrangement of Manual

a. General Plan. This Manual is divided into sections, each one dealing with a separate aspect of equipment management; each section is subdivided into parts and paragraphs.

b. Numbering. The numbering of individual paragraphs is designed to permit subsequent insertion of additional paragraphs and pages within the appropriate section and part. The first digit of a paragraph number set off by a period indicates the section. Following the period are three digits, the first of which indicates the part. The next two digits indicate paragraph sequence. Thus, paragraph 1.109 indicates Section I, Part 1, Paragraph 9. The scope of any section, when given, will be set forth in a separate introductory paragraph; the three digits following the period will be 000 (e.g., 1.000). The scope of any part, when given, will be set forth in a separate paragraph at the beginning of that part, with the part number followed by 00, e.g., 100, 200, 300, etc., depending on the number of the part (for example, paragraph 1.100 sets forth the scope of Part 1 Section I). In numbering pages, the first digit of the number of a particular page, set off by a dash, indicates the section to which the page relates. The pages are then numbered sequentially within each section. Appendix pages will bear the letter designation of the Appendix followed by sequential numbering.


Content of Manual

This Manual contains policies, procedures, and instructions related to the management of equipment. It is designed to achieve management consistency throughout NASA. This Manual is amended from time to time to include new or improved procedures and instructions.

Amendment of Manual

This Manual is amended by issuance of printed loose-leaf changes containing revised or additional
pages, sections, parts, or paragraphs. When practicable, an asterisk will be placed before the paragraph or subparagraph being revised.

1.106 Effective Date of Changes to the Manual

Changes to the NASA Equipment Management Manual must be implemented within 60 calendar days from date of issuance, unless otherwise prescribed in the change.

1.107 Field Installation Instructions and Implementation of the NASA Equipment Management Manual

a. Directors of NASA Field Installations will implement this Manual by prescribing detailed equipment management operating instructions, delegations of authority, and assignments of responsibility which they deem essential for the efficient performance of equipment management functions. Such instructions will be consistent with the policies and procedures contained in this Manual. To the extent practicable, Installation procedures will follow the format, arrangement, and numbering system of this Manual.

b. The Director of each NASA Installation will furnish the Supply and Equipment Management Office, NASA Headquarters (Attn: JIE) one copy of:

   (1) The basic publication prescribing the equipment management operating instructions for the Field Installation; and

   (2) Each change, revision, or amendment to such instructions at the time of issuance.

1.108 Deviations From This Manual and Other Equipment Management Publications

a. Applicability. A deviation will be considered to be:

   (1) Any policy, procedure, method, or practice inconsistent with that prescribed in this Manual; or

   (2) Alteration of a Standard or NASA Form.
b. **Approval of Deviations.** Deviations will be authorized only when special circumstances make such deviations clearly in the best interest of the Government. Such deviations will be approved only by the Chief, Supply and Equipment Management Office.

c. **Requests for Deviations.** Requests for authority to deviate from the provisions of the Manual and other equipment management publications will be submitted to the Chief, Supply and Equipment Management Office, NASA Headquarters (Code JIE). Such requests will be submitted by the Installation Director or authorized representative as far in advance as the situation will permit. Each request will contain as a minimum:

1. Identification of the requirement of the NASA Equipment Management Manual or other equipment management publication from which a deviation is sought;

2. A full description of the deviation sought and the circumstances in which it will be used;

3. A description of the result expected to be obtained by (intended effect of) the deviation;

4. A statement as to whether the deviation has been requested previously, and, if so, the circumstances of the previous request;

5. A detailed justification supporting the request, including all pertinent background information which will contribute to a fuller understanding of the deviation sought; and

6. A statement to indicate the length of time the deviation will be required.
PART 2 -- GENERAL EQUIPMENT MANAGEMENT POLICIES

1.200 Scope of Part

This part sets forth general equipment management policies with respect to the planning, budgeting, acquisition, documentation, utilization, maintenance, inventory, and disposal of NASA-owned equipment.

1.201 General Policy

a. Government equipment is not owned by the holder, and action will be taken, when it makes economic and programmatic sense, to move such equipment from one use and user to another, including movement among offices, functions, programs, contractors, and Installations.

b. NASA division directors/chiefs (see paragraph 1.306), through their Installation Directors and in accordance with this Manual, are the primary officials responsible for the equipment assigned to their organizations, including all aspects of its use and condition.

c. Equipment for which no use is contemplated should not be retained beyond the point of cost effectiveness (see paragraph 2.213).

d. Unless exempted in writing by the Chief, Supply and Equipment Management Office, all equipment acquired for the accounts of NASA or held by NASA under lease or loan will be managed in accordance with this Manual or the Federal Acquisition Regulation (FAR) Part 45.5 and Subpart 18-45.5 of the NASA/FAR Supplement.

* e. Contracting Officers will include clauses in solicitations and contracts, in accordance with NASA/FAR Supplement 18-45.106-70(b), requiring contractors to manage and control NASA-owned equipment as prescribed by this Manual.

f. Government property is to be used exclusively for the conduct of official business.

g. The Agencywide NASA Equipment Management System (NEMS) will be utilized by all NASA organizations to identify, account for, and control NASA equipment. The system requires accurate and complete item description, location, condition, and availability
so as to permit cost effective and programmatic Agencywide control, accountability, equipment screening, and reuse consideration wherever located.

h. All Agency instructions and guidance material related to equipment management will be periodically reexamined and strengthened to implement the policies and requirements of this Manual.

i. Procedures and practices at NASA Installations, including those affecting equipment in the hands of contractors, will be reexamined periodically and, within current regulations and policies, strengthened to improve control over equipment usage to assure that equipment items available for reuse are promptly identified.

1.202 Planning

Evaluation of equipment requirements will be initiated at an early stage in the planning of project and institutional support requirements. At the point in the planning when equipment requirements can be defined, coordination will be effected with the Installation NEMS Reutilization Coordinator for assistance in determining whether or not existing resources are available and may be used in lieu of new acquisitions.

1.203 Budgeting

a. The cost of equipment, identified to project and institutional support requirements, will be included in annual budget submissions in accordance with the guidelines of the Budget Administration Manual, NHB 7400.1.

b. Equipment (excluding automatic data processing (ADP) equipment) to be used at a NASA Installation, the Jet Propulsion Laboratory, or a component Installation (see NMI 1101.2, "NASA Organization and Definition of Terms") acquired with Research and Development (R&D) and Space Flight, Control, and Data Communications (SFC&DC) funds, which exceed $250,000 per item, or items collectively exceeding $1,000,000 for the same purpose, require an Equipment Acquisition Document (EAD). In response to annual budget calls and prior to the equipment acquisition action, EAD's for non-ADP equipment will be submitted to Headquarters for review and approval in accordance with paragraph 2.105. ADP equipment meeting the above criteria requires submittal to
Headquarters through the annual ADP Plan in accordance with NHB 2410.1, "Information Processing Resources Management."

1.204

Acquisition

a. Only that equipment necessary for the performance of NASA requirements will be acquired.

b. Alternative methods such as leasing, borrowing, or contracting should be evaluated by the Installation office involved prior to the initiation of new procurement.

c. Equipment nomenclature and description provided by the requiring office will be of sufficient detail to facilitate screening and subsequent identification and documentation consistent with the provisions of this Manual.

d. Prior to the acquisition of equipment, existing equipment resources will be screened. All items of equipment expected to cost $1000 or more will be screened pursuant to Section IV of this Manual. All other equipment requests will be screened as set forth in Section IV of this Manual, FAR 8.103, and NASA/FAR Supplement 18-8.103.

* e. Before any equipment is acquired which costs less than $1000 per unit, the requirement will be screened against available excess property in accordance with NHB 4390.1, "NASA Personal Property Disposal Manual."

1.205

Record Keeping

Records describing NASA equipment and actions affecting NASA equipment will be maintained as prescribed in this Manual, the Financial Management Manual (FMM), the FAR, and NASA/FAR Supplement, and other applicable regulations.

1.206

Utilization

a. Optimum use and reuse will be made of NASA-owned equipment through implementation of the NASA Equipment Management System (NEMS).

b. NASA Installations will ensure that Installation procedures are established to effectively examine and consider equipment reutilization and redistribution.
c. New equipment will not be designed, developed, or procured unless it is determined that the requirement cannot be satisfied with items already available.

d. Each Installation will accomplish walk-through inspections of equipment at least annually to assure that equipment reportable to NEMS is classified in the appropriate use status in accordance with Section IV of this Manual. This status of inactive equipment being held by the Installation will be recertified annually. See paragraphs 2.204 and 2.205.

e. Equipment no longer required for the performance of a specific NASA requirement will be reported for reutilization screening throughout NASA.

1.207 Maintenance

Each Installation will provide appropriate procedures to require that equipment is effectively maintained and repaired to ensure optimum use and safe operation. Costs related to equipment maintenance and repair will be considered in determining continued maintenance investment versus replacement.

1.208 Calibration

a. Each Installation shall establish and maintain a program for the calibration of Installation equipment pursuant to NMI 5330.9, "Metrology and Calibration." Equipment will generally be calibrated in accordance with the manufacturer's recommended calibration specifications unless user requirements dictate otherwise. Equipment in inactive storage will not be calibrated until removed from storage for active use.

b. An automated calibration recall and data system provides a locally developed and maintained data base whereby Installation instrument calibration and maintenance functions can maintain current and historical data on each item of equipment that is repaired and/or calibrated. This system will track costs (labor and parts), staff hours expended, equipment condition when received for service and work performed for each item in the data base as well as other metrology related data. Generally this equipment will consist of electronic instrumentation, calibration standards; and
transducers such as accelerometers, flowmeters, and pressure transducers. In addition, the system generates standard reports for use as recall notices, statistical analysis reports and trend data reports. All requirements of NMI 5330.9, "Metrology and Calibration," as well as related Installation management instructions, can be met by utilizing the functions provided for by each local system.

1.209 Inventory

NASA-held equipment will be inventoried in accordance with the provisions of Section V of this Manual to determine the effectiveness of property control records and procedures and to obtain information needed for accomplishing all aspects of equipment management. Contractor-held and recorded equipment will be inventoried pursuant to the requirements set forth in the Federal Acquisition Regulation (FAR) 45.508 and NASA/FAR Supplement 18-45.508.

1.210 Disposal

Each Installation will maintain an effective program for timely disposal of equipment no longer required by NASA. Disposal will be accomplished in accordance with the requirements set forth in NHB 4300.1, NASA Personal Property Disposal Manual, and also, in the case of contractor-held property, in accordance with the requirements of the Federal Acquisition Regulation (FAR) and the NASA/FAR Supplement Part 18-45.6.

1.211 Equipment Loan Policy

a. It is the policy of the National Aeronautics and Space Administration that NASA-held equipment, other than administrative equipment and materials and contractor or grantee-held equipment, may be made available to organizations, private individuals, corporations, or other entities provided the loan of such equipment is in the public interest and meets the following conditions:

(1) Equipment will be made available only on a temporary basis normally not to exceed 1 year. If use must be extended, the extension will not be for a longer time than necessary to reasonably accommodate the temporary purpose.
(2) The use will serve some purpose advantageous to the Government, either directly or indirectly, or a substantial benefit will inure to the Government.

* (3) In all but the most exceptional circumstances, the loanee acquires no enforceable rights, i.e., a nontransferable, nonexclusive, revocable license, subject to termination at any time at the will of the Government.

(4) Provided that the equipment is not modified or altered without advance approval.

(5) The proposed agreement is concurred in by the Installation's Supply and Equipment Management Officer and Chief Counsel.

b. Equipment will not be held or acquired by the Installation solely for the purpose of loans.

c. Each loan, except loans between NASA Installations or loans made as a part of a broader agreement, will be covered by a loan agreement which sets forth appropriate requirements for use and accountability. See paragraph 3.501b when off-site use will exceed 6 months. Loans between NASA Installations will be accomplished pursuant to the requirements of paragraph 3.410.

d. Government Furnished Equipment (GFE) to contractors or grantees will be provided under the terms of the appropriate instrument, as provided in the Federal Acquisition Regulation (FAR) and NASA/FAR Supplement, and the "NASA Grant and Cooperative Agreement Handbook," NHB 5800.1, and not the provisions of this policy or Part 3.400 of this Manual.

e. Equipment loaned solely for use as a display or for use in an exhibit will be provided under the provisions of NMI 1387.1, "NASA ExhibitS Program." Controlled equipment used for display or exhibit purposes will remain in the NEMS data base accountable to the cognizant property custodian.

f. Equipment loaned to profit-making organizations must be documented and approved for loan in accordance with additional requirements and reviews of paragraph 3.405.
*1.212 Equipment Acquired With Reimbursable Funds From Other Federal Agencies

Capital equipment acquired with funds reimbursable by another Federal agency will be controlled and accounted for by NASA following the procedures of paragraph 3.106.

1.213 Equipment on Lease or Loan to NASA

Equipment items on lease or loan to NASA will be identified and tracked by the Installation equipment management organization as specified in paragraphs 3.407 and 3.408.

*1.214 Equipment Transfer

Section 203(c)(6), National Aeronautics and Space Act of 1958, as amended (42 U.S.C. 2473(c)(6)), provides that "Each department and agency of the Federal Government shall cooperate fully with the Administration (NASA) in making its services, equipment, personnel, and facilities available to the Administration, and any such department or agency is authorized, notwithstanding any other provision of law, to transfer to or to receive from the Administration, without reimbursement, aeronautical and space vehicles, and supplies and equipment other than administrative supplies or equipment."
PART 3 -- EQUIPMENT MANAGEMENT RESPONSIBILITIES

1.300 Scope of Part

This part sets forth the responsibilities of appropriate personnel at NASA Headquarters and Field Installations required for NASA's equipment management program.

1.301 Chief, Supply and Equipment Management Office

The Chief, Supply and Equipment Management Office, NASA Headquarters, through the Manager, Equipment Programs, is responsible for providing functional management and leadership in the implementation of an effective equipment management program, including:

a. Providing direction and ensuring allocation of necessary resources for the operation and maintenance of the Agencywide NASA Equipment Management System (NEMS) and related procedures;

b. Reviewing and initiating action to issue, amend, or cancel NASA instructional and guidance material governing the equipment management activities of the Agency;

c. Assisting the management of NASA Installations in the development and operation of internal systems and ensuring their compatibility with Agency programs;

d. Devising necessary reports on the overall implementation of equipment management programs and reporting periodically on that implementation to senior NASA management; and

e. Conducting reviews and assessments of equipment management activities and reporting significant findings to NASA management.

1.302 Director, Information Resources Management Division

The Director, Information Resources Management Division, NASA Headquarters, is responsible for ensuring funding and support for maintenance and operation of NEMS and its Central Data Base (CDB).

1.303 Program and Institutional Associate Administrators

Program and Institutional Associate Administrators,
NASA Headquarters, are responsible for appropriate coordination, approval, and allocation of equipment within their programs so as to minimize cost and to make effective use of available resources.

1.304 Installation Directors

Directors of Field Installations are responsible for:

a. All equipment assets assigned to their Installations;

b. Approving and allocating equipment resources at their Installations in the most effective and efficient manner;

c. Providing the management direction and resources necessary to assure accomplishment of prescribed property control and accountability requirements;

d. Providing for the establishment and operation of the NEMS Data Center;

e. Establishing and maintaining a well-defined equipment management program;

f. Identifying inactive equipment;

* g. Appointing a single Supply and Equipment Management Officer to carry out the functions and responsibilities set forth in paragraph 1.305;

h. Appointing an Installation Property Survey Officer in accordance with paragraph 1.318; and

i. Establishing a Property Survey Board in accordance with paragraph 1.319.

1.305 Supply and Equipment Management Officer

a. The Supply and Equipment Management Officer is the principal official appointed by the Installation Director for functional administration of supply and equipment management at the Installation. In the area of equipment management, the Supply and Equipment Management Officer is primarily responsible for:

(1) Appointing a NASA Equipment Management System (NEMS) Equipment Manager, and approving and periodically evaluating the NEMS Equipment
Manager's implementation of policies and procedures by reviewing:

(a) The controls and record maintenance established for NEMS at the Installation;

(b) Items designated for control as sensitive equipment;

(c) Controls established and maintained for sensitive items as set forth in paragraph 2.207;

(d) Records of controlled equipment transactions of the Installation and its contractors with respect to NEMS Central Data Base (CDB) updates;

(e) Property management areas, and property custodian assignments and training; and

(f) Inventory documentation, followup actions, and results.

(2) Approving or assigning an appropriate designee to approve all NEMS global changes;

(3) Designating, in writing, the Installation inventory team;

(4) Ensuring that prescribed physical inventories of controlled equipment are taken and coordinated, including the physical inventory of the property management area when a new property custodian is assigned;

(5) Directing special inventories, as appropriate;

(6) Ensuring that the Property Survey Officer and Property Survey Board have been appointed and are fully informed of their duties;

(7) Establishing and maintaining interface with institutional and industrial organizations using and administering NASA personal property; and

(8) Establishing a transaction cutoff date with the Financial Management Officer and reviewing and approving with the Financial
Management Officer the semiannual reconciliation of the NEMS equipment records and the finance equipment type accounts (1551 thru 1563).

* b. Supply and Equipment Management Officers may appoint full-time property custodians, in-house or by contract, responsible for the management of property (generally 3,000-6,000 equipment items) by geographic location, rather than appointed by division directors/chiefs for their cognizant property management areas. The Supply and Equipment Management Officer will oversee the management of any such program, and division directors/chiefs and equipment users will continue to be responsible for the use, care, and protection of assigned equipment.

*1.306 Division Director/Chief

a. The division director/chief or other head of an Installation's secondary organizational element (i.e., the element one level below the level of the basic organizational element, see NMI 1120.1, "Requirements and Procedures for Organizational Changes"), is the principal equipment using official in the NASA Equipment Management Program responsible for the equipment assigned to the organization, including all aspects of its use and condition (see paragraph 2.201) and the accomplishment of walk-through inspections (see paragraph 2.205).

b. At Installations with full-time property custodians, civil service or contractor, division directors/chiefs retain responsibility for conducting annual walk-through inspections and utilization reviews.

*1.307 Property Custodians

Property custodians are designated for each property management area by the head of the organization concerned, usually the division director/chief, with the concurrence of the Supply and Equipment Management Officer or designee. Full-time property custodians may be appointed by the Supply and Equipment Management Officer to be responsible for the management of property (generally 3,000-6,000 equipment items) by geographic location, rather than appointed by division directors/chiefs for their cognizant property management areas. Property custodian responsibilities and procedures are
defined in NHB 4200.2, "NASA Equipment Management System (NEMS) User’s Guide for Property Custodians," and include:

a. Maintaining records (including NASA Form 1602’s, NEMS Transaction Documents) for all controlled equipment in their assigned property management area;

b. Continuing surveillance to ensure that equipment is used for official purposes only;

c. Reporting untagged controlled equipment (including fabricated equipment) found in their assigned property management area to the Supply and Equipment Management Officer, and assisting in the research to identify the circumstances relating to untagged items found on station;

d. Assigning sensitive items to primary users (see paragraph 2.207a(1));

e. Cooperating in the physical inventory of controlled equipment;

f. Identifying and reporting any controlled equipment no longer needed in their property management area; and

g. Accompanying division director/chief during annual walk-through inspections (see paragraph 2.205).

1.308

Responsibility of the Individual

* a. Each employee is responsible for Government property as set forth in Standards of Conduct for NASA Employees, NHB 1900.1, S1207.103(b), as follows: "An employee will not directly or indirectly use or allow the use of Government property of any kind, including property leased to the Government, for other than officially approved activities. An employee has an affirmative duty to protect and conserve Government property, including equipment, supplies, and other property entrusted to the employee." Also see paragraph 3.304 concerning Government employee disciplinary action.
b. Additional responsibilities of the individual include:

* (1) Notifying the cognizant property custodian, supervisor, and the Installation Security Officer immediately if theft of Government property is suspected.

(2) Ensuring that such equipment is used only in pursuit of approved NASA programs and projects.

(3) Identifying equipment not being actively used in pursuit of approved NASA programs and projects.

* (4) Ensuring that equipment is turned in to the Property Disposal Officer through the cognizant property custodian when no longer needed. Under no circumstances will an employee throw away Government equipment.

* (5) At Installations with full-time property custodians, assigned users retain all responsibilities including notifying cognizant property custodians of all activity associated with the user’s assigned equipment.

1.309 NASA Contractors and Contracting Officers

a. NASA contractors are responsible for equipment and other property as set forth in the Federal Acquisition Regulation (FAR), the NASA/FAR Supplement, and the applicable contract.

b. Contracting officers are responsible for ensuring that Government-owned equipment furnished to contractors or acquired by contractors to the Government’s account is managed pursuant to the provisions of the contract. In authorizing the providing of equipment, contracting officers will ensure that:

(1) Requirements are verified by the appropriate project office;

(2) Written determinations are executed by the appropriate Installation official pursuant to FAR 45.302-1(a)(4) and NASA/FAR Supplement 18-45.302-1;
* (3) Existing Government assets are screened pursuant to NASA/FAR Supplement 18-45.502-71, and 18-52.245-70.

(4) NEMS reportable data required from contractors are received in acceptable form and within the time period specified in NASA/FAR Supplement 1845.505-670; and

(5) NASA requirements for property management by contractors are made known to other agencies to which property administration has been delegated.

1.310 Industrial Property Officer/Property Administrator

The Industrial Property Officer is that individual designated at an Installation to manage and coordinate property matters among the various contracting officers, technical officials, contractor officials, and delegated property administrators and plant clearance officers. The responsibilities of the Industrial Property Officer under the Contract Property Management Program are outlined in NASA/FAR Supplement 18-45.7205. Generally, the Industrial Property Officer is responsible for the Contract Property Management function; the Installation is responsible for the entire function regardless of how it is organized and distributed. This function includes the performance of property administration and plant clearance when required but not delegated to Department of Defense (DOD).

1.311 NEMS Equipment Manager

The NEMS Equipment Manager, appointed by the Supply and Equipment Management Officer, is the key interface between the equipment organization and the property custodians and equipment users. The NEMS Equipment Manager is primarily responsible for:

a. Establishing appropriate controls and maintaining adequate records for all equipment at the Installation.

b. Ensuring NEMS regularly scheduled and on request reports are periodically reviewed, revised as needed, and produced as scheduled.
c. Controlling global changes to the NEMS database. A global change will change all records for the specific data element selected. It is restricted to the NEMS Equipment Manager's use and must be approved by the Supply and Equipment Management Officer, or designee.

d. Controlling record data changes. A record data change will change one or more data elements in a single record. It is restricted to the NEMS Equipment Manager's use.

e. Determining items which will be designated for control as sensitive equipment.

f. Ensuring the designation of property management areas and that property custodians are appointed and trained for each property management area.

g. Providing property custodians with individual transaction documents for each item of controlled equipment and a summary report of all controlled equipment items for which they have been charged.

h. Reviewing the records and performance of property custodians.

* i. Developing the cyclic and sensitive item inventory schedules.

j. Reconciling and adjusting equipment records as a result of inventory actions.

* k. Ensuring the Supply and Equipment Management Officer's review of equipment record adjustments resulting from inventory to determine any actions needed to reduce the necessity for future adjustments, including the need for greater attention to prescribed controls or better procedural guidance.

l. Documenting inventory results for submittal by the Supply and Equipment Management Officer to division directors/chiefs and property custodians.

m. Designating a NEMS Reutilization Coordinator, with the approval of the Supply and Equipment Management Officer.
n. Coordinating the records of controlled equipment transactions of the Installation and its contractors with the NEMS Reutilization Coordinator for update of the NEMS Central Data Base.

o. Conducting a semiannual reconciliation of NEMS equipment records with the equipment type accounts (1551 thru 1563) maintained by finance. Differences will be mutually resolved and ending balance of Installation-held capital equipment will be established for reporting purposes; the reconciliation will be jointly approved by the Supply and Equipment Management Officer and the Financial Management Officer.

p. Processing item and value adjustments for NEMS transactions so that the net results are reflected in NEMS Report 410, which is submitted monthly to the Supply and Equipment Management Officer for preparation of the Semiannual Report of Supply and Equipment Management Operations (NASA’Form 1324) (RCS 10-0000-00229). NASA Form 1324 is submitted as of March 31 and September 30. (Also note requirements of paragraph 3.208.)

q. Equipment management personnel, as designated by the NEMS Equipment Manager and approved by the Supply and Equipment Management Officer, are further responsible for:

(1) Identifying, categorizing, classifying, and coding all existing and newly acquired Installation and contractor-held equipment. Before an equipment record is created, a NEMS Cataloger will review and record the valid manufacturer, manufacturer’s model number, and standard item name by major noun with appropriate modifiers (see Appendix B-1);

(2) Reviewing the NASA Form 1602’s, NEMS Transaction Documents, submitted by property custodians for equipment change and delete transactions, and ensuring appropriate supporting documentation is attached, as required;

(3) Assisting property custodians and equipment users in the proper procedures and documentation of the following equipment actions: loans, transfers, turn-ins, repairs, storage, calibration, replacement, modification-cannibalization, fabrication,
found on station, and survey reports for lost, damaged, or destroyed equipment.

r. Also see paragraphs 4.104c(1)(a)-(g).

*1.312 **NEMS Cataloger**

An Installation NEMS Cataloger reviews and standardizes equipment item names and manufacturer codes and model numbers. Questions concerning standardization and assignment of new manufacturer codes will be referred by Headquarters Code NIE to the NEMS Central Cataloger for resolution (also see paragraph 3.205b, 3.205c, 4.501d and e, and Appendix B-1).

1.313 **NEMS Control**

After the NEMS Equipment Manager and a NEMS Cataloger have reviewed a NEMS add transaction, a representative of NEMS Control (located within the Installation’s equipment management organization) is responsible for entering the final transaction data on the receiving report and proofing the document for completeness. This final transaction information is then keyed into the data base via a remote terminal and the receiving report is microfiched or microfilmed. All necessary data have been recorded at this point and a NASA Form 1602 is generated and forwarded to the accountable property custodian.

*1.314 **NEMS Reutilization Coordinator**

The NEMS Reutilization Coordinator, designated by the NEMS Equipment Manager, and approved by the Supply and Equipment Management Officer, is responsible for NEMS equipment reutilization screening at the Installation, including the appropriate interfaces with other Installation offices in matters related to the use and reuse of equipment as further reuse of equipment as further detailed in paragraphs 4.104c(2)(a)-(g) and Part 4.300.

1.315 **NEMS Configuration Control Board**

This group is a permanent technical control group responsible for maintaining configuration control for the system. Members come from each Field Installation and NASA Headquarters. The Board
Chairperson convenes the group as necessary. The Board's Charter and Configuration Control Document (NASA Form 1620) are shown in Appendix B-2.

1.316 Financial Management Officer

a. The Financial Management Officer will conduct a semiannual reconciliation of equipment-type accounts with the property records maintained by the Supply and Equipment Management Officer. Differences will be mutually resolved; ending balances of Installation-held capital equipment will be established for reporting purposes.

b. Corrective adjustments will be processed so that the net results thereof are reflected in all financial reports submitted as of March 31 and September 30, i.e., the Analyses of Fixed Assets Report (NASA Form 1490), the account balances submitted via the General Ledger Accounts System (GLAS) and the year-end Supplemental Analyses Schedule required by FMM 9391-9a. Also note requirements of paragraph 3.208.

c. The detailed property records required by this Manual will not be duplicated by the Installation Financial Management Officer. Entries in the Installation financial accounts will be independently developed by accounting personnel to the maximum extent practicable as set forth in FMM 9255-5.

1.317 Security Officer

The Installation Security Officer will keep the Supply and Equipment Management Officer fully informed concerning reported or suspected losses of Government property.

1.318 Property Survey Officer

Each Installation Director will appoint a senior management officer as the Installation Property Survey Officer with authority to approve all survey reports and investigate survey reports (see Part 3.300) not handled by the Property Survey Board. The Property Survey Officer may refer surveys to the Property Survey Board for their action. Supply and Equipment Management Officers, their supervisors, or subordinates will not be designated as Property Survey Officers.
1.319 **Property Survey Board**

Each Installation Director will establish a Property Survey Board composed of two or more members (with alternates, as appropriate) and a chairperson who will investigate and make recommendations concerning the loss, damage, or destruction of property exceeding $1,000 in acquisition value. The Property Survey Officer, Supply and Equipment Management Officer, or individuals involved in the maintenance of official Installation property records will not be designated to serve on the Board.

1.320 **Designees**

Where specifically stated, designees may be authorized, in writing, one level lower than the responsible individual. The responsible individual will retain all responsibilities that are given to a designee to execute. The designee will ensure that feedback is provided to the responsible individual to keep that person fully and currently informed of significant actions, problems, or other matters of substance.
<table>
<thead>
<tr>
<th>Par.</th>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.000</td>
<td>Scope of Section</td>
<td>2-1</td>
</tr>
</tbody>
</table>

**PART 1 - EQUIPMENT ACQUISITION**

<table>
<thead>
<tr>
<th>Par.</th>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.100</td>
<td>Scope of Part</td>
<td>2-1</td>
</tr>
<tr>
<td>2.101</td>
<td>Equipment Acquisition Justification</td>
<td>2-1</td>
</tr>
<tr>
<td>2.102</td>
<td>Developing Cost Estimates</td>
<td>2-1</td>
</tr>
<tr>
<td>2.103</td>
<td>Preparation of Equipment Specifications</td>
<td>2-2</td>
</tr>
<tr>
<td>2.104</td>
<td>Identification of Unique Equipment</td>
<td>2-3</td>
</tr>
<tr>
<td>2.105</td>
<td>Equipment Acquisition Documents (EAD’s)</td>
<td>2-3</td>
</tr>
<tr>
<td>2.106</td>
<td>Procedures For Approving All Capital Equipment Acquisitions</td>
<td>2-7</td>
</tr>
<tr>
<td>2.107</td>
<td>Prescreening of NEMS Central Data Base (CDB)</td>
<td>2-8</td>
</tr>
<tr>
<td>2.108</td>
<td>Approving Contractor Proposals for Equipment</td>
<td>2-8</td>
</tr>
<tr>
<td>2.109</td>
<td>Equipment Subject to Special Controls and Reporting Requirements</td>
<td>2-8</td>
</tr>
<tr>
<td>2.110</td>
<td>Equipment Acquired For Use In Mission Support Under the Space Tracking and Data Systems Program</td>
<td>2-9</td>
</tr>
<tr>
<td>2.111</td>
<td>Fabrication of Equipment</td>
<td>2-10</td>
</tr>
<tr>
<td>2.112</td>
<td>Acquisition of Office Furniture</td>
<td>2-10</td>
</tr>
</tbody>
</table>

**PART 2 - EQUIPMENT USE**

<table>
<thead>
<tr>
<th>Par.</th>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.200</td>
<td>Scope of Part</td>
<td>2-11</td>
</tr>
<tr>
<td>2.201</td>
<td>General</td>
<td>2-11</td>
</tr>
<tr>
<td>2.202</td>
<td>Property Management Areas</td>
<td>2-11</td>
</tr>
<tr>
<td>2.203</td>
<td>Assignments and Function of Property Custodians</td>
<td>2-12</td>
</tr>
<tr>
<td>2.204</td>
<td>Equipment Utilization</td>
<td>2-12</td>
</tr>
<tr>
<td>2.205</td>
<td>Walk-Through Inspections</td>
<td>2-13</td>
</tr>
<tr>
<td>2.206</td>
<td>Equipment Pools for Laboratory and Research Equipment</td>
<td>2-14</td>
</tr>
<tr>
<td>2.207</td>
<td>Control of Sensitive Items</td>
<td>2-15</td>
</tr>
<tr>
<td>2.208</td>
<td>Loan of Equipment</td>
<td>2-16</td>
</tr>
<tr>
<td>2.209</td>
<td>Equipment Maintenance, Repair, Rehabilitation, and Reclamation</td>
<td>2-16</td>
</tr>
<tr>
<td>2.210</td>
<td>Replacement of Equipment</td>
<td>2-19</td>
</tr>
<tr>
<td>2.211</td>
<td>Cannibalization of Equipment</td>
<td>2-19</td>
</tr>
<tr>
<td>2.212</td>
<td>Retention of Inactive Equipment</td>
<td>2-21</td>
</tr>
</tbody>
</table>
### PART 2 - EQUIPMENT USE (Cont'd)

<table>
<thead>
<tr>
<th>Par.</th>
<th>Reporting and Control of Inactive Equipment Retained by NASA Installations</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.213</td>
<td></td>
<td>2-22</td>
</tr>
</tbody>
</table>
SECTION II

EQUIPMENT ACQUISITION AND USE
(Installation Equipment)

2.000 Scope of Section

This section is primarily for equipment using organizations and applies to controlled equipment (see Appendix C - Definition of Terms) which will be acquired or is used by NASA Installations. This section sets forth administrative requirements for the acquisition and use of new or replacement equipment. NOTE: NASA contractors will acquire equipment in accordance with the provisions of the Federal Acquisition Regulation (FAR) and the NASA/FAR Supplement.

PART 1 -- EQUIPMENT ACQUISITION

2.100 Scope of Part

This part set forth guidelines for administering the acquisition of equipment including the preparation and coordination of the justification to acquire, estimates of cost, equipment specifications, identification of unique equipment, submission of Equipment Acquisition Documents (EAD's), and the approval to acquire.

2.101 Equipment Acquisition Justification

Except for the acquisition of equipment necessary to resolve an unforeseen emergency, justification to acquire equipment will be initiated in advance of the date the item is needed to permit orderly development, review, and coordination of an acquisition plan. The equipment acquisition justification will define the equipment, its functional use, and its relationship to any parent system, the date the item is required, estimated cost, and method of acquisition.

2.102 Developing Cost Estimates

a. The cost of equipment will be identified to the funding project or functional activity. If new equipment is proposed, the estimate, in addition to the cost to acquire, will include the cost of transportation, handling, and installation. Estimated costs will be reflected in the appropriate fund source under the budget authorization as
required by NHB 7400.1, "Budget Administration Manual," Part II - Budget Formulation.

b. Cost estimates for capital equipment (excluding automated data processing equipment (ADPE)) to be acquired with Research and Development (R&D) and Space Flight, Control, and Data Communications (SFC&DC) funds and used at NASA Installations for items costing $250,000 or more or items collectively costing $1,000,000 or more for the same purpose require preparation and submission of a supporting EAD (see paragraph 2.105). ADPE meeting this criteria requires preparation and submission in accordance with the annual ADP Plan.

c. Cost estimates for capital equipment which will be acquired concurrently with a related facility project also will be reflected in the related equipment section of the facility project (see NHB 7400.1, paragraph 2524, Facility Project). Separate EAD’S and annual ADP Plan submittals are still required for equipment items with related facility projects that meet the R&D and SFC&DC major equipment acquisition dollar levels.

2.103 Preparation of Equipment Specifications

a. Equipment specifications will be developed in the detail required to provide for a well defined procurement action and to clearly delineate the required functional performance criteria and operational characteristics. To the extent that equipment characteristics may have common use application in fulfilling other requirements, development of a standard specification should be considered to simplify procurement and reduce the lead time for acquisition. Equipment will be sufficiently defined to enable appropriate classification and categorization pursuant to Section III, Part 2, of this Manual. In order to facilitate screening of NEMS and excess property listings, the equipment documentation will record as a minimum the appropriate item name, suggested manufacturer, model, and Federal Supply Class or similar information for acceptable substitute items when submitted for acquisition.

b. Installations will require vendors to meet requirements for systems safety as outlined in the "NASA System Safety Manual," NHB 1700.1 (V3), and Chapter 3 of NHB 1700.1 (V1-A), "Basic Safety
Manual," for major hardware and software acquisitions.

c. The Supply and Equipment Management Officer should be contacted for assistance in developing these data and other information to facilitate the classification and documentation that will be necessary in establishing control of the item upon receipt by the Installation.

2.104 Identification of Unique Equipment

a. Specialized equipment items or equipment systems generally not commercially available which, by design or function, may be subsequently redistributed and used for other purposes will be designated as unique equipment at the time the unique equipment becomes inactive. The determination should be made by the cognizant division director/chief in conjunction with the NEMS Reutilization Coordinator.

b. When unique equipment becomes inactive, it must be reviewed throughout NASA for other use following the procedures of paragraph 4.505.

2.105 Equipment Acquisition Documents (EAD’s)

a. Each Installation will establish and maintain a procedure consistent with the requirements of paragraph 1.203 for the overview, control, and submission of EAD’s to NASA Headquarters. Each Installation will designate an Installation contact point for EAD matters and submit the name of the contact to the Chief, Supply and Equipment Management Office, Code JIE, NASA Headquarters. EAD’s are required for the acquisition of R&D and SFC&DC funded noncollateral, non-ADP equipment which will be used at NASA Installations, the Jet Propulsion Laboratory, or component Installations.** "Acquisition" in this case includes acquisition by purchase, lease, fabrication, or by transfer from another Government agency, or contractor plant. Instructions for the preparation and a sample of the EAD form (NASA Form 1511) are contained in Appendix F. EAD forms are not required for ADP equipment. ADP estimates will be extracted from the annual ADP Plan and will be submitted in summary format by the Headquarters Information Resources Management Division, IRM Policy and Acquisition Management Office (Code JTD), to the cognizant Institutional Program Office.
b. Prior to EAD and ADP Plan submission, the Installation Director will ensure that duplicate capacity is not being acquired. As required by paragraph 2.106c, the EAD also will be reviewed by and coordinated with the Installation facilities office to ensure that facilities requirements, especially for Installation needs and follow-on requirements, have been fully considered. Any estimated costs for facilities requirements will be provided for and so identified by footnote in block seven of the EAD form.

c. EAD's will be submitted to the supporting Headquarters Program Associate Administrator with the annual budget estimates as set forth in the annual budget call and NHB 7400.1, "Budget Administration Manual." Equipment acquisitions requiring EAD's that are funded on a multi-year basis require updated resubmission of the EAD in response to the budget call for each fiscal year involved with all the year's funding identified.

d. The annual ADP Plan will be submitted to the Information Resources Management Office through the Deputy Associate Administrator for Management Systems and Facilities (Operations) for ADPE funding requests in accordance with NHB 2410.1, "Information Processing Resources Management."

e. Staffing of EAD approval by the appropriate program office within Headquarters is the responsibility of the Chief, Supply and Equipment Management Office, Code JIE. Each NASA Form 1511 received at Headquarters and prior to staff coordination will be assigned an EAD control number by the Supply and Equipment Management Office. This number will be used to identify the EAD and its eventual disposition. The number will be established as follows:

   (1) First set of two digits identifies the Installation code consistent with the Field Installation coding in FMM 9121-51.

   Installation two digit codes are:

<table>
<thead>
<tr>
<th>Code</th>
<th>Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>NASA Headquarters</td>
</tr>
<tr>
<td>21</td>
<td>Ames Research Center</td>
</tr>
<tr>
<td>22</td>
<td>Lewis Research Center</td>
</tr>
<tr>
<td>23</td>
<td>Langley Research Center</td>
</tr>
<tr>
<td>51</td>
<td>Goddard Space Flight Center</td>
</tr>
</tbody>
</table>
(2) The second set of two digits identifies the first fiscal year that funds will be used for the acquisition, e.g., 91-FY 1991.

(3) The third set of two digits represents a sequentially assigned serial number for the Installation. For example, EAD number 22-91-02 would represent the second EAD submitted by Lewis Research Center for Fiscal Year 1991.

(4) EAD’s for incrementally funded equipment will be identified to the originally assigned EAD number in block seven of NASA Form 1511.

f. After receipt of EAD’s and the annual ADP Plan estimates by the Program Associate Administrator, the Program Associate Administrator will forward to the Supply and Equipment Management Office a summary of the total supported R&D and SFC&DC equipment estimates by budget line item, along with supporting EAD’s for non-ADPE and a major ADPE estimates report (extracted from the annual ADP Plan by the IRM Policy and Acquisition Management Office (Code JTD). The Supply and Equipment Management Office submits the Estimates for Equipment to the Budget Operations Office (Code BT), for inclusion in the Special Analyses Section of the Congressional Budget.

g. Cognizant Institutional Program Offices will hold EAD’s pending Congressional action on the NASA budget. During September, preceding the next fiscal year, the EAD’s will be forwarded to the Chief, Supply and Equipment Management Office, the Director, Information Resources Management Division, and Director, Facilities Engineering Division, for final concurrence. After concurrence is obtained, approval to acquire will be sought from the supporting Headquarters Program Associate Administrator. The cognizant Institutional Program Offices will confirm all approved and disapproved equipment acquisitions with their Installations.

h. For non-ADP equipment requirements which were not foreseen at the time of the annual submission of budget estimates and which require an EAD for the
authorization and/or purchase of equipment, a supplemental EAD will be submitted to Headquarters for approval prior to acquisition. The NASA Form 1511 will be forwarded to the appropriate Headquarters Program Associate Administrator, who will, if supported, forward it to the Chief, Supply and Equipment Management Office, who will assign the EAD number, obtain the necessary concurrences and approvals in Headquarters, and return it to the cognizant Institutional Program Office to confirm approval/disapproval with the cognizant Installation.

i. Annual Report To Congress

(1) By November 1, each Installation will forward to the appropriate Headquarters Program Associate Administrator information required by this paragraph of action taken by the Installation for the acquisition of R&D and SFC&DC equipment with an item value of $250,000 or more or a group of items valued at $1 million or more to serve the same purpose, during the preceding fiscal year which will be installed at the Installation.

(2) As of September 30 each year, the Installation EAD Coordinator will request an ad hoc query from the NEMS data base of all equipment acquired during the preceding fiscal year with an acquisition cost of $250,000 or more. Items produced from the query will be reviewed, and qualifying items not supported by an EAD or the ADP Plan will be included in the annual report as appropriate.

(3) The report of approved acquisitions furnished by the Installation will be submitted using a columnar format which indicates Control Number, Receiving Installation, Equipment Description, Purpose, Acquisition Method, Fiscal Year Obligation, Fund Source (i.e., Budget Line Item name), and Remarks. To the extent possible, this information should be taken from the approved EAD's and ADP Plan, or from NEMS for qualifying items found in the NEMS data base ad hoc query that were not supported by an EAD or the ADP Plan. The acquisition method should be lease, transfer, or purchase and include the type of contract, as applicable. The fund source column should identify the R&D or SFC&DC budget line item and
the project number(s). The Headquarters Program Associate Administrator will forward these reports to the Supply and Equipment Management Office by November 15. These reports will form the basis for the annual report of major equipment acquisitions submitted by the Chief, Supply and Equipment Management Office, to the Congress. Report Control Symbol Number RCS 10-0000-00623, Major Equipment Acquisitions, applies to this report.

2.106 Procedures For Approving All Capital Equipment Acquisitions

a. Each Installation will prescribe uniform procedures for the review and approval of all capital equipment acquisitions.

b. The procedures will establish equipment approval authority at a level which assures that the approving officer is knowledgeable of the overall equipment requirements, the Installation Director’s equipment acquisition policy, and the policy set forth in paragraph 1.204. The approving official will assure that a review of the requirement is made by technically qualified personnel, preferably independent of the requiring office, and will ensure that coordination is effected with any offices functionally responsible for management and control of the equipment. Examples of equipment which are subject to such reviews are transportation, photographic, automatic data processing, aircraft, safety, and weapons.

c. All requests for equipment when the estimate of Installation cost is $10,000 or more will be coordinated with the Installation facilities office. This requirement applies whether collateral or noncollateral type equipment is involved, and whether or not a supporting or related facility project is indicated. The Installation facilities office ensures that all necessary coordination with regard to maintenance and utilities is secured.

d. Prior to acquisition, the procurement officer will ensure that appropriate consideration has been given to the Agency’s existing equipment assets and that a certification of nonavailability has been obtained.
e. When transfer or loan from another Government agency or NASA Installation is involved, the Supply and Equipment Management Officer may be contacted for shipping and handling instructions. Requests for NASA Headquarters assistance in obtaining equipment from other Government agencies will be directed to the Chief, Supply and Equipment Management Office, Code JIE.

*2.107 Prescreening of NEMS Central Data Base (CDB)

For an item of equipment estimated to cost $1,000 or more, the requesting office should contact the Installation NEMS Reutilization Coordinator for the prescreening of the NEMS records prior to initiation of a procurement request to determine the availability of candidate equipment which may satisfy the requirement and thus avoid new acquisition. This informal prescreening technique, which is more fully described in paragraph 4.302, is designed to reduce lead time and paperwork in the event existing equipment can be used.

2.108 Approving Contractor Proposals for Equipment

Contractor proposals for equipment acquisition will be processed and administered pursuant to the guidelines set forth in the Federal Acquisition Regulation (FAR) and NASA/FAR Supplement and will be submitted to the applicable contracting officer.

2.109 Equipment Subject to Special Controls and Reporting Requirements

Additional special controls and reporting requirements are established for the following equipment:

a. Motor Vehicles. Budget requirements are defined in NHB 7400.1, "Budget Administration Manual." Separate annual calls are made for the Office of Management and Budget (OMB) and Congressional budget submission. Specific policies and procedures for the authorization, acquisition, utilization, and disposal of vehicles are set forth in NMI 6000.5, "Transportation Management." Federal Property Management Regulations (FPMR) Amendment G-47 requires that passenger-carrying vehicles and trucks achieve a fleet average fuel economy as established by the Secretary of Transportation. In this regard, purchase requests and documentation submitted to GSA must include a NASA Form 925, Motor Vehicle

2-8
Authorization and Certification, which has been approved and/or certified by NASA Headquarters.

b. Aircraft. The policies and procedures for the acquisition, management, and control of NASA aircraft are set forth in NMI 7910.1, "NASA Aircraft Management." The annual budgetary reporting requirements for aircraft are prescribed in NHB 7400.1, "Budget Administration Manual," paragraph 2518, or as may be amended in the annual call for estimates.

c. Automatic Data Processing Equipment (ADPE). The acquisition of ADPE will be subject to the approval processes set forth in NHB 2410.1, "Information Processing Resources Management." Budget and funding requirements for ADPE are prescribed in NHB 7400.1, "Budget Administration Manual," or may be amended in the annual call for estimates.

d. Word Processing Equipment. The acquisition of word processing equipment will be subject to the policies and procedures set forth in NHB 2410.1, "Information Processing Resources Management."

2.110 Equipment Acquired For Use In Mission Support Under the Space Tracking and Data Systems Program

a. NASA Installations acquiring Space Tracking and Data Systems funded equipment will not prepare NASA Form 1511, Equipment Acquisition Document (EAD), for such equipment.

b. The acquisition of such equipment will be subject to the Work Authorization Document (WAD) procedures established by the Space Operations Program. The acquisition of all tracking and data acquisition equipment will be administered only in accordance with these established procedures.

c. The Associate Administrator for Space Communications will provide to the Supply and Equipment Management Office input for the Congressional budget for WAD approved equipment acquisitions as set forth in the annual budget call. Also, by November 15 of each year the Office of Space Communications (OSC) will provide a report for the preceding fiscal year of actions taken by Field Installations for the acquisition of such equipment as required by this Manual (Reports Control Symbol RCS 10-0000-00623, Major Equipment Acquisitions).
2.111 Fabrication of Equipment

a. Equipment which is fabricated at or by a NASA Installation will be sufficiently identified to enable appropriate Federal Supply Class identification and accountability.

b. Documentation for and description of fabricated equipment will be developed and furnished to the Supply and Equipment Management Officer for use in determinations regarding the physical control of such items (see paragraph 3.103, Experimental and Fabricated Equipment).

2.112 Acquisition of Office Furniture

Prior to the purchase of new office furniture, NASA Installations shall fulfill requirements for office furniture in so far as is practical through redistribution, repair, or rehabilitation of furniture already owned. In furtherance of such reuse of furniture, Installations shall review inventories on a continuing basis to ascertain those items which can be economically rehabilitated and institute programs for their orderly repair and rehabilitation. Office furniture requirements are further defined in NMI 4220.1, "Standards for Office Furniture and Furnishings."
PART 2 -- EQUIPMENT USE

2.200 Scope of Part

This part sets forth directions for the use, custody, care, and reporting of equipment while in the hands of user organizations. It includes identification of property management areas, assignment and function of property custodians, equipment utilization, walk-through inspections, equipment pools, control of sensitive items, loan of equipment, equipment maintenance, replacement of equipment, cannibalization of equipment, and retention reporting, and control of inactive equipment retained by NASA Installations.

2.201 General

Each Installation will prescribe appropriate procedures for user management of equipment consistent with the provisions of this part. These procedures shall require that heads of user organizations periodically report to Installation management concerning these user activities, including walk-through results and the use and effectiveness of equipment pools, if applicable.

*2.202 Property Management Areas

Property management areas (see Appendix C - Definition of Terms) are required to assure effective control and surveillance of equipment while in the possession of the organization. Property management areas shall be defined through the cooperative efforts of the head of the user organization and the Installation Supply and Equipment Management Officer and should not normally exceed 500-600 items for control unless the geographic or physical location otherwise facilitates surveillance (see paragraph 2.203 for full-time property custodians). When defined, the Supply and Equipment Management Officer will ensure establishment of and approve a property custodial account and number for each area. The custodial account number will identify in the records all controlled equipment assigned within the area for which the head of the user organization is responsible. The account number will be used for recording transactions against the account in the Installation's NEMS central control records.
Assignments and Function of Property Custodians

A property custodian shall be assigned for each defined property management area. The duties of the property custodian are set forth in paragraph 1.307. A property custodian is normally responsible to the head of the user organization for equipment management. However, the Supply and Equipment Management Officer can appoint full-time property custodians, in-house or by contract, responsible for the management of property (generally 3,000 - 6,000 equipment items) by geographic location rather than appointed by division directors/chiefs for their cognizant property management areas. The property custodian will initiate internal instructions which provide that equipment is appropriately receipted when assigned to the organization, ensure that all custodial records are documented and transactions properly accomplished, and that periodically the condition and use status of equipment is accurately reported. Whenever direct surveillance of equipment charged to the custodial account cannot be exercised due to either the location or nature of use, the property custodian will assign the equipment to the primary user, obtain the user's signature on the NASA Form 1602, and submit the NASA Form 1602 to NEMS Control for processing. The primary user, through this transaction, assumes responsibility for surveillance of the equipment and should report any changes of status, location, or user to the property custodian. Property custodians will maintain interface with the NEMS Reutilization Coordinator and other property personnel for prescreening of user equipment requirements and related action.

Equipment Utilization

The director of the using directorate or major organizational unit shall ensure that equipment assigned to the organization is properly utilized and maintained. Periodic review not less often than annually will be made to determine whether or not equipment which is inactive or underutilized should be retained by the organization or turned in to the supply and equipment organization for reutilization screening. NEMS Report 720, Annual Equipment Utilization Review, may be used for this purpose. For controlled equipment reportable to NEMS, equipment status will be verified annually and necessary changes will be submitted to the NEMS Reutilization Coordinator pursuant to the guidelines of paragraph 4.201. Equipment records of NEMS items
2.205

Walk-Through Inspections

a. Walk-through inspections are required by FPMR Subchapter E, Section 101-25.1, and will be performed annually by each division director/chief accompanied by the property custodian of the property management area concerned. The walk-through will include all offices, laboratories and shops both on-site and off-site of each property management area for the purpose of:

(1) Identifying inactive or underutilized equipment to the Supply and Equipment Management Officer for reutilization or retention in inactive storage. The division director/chief will identify, based on the knowledge of future programs approved by the Installation Director, equipment that is no longer required or which is expected to become inactive in the near future; and

(2) Inspecting the equipment to ensure that scheduled or necessary maintenance is being performed as required and that calibration of equipment is up-to-date and in keeping with established performance requirements.

b. Each NEMS reportable item identified as inactive, including those which are turned in or placed in storage, will be reported to the NEMS Equipment Manager for updating of the NEMS data base (reference NEMS Report 138, Storage In Expiration Report).

c. A memorandum for record covering the results of the walk-through will be prepared by the division director/chief and a copy will be maintained on file by each property custodian for each property management area, and a copy will be forwarded to the Supply and Equipment Management Officer, or a more senior designee.
d. Before each March 31, the Supply and Equipment Management Officer, or a more senior designee, will prepare a comprehensive report for the Installation Director describing the previous calendar year walkthrough program and results.

2.206 Equipment Pools for Laboratory and Research Equipment

a. Each NASA Installation, pursuant to FPMR Subchapter E, Section 101-25.109-2, will establish equipment pools for laboratory and research equipment so such equipment can be shared or allocated on a temporary basis to activities and individuals whose normal use does not warrant the assignment of such equipment on a permanent basis. Pooling operations should begin expeditiously, within 120 days, if feasible, following decisions regarding the number and location of pools. If an Installation determines that an equipment pool would not be practical or economical, or for any other reason not be required, a written report supporting that determination will be submitted to the Chief, Supply and Equipment Management Office, NASA Headquarters, and a copy of the report will be maintained on file by the Supply and Equipment Management Officer.

b. When the establishment of a physical pool would not be feasible due to excessive transportation and handling cost, limited personnel resources or space, pooling may be accomplished using equipment listings without assembling the equipment at one location.

c. Each Installation should consider the establishment of an advisory committee consisting of technical and management personnel to determine the types of equipment to be pooled and to identify equipment that is no longer required in the pool.

d. The Chief, Supply and Equipment Management Office, will ensure periodic review of determinations and equipment pool operations at each Installation as a part of the functional review process.
2.207 **Control of Sensitive Items**

a. Each property custodian shall establish the following special controls for the sensitive items that have been individually identified in the property custodian’s NEMS account:

1. Sensitive items will be assigned to the primary user; the property custodian will obtain the user’s signature on the NASA Form 1602 and submit the NASA Form 1602 to NEMS Control for processing. The primary user assumes responsibility for surveillance of the sensitive items and should report any changes of status, location, or user to the property custodian;

2. Sensitive items will be secured and locked up when not in use;

3. Sensitive items will not be loaned out of possession or control of the person to whom they are assigned unless the property custodian is notified;

4. All loans of sensitive items will be revalidated every 30 calendar days by the property custodian; however, sensitive items in Installation-wide pools are not subject to the 30-day limitation provided Installation-wide procedures are published for their effective control; and

5. Property custodians will be able to produce all sensitive items charged to the account and not on documented loan within 24 hours.

b. Property custodians will verify annually, in writing, that the special controls in subparagraphs (1)-(5) have been established and that all sensitive items are accounted for on listings provided by the Supply and Equipment Management Officer. The Supply and Equipment Management Officer can provide the listings by using NEMS Report 140, Custodian Account Property Record, selecting sensitive items only.

c. Unannounced special inventories of sensitive items will be directed by the Supply and Equipment Management Officer as set forth in paragraph 5.102b.
2.208 Loan of Equipment

a. Before equipment may be loaned outside a division, the property custodian must obtain a certification from the division director/chief, or designee, that the item to be loaned may be released without adversely affecting assigned programs. If the loan is to be made to another element within the Installation, i.e., a borrow (see paragraph 3.410), the certification to this effect will be included with the custodian's record and may be included on the NASA Form 1602 when it is submitted to process Transaction 38, Borrowed Out. If the loan is made outside the Installation, the certification will be included in the Installation's official loan file.

b. Custodian records of loaned/borrowed equipment will continue to be maintained by the lending property custodian. All loans off the Installation will be made as prescribed in paragraph 1.211 and Part 3.400 in conjunction with the Supply and Equipment Management Officer.

2.209 Equipment Maintenance, Repair, Rehabilitation, and Reclamation

a. A maintenance program shall be prescribed for all Installation assigned equipment. The basic objective of the maintenance program will be to assure maximum readiness of equipment to perform assigned functions safely and efficiently and at the lowest cost. Maintenance is a continuing activity which is accomplished more effectively under uniformly prescribed procedures and practices and with appropriate guidelines for the maintenance of each category of equipment in use at the Installation. For applicable categories of equipment, these guidelines will identify maintenance requirements set forth in appropriate Federal Regulations and existing NASA Management Directives. When no such guidelines have otherwise been prescribed, maintenance will generally be accomplished in accordance with the manufacturer's or design agency's recommended procedures.

b. Maintenance programs will include procedures which ensure:

   (1) Identification and estimation of maintenance requirements;
(2) Uniform scheduling of maintenance service;

(3) Correction of deficiencies detected during visual inspections of daily operations;

(4) Prompt repair and calibration of equipment in keeping with the user's performance requirements;

(5) Periodic scheduling of inspections to verify the effectiveness of the maintenance program and general operating conditions of equipment;

(6) Use of manufacturer warranties or servicing agreements, as applicable;

(7) Establishment of a technical library of applicable maintenance instructions for each category of equipment for which maintenance is provided;

(8) Appropriate preservation and protection of inactive equipment held in storage; and

(9) Preprinted maintenance checklists when appropriate.

c. Each Installation should refer to FPMR Subpart 101-42 relating to a Government-wide service support program for the maintenance, repair, rehabilitation, and reclamation of equipment and other personal property. The General Services Administration (GSA) property rehabilitation program is a ready vehicle for Agency use to avoid new procurement and achieve cost reductions. It provides competitively established commercial service contracts for the maintenance, repair, rehabilitation, and reclamation of not only in-use administrative property, such as furniture and office equipment, but also a large number of other items of personal property. Appendix L is a list of the most commonly used items covered by GSA regional contracts. A carefully planned personal property maintenance and rehabilitation program is an essential part of sound property management.
d. FPMR Subchapter E, Section 101-25.106, requires that a determination be made concerning whether to service office machines by use of annual maintenance contracts or on a per-call basis. The cost analysis determination shall be made considering the following factors:

(1) Standard of performance required;
(2) Degree of reliability needed;
(3) Environmental factors, i.e., dusty surroundings or other unfavorable conditions;
(4) Proximity to available repair facilities;
(5) Past experience with service facility, i.e., reputation, performance record, quality of work, etc.;
(6) Daily use (heavy or light) and operator's care of machines;
(7) Age and performance record of machine;
(8) Machine inventory in relation to operating needs, i.e., availability of reserve machine in case of breakdown;
(9) Number of machines, including overall frequency of repairs required;
(10) Security restrictions, if any; and
(11) Other pertinent factors.

e. NASA Installations will compare, at least annually, the cost of maintenance service contracts with the cost of securing services and repair on a per-call basis. Based on this comparison, Installations will then use that method of obtaining services and repairs which the comparison shows to be most economical. When clearly advantageous, maintenance service contracts may be used for some machines and per-call service used for others.
f. Cost analysis determinations are not required when an office machine maintenance package/plan secured through GSA schedules/contracts does not require the vendor to furnish the Government with detailed information (e.g., labor hours expended per machine, parts installed, and associated cost per machine).

g. In the absence of historical data based on experience, the following estimates of the number of annual repair calls which can be expected will be used:

<table>
<thead>
<tr>
<th></th>
<th>Estimated Annual Repair Calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Typewriters</td>
<td>3.0</td>
</tr>
<tr>
<td>Manual Typewriters</td>
<td>1.0</td>
</tr>
<tr>
<td>Adding Machines</td>
<td>1.0</td>
</tr>
<tr>
<td>Calculators</td>
<td>1.5</td>
</tr>
<tr>
<td>Dictating Machines</td>
<td>1.0</td>
</tr>
</tbody>
</table>

h. An annual comparison and analysis will be documented and filed as a reference in support of the service method selected and for purposes of comparing actual results to previous estimates.

2.210 Replacement of Equipment

Each Installation will establish and maintain a procedure for replacement of obsolete and worn-out equipment. An item of equipment will be considered a candidate for replacement when maintenance experience is such that the item is no longer economically repairable or its design capability becomes outdated to the extent that operational performance requirements cannot be maintained. Replacement standards will be consistent with those set forth in FPMR Subpart 101-25. For equipment not covered by these standards, periodic evaluations of equipment repair costs, anticipated overhauls, and a thorough inspection of the item should be made to determine whether or not the economically justifiable time for replacement has arrived. Replacement cost as well as acquisition cost should be considered in all evaluations.

2.211 Cannibalization of Equipment

* a. Equipment may be cannibalized (see Appendix C Definition of Terms) when such action is determined to be justified in fulfilling equipment requirements
and the written approval of the responsible division director/chief has been obtained prior to disassembly of the equipment. This approval will be documented using NASA Form 1617, Request for Cannibalization/Modification of Controlled Equipment (see Appendix G), and will include the equipment control number, a brief description to include the make, model, serial number, and value of the item to be cannibalized, and a brief statement as to the reason for the cannibalization and whether or not the cannibalized item will be retained for future use. Cannibalization/modification requirements do not apply to the removal and replacement of system components for operational purposes. Note: The use of ADPE for maintenance by redundancy (backup) or cannibalization for a parts source of supply shall not be made until Federal requirements are determined in accordance with NHB 4300.1, "NASA Personal Property Disposal Manual," Chapter 7, paragraph 704a(2), and the Federal Information Resources Management Regulation (FIRMFR), paragraph 201-33.003-2a(2)(v). Subsequent GSA (Code KHEE) approval to cannibalize ADPE will be noted in Section II of NASA Form 1617.

b. A NASA Form 1617 will be submitted to the NEMS Equipment Manager for appropriate adjustment of the equipment control record, and will be approved by the Supply and Equipment Management Officer. Any residual unused materials will be turned in for reutilization or disposal. When cannibalized equipment is removed from the NEMS data base, the Supply and Equipment Management Officer will ensure submission of necessary data to the Installation financial management organization.

c. In those cases where an item which has been cannibalized will continue to function and only the value has changed (i.e., the item has been modified), the new value for the item also will be reported to the Supply and Equipment Management Officer for appropriate adjustment of the equipment control record on NASA Form 1617. Modifications to equipment require an adjustment to the equipment records when the modification cost exceeds $1,000. The Supply and Equipment Management Officer will ensure notification to the Financial Management Division of the cost change. Modification costs that do not exceed $1,000 will be recorded by finance as current year costs.

d. Normally, equipment available from other NASA Installations, contractors, or other Government agencies will not be acquired solely for cannibalization. Exceptions to this rule will
require directorate level approval. This approval document will be maintained by the NEMS Equipment Manager in the equipment entry reference number microfilm/microfiche source document file for the item(s) acquired.

2.212 Retention of Inactive Equipment

The nature of NASA operations occasionally makes it desirable to retain equipment, not in current use, for a specified time for other potential needs prior to further disposition. Equipment may be retained in an active status by the Installation only for one of the following specific purposes and under the conditions indicated:

a. Status code C items undergoing NEMS CDB screening.

b. Firm Future Requirement: A firm future requirement may be considered a specific purpose for equipment retention provided that the equipment has been identified for use on a project, program, or other work activity, the planning of which has been approved by the Installation Director. All equipment held for firm requirements will be recertified annually by the director of the storing directorate.

c. National Asset: Equipment may be classified as a national asset and retained by the Installation in an inactive status provided the item is:

(1) Special purpose in nature;
(2) Costly in its design and development;
(3) One of a kind or nationally scarce; or
(4) Its reuse potential warrants retention, even though a firm future requirement does not exist.

Retention of inactive national asset equipment in excess of 12 months must be approved by the Chief, Supply and Equipment Management Office.

d. Standby: Retention of equipment designated by the Installation Director for emergency standby purposes may be justified provided such equipment is not in excess of that considered necessary for maintaining proper operation. Standby equipment will be reviewed annually by the director of the storing
directorate to determine the appropriateness of continued retention.

2.213 Reporting and Control of Inactive Equipment Retained by NASA Installations

a. The equipment held in an inactive status pursuant to paragraph 2.212 will be reported to the Supply and Equipment Management Officer for further processing in accordance with existing storage guidelines. The turn-in document will be annotated to reflect the purpose for retention of the equipment and the length of time the equipment is to be held for that purpose. Equipment which is not readily movable or is specifically located for emergency purposes should be held in place and tagged to indicate its inactive status.

b. The equipment transaction documentation will reflect pertinent data relating to the inactive designation of the equipment, including the results of cyclic review and recertification prescribed by paragraph 2.212. All inactive equipment subject to reutilization screening will be classified as status code B or C (see paragraphs 4.203 and 4.204).
SECTION III
EQUIPMENT ADMINISTRATIVE PROCEDURES
(Installation Equipment)

CONTENTS

<table>
<thead>
<tr>
<th>Par.</th>
<th>Scope of Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.000</td>
<td>Scope of Section</td>
<td>3-1</td>
</tr>
</tbody>
</table>

PART 1 - EQUIPMENT CONTROL

<table>
<thead>
<tr>
<th>Par.</th>
<th>Equipment Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.100</td>
<td>Scope of Part</td>
</tr>
<tr>
<td>3.101</td>
<td>Controlled Equipment</td>
</tr>
<tr>
<td>3.102</td>
<td>Noncontrolled Equipment</td>
</tr>
<tr>
<td>3.103</td>
<td>Experimental and Fabricated Equipment</td>
</tr>
<tr>
<td>3.104</td>
<td>Equipment Located at NASA Installations Other than the Funding Installation</td>
</tr>
<tr>
<td>3.105</td>
<td>Equipment Direct Delivered to Nonfunding Installations</td>
</tr>
<tr>
<td>3.106</td>
<td>Equipment Acquired Under Reimbursable Authority from Other Federal Agencies</td>
</tr>
<tr>
<td>3.107</td>
<td>Equipment Acquired by Another Federal Agency and Reimbursed by NASA</td>
</tr>
<tr>
<td>3.108</td>
<td>Uncontrolled Equipment Located that Meets NASA Control Criteria (Referred to as Found on Station (FOS))</td>
</tr>
<tr>
<td>3.109</td>
<td>Space Property</td>
</tr>
<tr>
<td>3.110</td>
<td>Noncontrolled Office Furniture and Furnishings</td>
</tr>
<tr>
<td>3.111</td>
<td>Relocatable Buildings</td>
</tr>
<tr>
<td>3.112</td>
<td>Vendor-Owned Equipment On-Site</td>
</tr>
<tr>
<td>3.113</td>
<td>Employee-Owned Equipment On-Site</td>
</tr>
</tbody>
</table>

PART 2 - EQUIPMENT ACCOUNTABILITY

<table>
<thead>
<tr>
<th>Par.</th>
<th>Equipment Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.200</td>
<td>Scope of Part</td>
</tr>
<tr>
<td>3.201</td>
<td>Accountability Requirements</td>
</tr>
<tr>
<td>3.202</td>
<td>Equipment Control Number</td>
</tr>
<tr>
<td>3.203</td>
<td>Equipment Control Number Register</td>
</tr>
<tr>
<td>3.204</td>
<td>Tagging of Equipment</td>
</tr>
<tr>
<td>3.205</td>
<td>NEMS Equipment Record</td>
</tr>
<tr>
<td>3.206</td>
<td>Transaction Audit Trail</td>
</tr>
<tr>
<td>3.207</td>
<td>Management Data and Statistical Records</td>
</tr>
<tr>
<td>3.208</td>
<td>Reconciliation, Adjustment, and Reporting of Property Records and Financial Accounts Balances</td>
</tr>
<tr>
<td>3.209</td>
<td>Control of Documents</td>
</tr>
<tr>
<td>3.210</td>
<td>Property Custodian Records</td>
</tr>
</tbody>
</table>
SECTION III
EQUIPMENT ADMINISTRATIVE PROCEDURES
(Installation Equipment)

CONTENTS (Cont’d)

<table>
<thead>
<tr>
<th>Par.</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART 2 - EQUIPMENT ACCOUNTABILITY (Cont’d)</td>
<td></td>
</tr>
<tr>
<td>3.211 Receiving and Inspection of Equipment</td>
<td>3-22</td>
</tr>
<tr>
<td>3.212 Shipment of Equipment</td>
<td>3-22</td>
</tr>
<tr>
<td>3.213 Removal of Tags and Other NASA Identification</td>
<td>3-23</td>
</tr>
<tr>
<td>3.214 Equipment Sent Off the Installation for Repair, Calibration and Under the Terms of a Warranty</td>
<td>3-23</td>
</tr>
<tr>
<td>PART 3 - SURVEY OF LOST, DAMAGED, OR DESTROYED EQUIPMENT</td>
<td></td>
</tr>
<tr>
<td>3.300 Scope of Part</td>
<td>3-25</td>
</tr>
<tr>
<td>3.301 Applicability</td>
<td>3-25</td>
</tr>
<tr>
<td>3.302 Policy</td>
<td>3-25</td>
</tr>
<tr>
<td>3.303 General</td>
<td>3-25</td>
</tr>
<tr>
<td>3.304 Government Employee Disciplinary Action</td>
<td>3-25</td>
</tr>
<tr>
<td>3.305 Procedures for Submitting Survey Reports (for Motor Vehicle Accidents see paragraph 3.314)</td>
<td>3-26</td>
</tr>
<tr>
<td>3.306 Time Limit on Submitting Survey Reports and Completing Action</td>
<td>3-27</td>
</tr>
<tr>
<td>3.307 Survey Report Register</td>
<td>3-27</td>
</tr>
<tr>
<td>3.308 Survey Action Procedures and Routing</td>
<td>3-27</td>
</tr>
<tr>
<td>3.309 Investigation and Findings by Property Survey Officer or Property Survey Board</td>
<td>3-28</td>
</tr>
<tr>
<td>3.310 Recommendations by Property Survey Officer or Property Survey Board</td>
<td>3-28</td>
</tr>
<tr>
<td>3.311 Approvals by Property Survey Officer</td>
<td>3-29</td>
</tr>
<tr>
<td>3.312 Approved Survey Reports Distribution</td>
<td>3-29</td>
</tr>
<tr>
<td>3.313 Reporting</td>
<td>3-29</td>
</tr>
<tr>
<td>3.314 Optional Use of Investigation Report of Motor Vehicle Accident (Standard Form 91A)</td>
<td>3-30</td>
</tr>
<tr>
<td>3.315 General Services Administration Motor Pool Vehicles Involved in Accidents</td>
<td>3-30</td>
</tr>
<tr>
<td>3.316 Other Property Damage Reporting and Investigation Requirements</td>
<td>3-30</td>
</tr>
<tr>
<td>3.317 Return of Previously Surveyed Items</td>
<td>3-31</td>
</tr>
<tr>
<td>PART 4 - EQUIPMENT LOANS</td>
<td></td>
</tr>
<tr>
<td>3.400 Scope of Part</td>
<td>3-33</td>
</tr>
</tbody>
</table>
SECTION III
EQUIPMENT ADMINISTRATIVE PROCEDURES
(Installation Equipment)

CONTENTS (Cont’d)

<table>
<thead>
<tr>
<th>Par.</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART 4 - EQUIPMENT LOANS (Cont’d)</td>
<td></td>
</tr>
<tr>
<td>3.401 Authority</td>
<td>3-33</td>
</tr>
<tr>
<td>3.402 Applicability</td>
<td>3-33</td>
</tr>
<tr>
<td>3.403 General</td>
<td>3-33</td>
</tr>
<tr>
<td>3.404 Procedures</td>
<td>3-33</td>
</tr>
<tr>
<td>3.405 Policy and Procedures for the Loan of NASA Equipment to Profit-Making Organizations for Purposes not Covered in a Procurement Contract or Other Agreement</td>
<td>3-35</td>
</tr>
<tr>
<td>3.406 Inventory Control of Outgoing Loans and Leases</td>
<td>3-35</td>
</tr>
<tr>
<td>3.407 Control of Incoming Loans and Leases</td>
<td>3-36</td>
</tr>
<tr>
<td>3.408 Identification of Equipment on Loan or Lease to the Installation</td>
<td>3-38</td>
</tr>
<tr>
<td>3.409 Leased Equipment Converted to Purchase</td>
<td>3-38</td>
</tr>
<tr>
<td>3.410 Control of Borrows between Custodians and Between NASA Installations</td>
<td>3-38</td>
</tr>
<tr>
<td>PART 5 - REMOVAL AND USE OF EQUIPMENT BY EMPLOYEES</td>
<td></td>
</tr>
<tr>
<td>3.500 Scope of Part</td>
<td>3-41</td>
</tr>
<tr>
<td>3.501 Policy</td>
<td>3-41</td>
</tr>
<tr>
<td>3.502 Approval to Remove</td>
<td>3-41</td>
</tr>
<tr>
<td>3.503 Procedures</td>
<td>3-42</td>
</tr>
<tr>
<td>3.504 Removal of Employee-Owned Equipment and Vendor-Owned Equipment</td>
<td>3-42</td>
</tr>
<tr>
<td>3.505 Shipment by Installation</td>
<td>3-43</td>
</tr>
</tbody>
</table>
INTENTIONALLY LEFT BLANK
SECTION III
EQUIPMENT ADMINISTRATIVE PROCEDURES
(Installation Equipment)

3.000 Scope of Section
This section is intended primarily for equipment management personnel. It applies to Installation-held equipment and sets forth the administrative requirements for establishing and maintaining equipment identification and accountability; reporting and acting on lost, damaged, or destroyed equipment; equipment loan procedures; and employee removal and use of equipment off-site.

PART 1 -- EQUIPMENT CONTROL

3.100 Scope of Part
This part sets forth equipment control procedures for Installation-held equipment.

3.101 Controlled Equipment

a. Pursuant to the policy set forth in Section I of this Manual, each NASA Installation will establish and maintain local procedures meeting NEMS requirements for the administrative control of equipment. The procedures will apply to all equipment classifications for which a continuing degree of control is necessary. Such equipment will be referred to generically as controlled equipment.

b. All capital equipment, that equipment with an acquisition cost of $5,000 or more, that has an estimated useful life of 2 years or more, which will not be consumed in an experiment; noncapital, nonsensitive controlled equipment with an acquisition cost between $1,000 and $4,999; and selected items of equipment designated and identified as sensitive by the holding Installation will be recorded and controlled under the procedures prescribed in this section. Selected standard equipment types for control as sensitive are listed in Appendix J. Also see paragraph 3.407 for leased property subject to capitalization.

c. The Equipment Type Accounts set forth in Appendix D are consistent with the Financial Management General Account Structure and will be...
used for classification of controlled equipment and for reconciliation with and reporting of capitalized equipment to finance.

d. Control will be established upon receipt and acceptance by physically marking the equipment with an equipment control number and entering the required data into the NEMS data base, which contains subsidiary records to the NASA General Ledger Accounts.

e. Also, each system, subsystem, or part of a subsystem which meets the criteria for control and is supplied as a unit of controlled equipment on an acquisition document, will be assigned an equipment control number if:

(1) Component equipment items of the system or subsystem are interchangeable;

(2) Component equipment items may be transferred as is for use in a dissimilar system; or

(3) Spare component equipment items are held for replacement of like component equipment items, except when they are identified as Line Replaceable Units (LRU’s) in an inventory management system or when they are stocked in a supply management repair program that controls reparable component equipment items by issue location (also see paragraph 3.204b(5) and NHB 4100.1).

f. Systems not identified to the component equipment item level on acquisition documents will be tagged at the component equipment item level, as appropriate, with the aid of technical personnel. Also see paragraph 3.204 for more information on tagging.

3.102 Noncontrolled Equipment

* a. Noncontrolled equipment are those items that do not meet the definition for control as stated in paragraph 3.101b, which generally have an acquisition cost of less than $1000. Noncontrolled equipment will be managed under procedures developed and prescribed by the holding Installation. All such equipment will be processed through the Installation’s central receiving facility where its receipt will be appropriately documented.
* b. Each item of noncontrolled equipment will be affixed with a "Property of U.S. Government" decal, NASA Form 1517, except when not physically or technologically feasible. Smaller versions may be obtained locally for use on small items of noncontrolled equipment. The use of the NASA Form 1517 on noncontrolled office furniture is optional.

* c. NASA Form 1517/1517a is a circular decal printed in blue on brushed aluminum material in two sizes as shown in Appendix K.

d. The NASA Form 1517 design will be used exclusively by NASA Installations for identification of noncontrolled equipment.

3.103 Experimental and Fabricated Equipment

a. Installation equipment which is designed or fabricated and meets the criteria for controlled equipment will be controlled under procedures prescribed in this section. Equipment integrated with test articles being experimented on and subject to frequent configuration change will not be accounted for as controlled equipment. If subsequent to experimental use an item's configuration and use becomes stable and otherwise meets the criteria for controlled equipment, the item will be added to the NEMS data base.

b. Sources and locations of experimental and fabricated equipment require monitoring to assure that appropriate equipment control actions are accomplished when such equipment meets the criteria for control. The equipment management organization will:

(1) Develop procedures that ensure appropriate control is established over fabricated equipment resulting from work orders, cannibalization, or other similar methods. Such procedures will include coordination with the financial management organization, as necessary, in determining pricing; only the production cost of a fabricated item is capitalized (see FMM 9255-3a),

(2) Identify areas and organizations having experimental equipment and, at least annually, review such areas to ensure proper establishment of any required equipment control.
3.104 Equipment Located at NASA Installations Other than the Funding Installation

a. Equipment accountability for items geographically separated from the funding or acquiring Installation will be vested in the Installation having possession of the equipment, except for short-term loans or removals (1 year with renewable option) of equipment for tests, inspections, and other uses which will be controlled by loan documentation as set forth in paragraph 3.404d. Should the separated location have no Supply and Equipment Management Officer, equipment accountability will be retained by the furnishing Installation. The dispersed location will be identified in the equipment records.

b. Equipment designated for return to the funding Installation will not be disposed of without prior approval by the Supply and Equipment Management Officer of the furnishing Installation.

c. Equipment losses disclosed by inventory or other surveillance will be processed in accordance with Part 3.300. The Installation to which the equipment was to be returned will be advised of the loss and the action taken.

*3.105 Equipment Direct Delivered to Nonfunding Installations

a. The Installation responsible for the procuring of property and processing an invoice or payment is held accountable for the property purchased until the accountability is transferred to and accepted by the Installation that received the shipment. In addition, the Financial Management Officer at the Installation that procures equipment is responsible for recording the purchase and initiating the transfers in the general ledger. The procedures stated in subparagraph should be utilized to ensure that the accountability is maintained and transferred when property is acquired by direct delivery to nonfunding Installations.

b. The program official at the funding Installation is responsible for specifying free on board (F.O.B.) point(s), along with any marking instructions, to the contracting officer concurrent with certifying the requirement. If any F.O.B. point(s) are outside the funding Installation, the program official shall coordinate this decision with the funding
Installation’s Supply and Equipment Management Officer (SEMO) and the Financial Management Officer (FMO). The program official, SEMO, and FMO, will, in turn, indicate to the contracting officer the quantity of contracts or other award documents to be distributed to the funding Installation’s SEMO and FMO to carry out their receiving, accounting and financial requirements for an off-site delivery. The SEMO and FMO will distribute the appropriate copies of award instrument(s) to the receiving Installation’s SEMO and FMO. The receiving Installation will suspend file the relevant documents and, upon receipt, prepare the receiving and inspection (R&I) documentation, enter the appropriate data into NEMS, and financially account for the accepted equipment or supplies. Thus, the funding Installation’s program official, SEMO, and FMO become responsible for assuring that their receiving Installation counterpart individual’s records will allow for proper receipt and accounting for deliverables. The contracting officer supports this activity by distributing the correct quantity of award instruments, concurrent with award, to the funding Installation’s SEMO, FMO, and program official.

** c. Funding and receiving Installation SEMO’s, and the funding Installation FMO, responsibilities are:

(1) **The receiving Installation SEMO will ensure:**

(a) A call, or NASAMAIL message, is sent to the funding Installation NEMS Equipment Manager to report receipt and acceptance of the equipment and the ECN(s) assigned.

(b) A copy of the R&I documentation is sent to the funding Installation Financial Management Officer (FMO) for information only, and the funding Installation Supply and Equipment Management Officer (SEMO), or designee.

(c) NEMS Control adds the equipment item(s) to the NEMS data base when the transfer transaction has been processed by the funding Installation. If the funding Installation processes the transfer transaction immediately, the NEMS central data base (CDB) Transfer Suspense File displays processing of the transfer.
transaction. The receiving Installation will use Transaction 04 (Receipt by Transfer from NASA Installation) to enter the record into NEMS, using the R&I and contract/purchase order as the authorizing source documents.

(d) The receiving Installation SEMO, or designee, signs the shipping document (received from the funding Installation) and returns the appropriate copy to the funding Installation SEMO to acknowledge receipt and acceptance of the equipment, with a copy to the receiving Installation FMO and funding Installation FMO. Receipt document will appropriate capitalization.

**Note:** If the funding Installation fails to process the transfer upon notification of receiving Installation receipt of equipment, the receiving Installation will take action to add the item(s) to NEMS within 3 working days of notification to the funding Installation. If the funding Installation transfer transaction is not processed within 3 working days, then the NEMS add transaction (receiver add) will take place before the NEMS delete transaction (conveyor delete). This means the eventual delete transaction must be released from the NEMS CDB Transfer Suspense File by the NEMS CDB staff.

(2) **The funding Installation SEMO will ensure:** The receiving Installation calls to report receipt, acceptance, and tagging of the equipment. The NEMS Equipment Manager will immediately process a NEMS Transaction 01 (Receipt by Purchase--NASA Funded), using the contract/purchase order as the authorizing source document, and then prepare a shipping document for transmittal to the receiving Installation SEMO. NEMS Transaction 65 (Transfer to Another NASA Installation) will be processed in NEMS, using the shipping document as the authorizing source document.

(3) **The funding Installation FMO will ensure:** The funding Installation FMO uses the signed shipping document to initiate a DD 1322 transfer document to complete financial reconciliation at both the funding and receiving Installation. Note: Financial reconciliation will be delayed on direct delivery equipment items to a non-funding Installation due to the delay in funding Installation receipt of the R&I after the equipment is actually received at the receiving Installation, and the delay in the receiving Installation receipt of the DD 1322 transfer document.
3.106 **Equipment Acquired Under Reimbursable Authority from Other Federal Agencies**

Installations will ensure that equipment acquired by NASA under the terms of interagency agreements, using funds reimbursed by another Federal agency, will be controlled and accounted for under NASA procedures. Control, accountability, and disposition shall be accomplished as specified in the following subparagraphs a, b, and c:

a. Control and accountability of capital equipment acquired by NASA under projects funded by other Federal agencies will be maintained in accordance with the provisions of this Section and the NASA Financial Management Manual (see FMM 9259-13). No separate control or accounting systems will be established for such equipment.

b. To the extent that other Federal agencies (OFA) request the identification of capital equipment acquired with reimbursable funds, such identification shall be limited to items valued at the capitalization level of $5,000 or more. Upon acquisition, such items will be coded in NEMS by add transaction 02 (Receipt by Purchase - OFA Funded), which generates the Agency number from NEMS Table 132, U.S. Treasury Agency Number Table.

c. When requested, NEMS reportable items will be identified to the funding agency at the conclusion of the NASA portion of the project and offered for a screening period of 30 calendar days, during which time the funding agency may select and arrange for shipment of items claimed. Items not claimed will be retained by NASA.

3.107 **Equipment Acquired by Another Federal Agency and Reimbursed by NASA**

When equipment is acquired by another Federal agency and reimbursed by NASA (e.g., under NASA/FAR Supplement 1817.70, NASA-Defense Purchase Request), the equipment will be controlled and accounted for pursuant to that agency’s procedures. However, all excess equipment costing $1,000 or more and in condition code 7 or better (GSA condition codes) will be reported to the NASA originating office for possible reutilization prior to disposition.
3.108 **Uncontrolled Equipment Located that Meets NASA Control Criteria (Referred to as Found on Station (FOS))**

a. Immediate action will be taken to establish control and accountability of all equipment items found on station which meet the control criteria of paragraph 3.101 and which are not individually controlled in the Installation’s equipment records.

b. The Supply and Equipment Management Officer is responsible for ensuring that a documented investigation is conducted for each such discovery or event to determine the circumstance which allowed the equipment to be on the Installation without being brought under equipment management control. NASA Form 1618, Found on Station (FOS) Equipment Investigation, will be used to document the circumstances and investigation (see Appendix H). A copy of the investigation documentation will be provided to the appropriate property custodian.

c. Upon conclusion of the investigation, the Supply and Equipment Management Officer will analyze all findings and facts developed and forward a report to upper management, if warranted, recommending corrective actions necessary to prevent similar occurrences.

3.109 **Space Property**

Installations will ensure that physical and financial accountability for space property which will not be expended in flight and which meets the criteria for controlled equipment is established as follows:

a. When delivered, contractor categorized special test equipment (STE) and ground support equipment (GSE) will be capitalized and accounted for as controlled equipment.

b. Reusable space property, e.g., shuttle orbiters, ground support equipment, payloads, and airborne equipment, will be capitalized and accounted for as controlled equipment.

c. Nonreusable flight space property, e.g., external tanks, and expendable payloads, will be controlled and accounted for in accordance with NHB 4100.1, "NASA Materials Inventory Management Manual," except as provided in subparagraph d.
d. Any space property whether or not acquired for flight which is used for engineering, test, displays, exhibits, or similar purposes will be accounted for as controlled equipment.

3.110 Noncontrolled Office Furniture and Furnishings

Group records may be established and maintained for all noncontrolled office furniture and furnishings. These group records may be established by location, property management area, or Installation. Normally, noncontrolled furniture and furnishings will not be charged to a property custodian. See NMI 4220.1, "Standards for Office Furniture and Furnishings," for further furniture management and control requirements.

3.111 Relocatable Buildings

In accordance with NMI 8811.7, "Relocatable Buildings," relocatable buildings will be accounted for as real property, except for nonrigid structures such as tents and inflatables which will be accounted for as personal property.

3.112 Vendor-Owned Equipment On-Site

When a vendor installs or uses vendor-owned equipment at a NASA Installation, for any reason, and retains title, such equipment must be clearly identified as being the property of the vendor (also see paragraph 3.504).

3.113 Employee-Owned Equipment On-Site

Those Installations that allow employee-owned equipment on-site must establish a mechanism to ensure such equipment is clearly identified as being the personal equipment of the employee (also see paragraph 3.504).
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3.200 Scope of Part

This part sets forth basic requirements for establishing and maintaining accountability of controlled equipment.

3.201 Accountability Requirements

Effective control and accountability of equipment requires the maintenance of data which provides a continuous audit trail of an item from its receipt until transfer of accountability or disposal. The data set forth in paragraph 3.205 will be maintained for each item of controlled equipment.

3.202 Equipment Control Number

a. Each item of controlled equipment will be physically identified with a singular equipment control number. This number will be affixed by means of a bar-coded equipment control number tag or a smaller bar-coded tag for small components or irregularly shaped items. The NASA standard for equipment control number tags, to be used by all Installations for identification and control of NASA controlled equipment, is set forth in Appendix K. The tag will be firmly affixed in a conspicuous place, preferably on the front of the item, which minimizes the possibility of defacement or obliteration and which facilitates reading the bar-code and does not impair the utility of the equipment. The number may be etched or painted on items not conducive to the application of tags.

b. NASA-controlled equipment which will be flown on the Space Shuttle or have other flight applications will be identified and controlled by the flight qualified NEMS bar-coded equipment control tag set forth in Appendix K. The use of any other tag requires a deviation in accordance with paragraph 1.108. In those cases where documented engineering considerations prohibit the physical tagging of the controlled equipment, a property control number may be assigned to the item with the tag retained on a property card (which includes the item description) within the equipment management organization.
3.203 Equipment Control Number Register

An equipment control number register will be established and maintained at each Installation. The register will contain the equipment control numbers listed sequentially and will be used to control the documentation which ensures that all equipment has been recorded in the property records, and to control distribution of the equipment control number tags. The register will include, as a minimum, the following data:

a. Equipment control number;

b. Person(s) holding blocks of tags prior to assignment, if all tags not centrally controlled;

c. Date assigned or tagged;

d. Noun; and

e. Acquisition document identification number.

3.204 Tagging of Equipment

a. Each item of controlled equipment will be affixed with an equipment control number tag upon receipt and acceptance at the Installation as prescribed in paragraph 3.101. All tags will be controlled by the Equipment Control Number Register prescribed in paragraph 3.203. The appropriate property custodian will be promptly notified of all new tagged items assigned to the account by receipt of a NASA Form 1602, NEMS Transaction Document, generated by NEMS for each newly assigned item.

b. In NASA a great number of equipment systems are acquired through purchase or in-house development to accomplish Agency missions. The nature of NASA equipment systems is such that reconfiguration, including the addition and subtraction of equipment component items, is a continuing process. Effective equipment control cannot be obtained or maintained if such items, meeting prescribed criteria, are not controlled and tracked through the accountable records. Additionally, the hooking together by cables and plugs in or out of equipment racks of individually manufactured and identifiable items of equipment, such as teletypes, power supplies, electric counters, recorders, and computers, does not exempt such items from being treated as individually controlled items and tagged as such.
when meeting the criteria for control, even though the items may be collectively performing some system function at any given time. The following criteria will be used for tagging NASA's equipment systems:

(1) Each system or subsystem which meets the criteria for control as set forth in paragraph 3.101 will be assigned an equipment control number if all components remain in place for the system to be functional. If any one component equipment item can be removed for use independently or in a different system or subsystem, the system or subsystem will not meet this test, and all qualified items will be tagged separately.

(2) All component equipment items, whether actually in a system or not, meeting the criteria for control will be assigned an equipment control number when these items may be or are used independently or in different systems and subsystems.

(3) Systems or subsystems, when meeting the criteria for control without some or all of their component equipment items or components, will also be assigned an equipment control number.

(4) Equipment items meeting the criteria for control and held accountable under materials inventory as stores stock, program stock, or standby stock (see NHB 4100.1, "NASA Materials Inventory Management Manual") will not have an equipment control number assigned. However, upon issue for use, action will be taken to assign an equipment control number. Once an item has been issued and assigned an equipment control number, it will not be returned to inventory as stores stock, program stock, or standby stock.

(5) Equipment items that are stocked in a supply management repair program that controls reparable equipment items by issue location will not be entered in the equipment management system. Such items will be uniquely tagged and coded to distinguish them from controlled equipment.

* c. In those instances where some like items are acquired at a cost slightly below the control level
and others are acquired at a cost slightly above the control level, control should be based on the acquisition cost, ensuring like items slightly below the control level are affixed with NASA Form 1517. If such items are not affixed with the NASA Form 1517, unnecessary Found-on-Station investigation and documentation will result.

* d. The application of the criteria set forth in subparagraphs b & c require judgment and knowledge regarding the use and configuration of NASA equipment systems. For effective control of NASA equipment, each Supply and Equipment Management Officer will ensure that these criteria are applied.

3.205 NEMS Equipment Record

A record for each unit of controlled equipment will be established in NEMS upon initial Agency receipt, by initiating an add transaction, and selecting the appropriate Acquisition Transaction Number. The equipment record will include, as a minimum, the following mandatory data fields:

* a. Equipment Control Number (ECN). Each record must contain the Equipment Control Number (tag/decal number) assigned to the corresponding controlled equipment. For equipment acquired prior to October 1, 1989, this number will be 6 positions, with position 1 alphanumeric (not a space) and position 2–6 numeric. For equipment acquired October 1, 1989, and beyond, this number will be 7 positions, with a pseudo-ECN in the 0900000 series assigned to an item purchased by an off-site contractor; and, additionally, a unique identification number assigned by the contractor and affixed to each item of NASA-owned, contractor-held controlled equipment is required. The Contractor Tag Number is 13 positions alphanumeric, right justified, no imbedded spaces, left-most spaces allowed.

* b. Item Name. Each record must contain an item name, not to exceed 30 alphanumeric characters, left justified. Installations, however, may use the local data field to expand the item name for internal use. A future system enhancement will add an optional item name field. The standard to be used for assigning item names is the Federal Cataloging Handbooks, H6 series. The NEMS Central Cataloger is responsible for central standardization of item names (see Part IV, paragraph 4.501d).
* c. **Manufacturer’s Code.** Each record must contain a 5-position alphanumeric manufacturer’s code, derived from the Federal Cataloging Handbook, H4/H8-Commercial and Government Entity (CAGE). If a manufacturer’s CAGE code cannot be identified, the NEMS Central Cataloger will provide standard alpha codes. The NEMS Central Cataloger will distribute semiannually to all NASA Installations a catalog (by microfiche) of the currently used manufacturers codes. The NEMS Central Cataloger may be reached via FTS 453-8517, NASAMAIL (NEMSCAT), or by regular mail to: NEMS Central Cataloger, NASA Headquarters, Code PRC-2 Washington, DC 20546. The NEMS Central Cataloger will centrally manage the update of Installations’ Manufacturer Code Table and equipment files with appropriate codes. The following codes will be used in order to load an equipment record into NEMS prior to assignment of a permanent code by the NEMS Central Cataloger: ’XXXXX’ will be used if a manufacturer is known, but a code needs to be assigned; ’ZZZZZ’ will be used when a manufacturer is unknown; ’YYYYY’ will be used when the manufacturer has been verified as unknown.

* d. **Manufacturer’s Model Number.** When known, each record will have a left justified model number not to exceed 20 alphanumeric positions. The manufacturer’s name plate data will be the standard for this field. Special characters [dash (-), period (.), and slash (/)] are used only when separating alpha character(s) from alpha or numeric characters from numeric. If there is no model number, enter the word ‘NONE.’

* e. **Manufacturer’s Serial Number.** When known, each record will have a left justified manufacturer’s serial number not to exceed 20 alphanumeric positions. The serial number may be entered with dashes, slashes, etc. If there is no serial number, enter the word ‘NONE.’

* f. **Date Installation Acquired.** Each record must contain the year, month, and day that the current accountable Installation, or a contractor at that Installation, received or identified an item of equipment. The date is a 6-position numeric, expressed as "yy mm dd." The Date NASA Acquired is generated from the Date Installation Acquired the first time an item is added to the NEMS data base.

g. **Custodian Account Number.** Each record must contain no more than a 5-position alphanumeric, left
justified number for the current custodian account, except for off-site contractor-held records. The account number must match the Installation Custodian Account Number table.

h. Federal Supply Class (FSC). Within the 13-position numeric National Stock Number, each record must contain in the first four positions the appropriate 4-digit FSC. The Federal Cataloging Handbooks, H2 series, will be used for classifying all equipment and assigning the correct FSC.

i. Acquisition Document Control Number. Each record must contain the acquisition document control number, i.e., the purchase order number, contract number, receiving report number, or other appropriate document number. This field must be left-justified and may contain up to 11 alphanumeric positions.

j. Capital/Sensitive Code. Each record must contain an appropriate 1-position alphanumeric, management identification code as follows:

(1) M - Capital Equipment-Nonsensitive (greater than or equal to (GE) $5,000).

(2) N - Noncapital Equipment-Sensitive (less than or equal to (LE) $4,999).

(3) P - Capital Equipment-Sensitive (GE $5,000).

* (4) Q - Noncapital Nonsensitive Controlled Equipment (GE $1,000, but LE $4,999).

(5) E - Contractor Equipment Reportable for Reutilization (GE $1,000).

(6) X - Noncontrolled Equipment (includes loan-in and lease-in items).

k. Acquisition Cost. Each record must contain the acquisition cost. Costs are rounded to whole dollars in a 9-position numeric field, left- or right-justified (stored right-justified with leading zeroes). Some Installations, however, have been authorized to carry a decimal point and two positions for cents as required by the local Financial Management Officer. Paragraph 4.501m further describes the criteria for determining acquisition cost based upon the type of receipt.
1. **Year Manufactured.** Each record must contain a 2-position numeric field for the year in which an item of equipment was manufactured. For an item acquired by purchase, the year purchased is used. For an item acquired by means other than purchase, the actual or estimated year of manufacture is used.

m. **Status Code.** Each record must contain the relative availability of the item of equipment for redistribution. The possible 1-position alphanumeric values are:

   (1) A - Active-Assigned; item unavailable in the normal conduct of business since the item is in use.

   (2) B - Inactive-Assigned; item in loan pool, in storage, on lease or loan out; item is considered sufficiently available to make screening worthwhile; accountable Installation must approve a transfer.

   (3) C - Interactive-Unassigned, item is available upon demand; items with condition codes 1-7 are required to be held in this category for a minimum of 90 days to assure adequate visibility.

   (4) D - Excess; item is available for redistribution: it has been through the 90-day screening period or has been reported in condition codes 8-9, S (scrap), or X (salvage); item is considered NASA excess and is going through the disposal process. See exception for use of status code D in paragraph 4.204.

*n.* **Equipment Location by Zip Code and Building.** A 5-position alphanumeric field for the U.S. Postal Service zip code is used for the geographical location of an equipment item. The NEMS Central Cataloger provides a central point of control for standardizing alphabetic codes for foreign locations. A 10-position alphanumeric, left-justified number of the building or other generalized location is used for equipment location. Building Location must match the Installation’s Building Number Table.

o. **Mandatory Data Elements Generated by NEMS.** Three data elements are always computer generated by
NEMS when a controlled equipment record is established. They are:

(1) **Equipment Type Account;** A 4-position numeric field (from 1551-1563) designating the type of equipment, e.g., laboratory equipment or automatic data processing equipment, by account for financial reporting purposes. The Equipment Type Account is generated by cross-reference from the Federal Supply Group Table, which uses the first two positions of the National Stock Number (Federal Supply Group (FSG)) as the key to the table.

(2) **Date NASA Acquired;** A 6-position numeric date in "yy mm dd" format that is generated from the add transaction at time of initial receipt within the Agency. Date NASA Acquired does not change when an item is transferred from one NASA Installation to another.

(3) **Acquisition Entry Reference Number;** A 10-position unique computer-generated number assigned at the time an add transaction is processed, which begins the audit trail for the item. Every transaction processed in NEMS (add, change, and delete) generates an Entry Reference Number. The Entry Reference Number consists of:

(a) Positions 1-2 - Installation number (see NASA Installation Number Table, paragraph 4.501b);

(b) Positions 3-6 - Julian date (yddd format);

(c) Positions 7-10 - sequence number assigned each transaction during the day, starting each day with 0001.

P. **Mandatory Fields for Certain Add Transactions.** Four NEMS data fields become mandatory under certain conditions:

(1) **User Number;** A 6-position alphanumeric, left-justified identification number assigned to a person holding sensitive, borrowed, or loan pool equipment. At some NASA Installations a User Number is required for all equipment holders. User Numbers must match the Installation's User Number Table.
(2) **Condition Code:** A 2-position alphanumeric, right justified code that indicates the physical condition and usability of an item of equipment (see Appendix A). The condition code must be entered if the availability status code is B, C, or D. For instance, when an equipment record is established for an item going to a loan pool, status code B is assigned, thereby requiring assignment of a condition code. Condition Codes must match the Condition Code Table.

(3) **Other Government Agency:** A 2-position numeric U.S. Treasury identification number is required when an equipment record is established as a result of a government agency providing NASA with funds for acquiring equipment or transferring equipment to NASA. The identification number must match the U.S. Treasury Agency Number Table.

(4) **Contractor Number (Accountable):** When an equipment record is established as a result of furnishing to or purchase by a contractor, the contract number assigned to the NASA contractor responsible for the equipment is required. The Contract Number is 9-position alphanumeric, entered right-justified, with left-most spaces allowed. Four previously mandatory data elements are not mandatory for a purchase by a contractor. They are Equipment Type Account, Custodian Account Number, User Number, and Building Location.

### 3.206 Transaction Audit Trail

All additions, deletions, changes, and adjustments to the NEMS records of controlled equipment generate an Entry Reference Number (ERN) that provides a readily identifiable audit trail of all actions affecting the equipment records (see paragraph 3.2050(3)). The Entry Reference Number also is used to locate the transaction source document that was microfiched or microfilmed at the time a NEMS transaction was processed.

### 3.207 Management Data and Statistical Records

a. In addition to a transaction audit trail, data and statistical records must be available monthly through NEMS for reporting purposes. NEMS offers preprogrammed ad hoc query capability for extracting...
various combinations of equipment management data. However, capital, noncapital nonsensitive controlled, and noncapital sensitive items, and their value, must be reported semiannually (as of March 31 and September 30), or on request, by specific data sorts. NEMS Report 410 provides the data sorts required for the semiannual report. The data required includes:

(1) The capital, noncapital nonsensitive controlled, and noncapital sensitive items and value on hand at the beginning and ending of the reporting period. The additions and deletions required to balance the beginning and ending figures are sorted as follows:

(a) Additions during Period for: (i) New Procurement; (ii) Found on Stations; (iii) Transfers In; and (iv) Other (including, but not limited to, fabrications, cost adjustment, modifications, return from excess).

(b) Deletions during Period for: (i) Reports of Survey; (ii) Transfers Out; (iii) Reported as Excess; and (iv) Other (including, but not limited to, cost adjustments, decontrol, and cannibalization).

(2) The capital, noncapital nonsensitive controlled, and noncapital sensitive items and value on loan and on lease at the end of the reporting period.

* (3) The capital and noncapital nonsensitive controlled items and value screened through NEMS for reutilization.

b. Prior to NEMS implementation, all of the data described in subparagraph a was manually reported on NASA Form 1324, Semiannual Report of Supply and Equipment Management Operations. The 1324 Report continues to be used for reporting purposes; however, the data will be generated monthly by NEMS Report 410. Report 410 cumulative data will be reported on NASA Form 1324 as of March 31 and September 30 each year (RCS 10-0000-00229).
3.208 **Reconciliation, Adjustment, and Reporting of Property Records and Financial Accounts Balances**

a. As required by paragraphs 1.305 and 1.316, a semiannual reconciliation and adjustment of property records and financial accounts will be conducted. Each Installation Financial Management Officer and Supply and Equipment Management Officer will establish a monthly transaction cut-off date to facilitate the reconciliation. The NASA Form 1490 Analyses of Fixed Assets Report will be jointly signed by the Installation Financial Management Officer and the Supply and Equipment Management Officer to reflect the agreed upon ending balances that will be utilized for financial reporting purposes.

b. The Analyses of Fixed Assets Report (NASA Form 1490), the account balances submitted via the General Ledger Accounts System (GLAS), and the year-end fiscal Supplemental Analyses Schedule required by FMM 9391-9a must be in agreement.

3.209 **Control of Documents**

Detailed Installation procedures will be formulated to ensure that all documentation and transactions affecting the accountable records, such as additions, deletions, adjustments, and accountability changes in location, are serially controlled and processed promptly. A microfiche/microfilm file of this documentation will be maintained by the NEMS Equipment Manager.

3.210 **Property Custodian Records**

NEMS Control will provide property custodians with a NASA Form 1602, NEMS Transaction Document, for each item of equipment assigned to their account. Each individual record will identify the appropriate capital/sensitive code as specified in paragraph 3.205j. Custodians also will be furnished a semiannual (or on request) report of all equipment assigned to their accounts, NEMS Report 140, Custodian Account Property Report. Property custodians will maintain or have access to files of documents affecting receipt, movement, and disposition of controlled equipment in their property management areas.
Receiving and Inspection of Equipment

a. All equipment entering an Installation, regardless of source, will be processed by the Installation supply and equipment organization.

b. Upon receipt of purchased equipment, inspection against the requirements of the acquisition document will be performed prior to acceptance by the Government. A check will be made for damage and defects, and accountability will be established for controlled equipment in accordance with paragraphs 3.202 and 3.204, and by preparing the documentation necessary for entering the equipment data into the NEMS data base. Equipment delivered on a DD Form 250, Material Inspection and Receiving Report, or equivalent acceptance document, will be fully priced at the line item level. An incomplete DD Form 250 will be referred to the appropriate contracting officer for correction. The assigned equipment control numbers are to be recorded on the receipt and inspection report along with any serial number, model numbers, or other appropriate identifying markings.

c. Other receipts of equipment will be received and reviewed against the accompanying shipping documentation, and, if accountable to the Installation as controlled equipment, assigned an equipment control number the same as purchased equipment. Controlled equipment transferred in from another NASA Installation retains the equipment control number assigned by the initial acquiring Installation.

d. Equipment entering the Installation on loan or lease will be handled and identified as required by paragraphs 3.407 and 3.408.

Shipment of Equipment

Equipment to be hand-carried or shipped from the Installation will be documented and coordinated with the Supply and Equipment Management Officer or designee prior to the physical movement of the equipment in order to ensure that the proper actions and adjustments are made to the NEMS equipment control records.
3.213 Removal of Tags and Other NASA Identification

a. When NASA control of an item of equipment is discontinued for any reason (except for equipment shipped to a contractor as Government Furnished Equipment (GFE) as noted in subparagraph b), the equipment control number tag and all other NASA identification will be removed or obliterated. The number will be canceled by the current accountable Installation and so shown on the reference document used to support the removal of the item from the NEMS control records. Also, when an item of noncontrolled equipment is disposed of or transferred from NASA, all NASA identification will be removed or obliterated.

* b. The one exception to removal of the tags is that controlled equipment shipped to a contractor as Government Furnished Equipment (GFE). This GFE will retain the equipment control number tag.

3.214 Equipment Sent Off the Installation for Repair, Calibration, and Under the Terms of a Warranty

The Installation will maintain equipment control over items of equipment that are removed from the Installation for repair, calibration, or under the terms of a purchase warranty. Installation equipment control numbers in such cases may be removed from the items, if appropriate; however, accountability will remain with the appropriate custodian. The Supply and Equipment Management Officer will establish procedures to ensure the return of the equipment to the Installation and subsequently to the property custodian account. Further, such procedures will provide for all necessary adjustment actions should a substitute item be returned to the Installation.
PART 3 -- SURVEY OF LOST, DAMAGED, OR DESTROYED EQUIPMENT

3.300 Scope of Part

This part prescribes the administrative and procedural requirements for the survey of lost, damaged, or destroyed equipment and any other personal property for which survey action is directed.

3.301 Applicability

This part is applicable to all personal property of NASA Headquarters and Field Installations. This part does not apply to Government property in the possession of NASA contractors and grantees; it does apply to that property used by contractors which is accounted for in the Installation's equipment control system.

3.302 Policy

A survey will be made immediately when Government property for which accountability is maintained is lost, damaged, or destroyed. At the discretion of the Supply and Equipment Management Officer or other appropriate official, a survey may be made to cover the loss, damage, or destruction of personal property for which accountability is not maintained.

3.303 General

A survey is an administrative action whereby the loss, damage, or destruction of Government property is investigated and reviewed to establish pertinent facts, adjust the records, and determine the extent or absence of personal responsibility for such loss, damage, or destruction. When theft is suspected, the Installation Security Officer will be notified immediately. A copy of any investigative report and finding will become part of the Survey Report.

3.304 Government Employee Disciplinary Action

A Government employee may be subject to disciplinary action for any loss, damage, or destruction of Government property resulting from the employee's negligence, misuse, dishonesty, or wanton and willful misconduct. Taking disciplinary action does not prevent the Government, in appropriate situations, from enforcing other remedies which may be available to it, such as asserting a claim.
against the employee. If such action is deemed warranted, the Installation's Legal Counsel will provide guidance. If disciplinary action is recommended, the matter will be referred to the employee's supervisor who should contact the Personnel Officer for guidance. An employee will not be found responsible or disciplined for the loss, damage, or destruction of property resulting from the employee's performance or failure to perform an action because of a reasonable error in judgment or because of a physical limitation.

Procedures for Submitting Survey Reports (for Motor Vehicle Accidents see paragraph 3.314)

a. When Government property for which accountability is maintained is lost, damaged, or destroyed, the individual who had possession of the property at the time will notify his/her property custodian, then promptly prepare Part I of the Survey Report, NASA Form 598 (Appendix E), and submit it to the Supply and Equipment Management Officer via the accountable division director/chief or equivalent organization head.

b. The division director/chief or equivalent organization head will review the report submitted by the possessor and specify in Part II what corrective action is proposed or has been taken to prevent recurrence. The division director/chief or equivalent organization head will then sign Part II of the Survey Report and forward it to the Supply and Equipment Management Officer.

c. The Supply and Equipment Management Officer will verify or ascertain the value of the lost, damaged, or destroyed property. In cases of damage, appropriate technical personnel of the Installation will be requested, when necessary, to assist in ascertaining repair costs. This information will be included as part of the Survey Report.

d. The Supply and Equipment Management Officer will, upon initial receipt of the Survey Report, authorize the NEMS delete transaction (71) for survey of loss or destruction items, and notify the Installation Financial Management Office of the adjustment to the records. In case of damage, items will not be deleted from NEMS, and the cost will not be adjusted if fully repaired.
3.306 **Time Limit on Submitting Survey Reports and Completing Action**

Survey Reports must be submitted by the division director/chief concerned to the Supply and Equipment Management Officer within 30 working days of the discovery of property loss, damage, or destruction; and action on the Survey will be completed within 90 working days of the division director/chief submittal. The 90 working-day time limit may be extended if the survey report is being investigated by the Installation Security Officer or the Installation Office of Inspector General. Supporting documentation must be obtained by the Property Survey Officer or Property Survey Board.

3.307 **Survey Report Register**

The Supply and Equipment Management Officer will ensure maintenance of a Survey Report Register, NASA Form 599 (Appendix E). Each Survey Report will be assigned a number and entered in the Register upon initial receipt. All documents pertaining to a Survey Report will be identified with the report number.

3.308 **Survey Action Procedures and Routing**

a. When the loss, theft, damage, or destruction of two or more items is the result of a single event or discovery, one Survey Report will be prepared. Preparation of separate Survey Reports for individual items would be considered circumvention because it is necessary to determine the overall cause and recommend actions to prevent recurrence of such cases.

b. The Supply and Equipment Management Officer will:

   (1) Refer Survey Reports to the Property Survey Board for investigation, findings, and recommendations if the loss, damage, or destruction of property exceeds $1,000 in total acquisition value; and

   (2) Forward all other Survey Reports to the Property Survey Officer. The Property Survey Officer will investigate the Survey Report or, if deemed necessary, refer the Report to the Property Survey Board.
3.309 **Investigation and Findings by Property Survey Officer or Property Survey Board**

a. Each Survey Report will be fully investigated and written findings made as to the:

   (1) Facts concerning the loss, damage, or destruction; and

   (2) Extent or absence of personal responsibility for such loss, damage, or destruction.

b. All evidence, testimony, and other information considered during the investigation will be clearly documented.

c. Survey Board meetings will be held as required, preferably on a regular schedule, by assembling the Board and documenting all actions taken in written minutes. Such minutes, in order to fully meet the requirements of subparagraphs a and b, will be in addition to the statements included on the Survey Reports.

3.310 **Recommendations by Property Survey Officer or Property Survey Board**

a. On the basis of the investigation and findings, one of the following recommendations will be made:

   (1) All concerned should be relieved from accountability and responsibility for the loss, damage, or destruction; or

   * (2) That the individual(s) involved should be disciplined (see paragraph 3.304).

b. Specific corrective or preventive action to prevent recurrence will be set forth as appropriate. Also, point out to division directors/chiefs when they have failed to meet the 30 working-day timeframe.

* c. For adequate internal control, the Installation Supply and Equipment Management Officer must ensure followup on the implementation of all recommendations arising from the survey process.

d. Indications of illegal or unethical conduct will be referred to the Inspector General in accordance with NMI 9950.1, "The NASA Investigations Program."
* e. In case of suspected or apparent employee negligence, the employee will be provided the opportunity to present his/her case personally or in writing to the Property Survey Officer or Property Survey Board during the course of the investigation, and prior to any final determination by the Property Survey Officer or Property Survey Board. An employee may appeal to the Installation Director within 30 work days if found responsible for loss, damage, or destruction of personal property.

3.311 Approvals by Property Survey Officer

The Property Survey Officer will review all Survey Reports and related evidence, and may return a Survey Report for reconsideration should the Property Survey Officer not concur with the findings or recommendations. The Property Survey Officer will approve all Survey Reports. Survey action will continue on a report until it is approved.

3.312 Approved Survey Reports Distribution

a. Approved Survey Reports will be forwarded to the Supply and Equipment Management Officer for distribution as shown in Part VI of the Survey Report.

b. The Supply and Equipment Management Officer will ensure complete entries in the Survey Report Register and filing of the original Survey Report with its supporting documents.

3.313 Reporting

* The Installation Property Survey Officer, in conjunction with the Chairperson, Property Survey Board, designated in accordance with paragraphs 1.318 and 1.319, respectively, will ensure that feedback is provided to the Installation Director via a written report at least annually through official channels. This report, at a minimum, should include:

a. The total number of Survey Reports processed at the Installation during the reporting period.

b. The total number of Survey Reports submitted by each directorate or equivalent organization.
c. The acquisition value of the lost, damaged, or destroyed property for each directorate or equivalent organization.

d. General information regarding significant actions, problems, or other matters of substance related to Survey Reports, including trends by organization, location, or equipment type.

3.314 Optional Use of Investigation Report of Motor Vehicle Accident (Standard Form 91A)

a. To avoid duplication of investigation and reporting, NASA Headquarters and Field Installations are authorized to use the Investigation Report of Motor Vehicle Accident, Standard Form 91A, in lieu of the Survey Report (NASA Form 598) when a motor vehicle is damaged or destroyed in an accident.

b. Completed copies of Standard Form 91A received by the Supply and Equipment Management Officer will be processed in the same manner as NASA Form 598 (see paragraph 3.305).

c. Complete survey procedures need not be followed when a motor vehicle is damaged and the cost of replacement or repair does not exceed $250; there is not bodily injury; and the Transportation Motor Vehicle Operations Officer, with Office of Chief Counsel approval, determines there is no negligence. However, a Standard Form 91A will be submitted to the Transportation Motor Vehicle Operations Officer.

3.315 General Services Administration Motor Pool Vehicles Involved in Accidents

Accidents involving a NASA employee operating a GSA motor pool vehicle will be investigated and reported as prescribed in FPMR Subpart 101-39.8.

3.316 Other Property Damage Reporting and Investigation Requirements

* a. In addition to Survey Report processing, the NASA Basic Safety Manual, NHB 1700.1(V1-A), Chapter 9, establishes investigation and reporting procedures for accidents and incidents. NMI 8621.1, Mishap Reporting and Investigating, establishes reporting and investigating procedures to determine mishap causes and prevent their recurrence. The
spectrum of mishaps includes accidents and incidents involving damage to property occurring in any NASA or NASA-related activity.

b. Mishaps involving damage or destruction to aircraft may be reported on the following forms, as appropriate, to avoid duplication of investigation and reporting: NASA Form 1388, Mishap Report Table of Contents; NASA Form 1389, Mishap Report; NASA Form 1391, Aircraft Flight Mishap Report. The Supply and Equipment Management Officer must obtain approved copies of the appropriate mishap reports in order to delete the aircraft from the property records (in the cases of loss or destruction) and notify the Installation financial management organization of the adjustment to the records. In the case of damage, aircraft will not be deleted from the property records, and the cost will not be adjusted if fully repaired; however, the Supply and Equipment Management Officer will keep copies of the approved mishap reports on file.

*3.317 Return of Previously Surveyed Items

Equipment items surveyed as lost, but later reported as found, will be physically verified, and the date found, location, and individual sighting the item annotated on the source document that authorizes reentry into NEMS by Transaction 19 (Receipt from Reinstating Item Previously Surveyed). Also see inventory reporting requirements in paragraph 5.302a(7).
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PART 4 -- EQUIPMENT LOANS

3.400 Scope of Part

This part sets forth the authority, requirements, responsibilities, and procedures for authorizing and accomplishing the loan of NASA equipment. This part does not apply to the providing of equipment under the terms of a NASA contract or grant which is governed by the Federal Acquisition Regulation (FAR) and NASA/FAR Supplement or NASA Grant and Cooperative Agreement Handbook.

3.401 Authority

a. Section 203, National Aeronautics and Space Act of 1958, as amended.

b. NMI 1050.1 Interagency Agreements -- Delegation of Authority and Procedural Requirements.

c. NMI 1050.3, Delegation of Authority -- To Take Actions Related to Certain Agreements with Colleges and Universities.

3.402 Applicability

a. Subject to the loan policy set forth in paragraph 1.211, the provisions of this part control any proposed arrangement whereby NASA equipment is to be used by other than the holding Installation or its support contractors physically located on-site in the performance of official duties.

b. Loans to profit-making organizations can only be accomplished when the specific requirements set forth in paragraph 3.405 are met and followed.

3.403 General

Loans made outside NASA must be made by an appropriate instrument. These loan agreements must be coordinated with the Installation Office of Chief Counsel and implemented in accordance with the provisions of paragraph 3.404 or 3.405.

3.404 Procedures

a. Any NASA employee receiving a request for the loan of NASA equipment will refer the request to the Installation Supply and Equipment Management Officer. Contacts regarding proposed loans should be
made far enough in advance to permit orderly review and approval of the request and timely preparation of the necessary documentation.

b. The Supply and Equipment Management Officer will coordinate all loan requests with affected organizational elements to determine if the use of the equipment at the Installation is greater than the use for which the loan is being requested. If the equipment may be released without adversely affecting Installation requirements, the Supply and Equipment Management Officer will obtain concurrence for the loan from the authorized official of the holding organization (see paragraph 2.208).

c. When the concurrence of the authorizing official has been obtained and the loan is to be made outside of NASA, the Supply and Equipment Management Officer will consult with the Installation's Office of Chief Counsel for assistance in determining the appropriate method for accomplishing the loan.

d. If the loan is to be made to another NASA Installation, it is referred to as a "borrow" in NEMS (see paragraph 3.410).

e. If the loan is to be effected by a loan agreement, the completed loan agreement will be approved by the Installation Director or designee.

f. If the loan is to be effected pursuant to the terms of any other type of agreement, the loaning documentation, i.e., correspondence, subordinate loan agreements, shipping documents, etc., will be approved by the Installation Supply and Equipment Management Officer.

g. If the loan is to be effected with any foreign government or organization, it will be approved by the International Relations Division (Code XI), NASA Headquarters.

h. The actual physical movement of the equipment will be arranged by the Supply and Equipment Management Officer.

i. For each loan the Supply and Equipment Management Officer will ensure a case file is established containing appropriate copies of authorizing agreements and all other pertinent supporting documentation.
3.405 Policy and Procedures for the Loan of NASA Equipment to Profit-Making Organizations for Purposes not Covered in a Procurement Contract or Other Agreement

a. NASA equipment may be made available to profit-making organizations only for purposes authorized by the Space Act and specified in the loan agreement. Loans of equipment under this paragraph must be authorized and approved by the Installation Director. No delegation of authority for this type of action is authorized.

b. In each case, and before the loan is accomplished, the following will be included in the supporting file:

(1) A determination that the loan does not confer on the user any unfair advantage;

(2) Coordination with the Installation procurement officer to ensure that the user will not receive an unfair competitive advantage for a Government contract;

(3) A determination of whether monetary consideration will be required for use of the property.

c. Each loan and its supporting file will be reviewed and concurred in, before execution, by the Installation Supply and Equipment Management Officer and Chief Counsel.

d. Loan agreements will be restricted to 1-year periods. Agreements may be renewed upon approval of the Installation Director.

e. NASA Headquarters, Supply and Equipment Management Office, will be provided executed copies of all such loan agreements involving equipment costing $100,000 or more.

3.406 Inventory Control of Outgoing Loans and Leases

a. Each loan agreement initially approved for a duration of more than 1 year will contain a provision requiring the loanee to report and certify to the lending Installation Supply and Equipment Management Officer, on the anniversary date of the loan, a statement which contains the identification number assigned to the equipment, its name, its current location and date physically sighted, its
current use, and validation of the requirement for continuation of the loan. This requirement also applies to 1-year loans that may be extended.

* b. The Supply and Equipment Management Officer, or designee, will maintain a suspense system on all outgoing loans in order to ensure that the equipment is returned on schedule or the loan extended. The NEMS Equipment Manager will request on a monthly basis NEMS Report 131, Loaned Out Equipment Expiration Report. This report generates all outgoing loans due to expire within a selected date range. The loaning officials must review extension requests, state the Installation’s reuse date, and certify extension of expired loans prior to a loanee’s annual recertification in order to ensure loans do not exceed the temporary use policy. Loan recertifications will verify continued use for the original purpose in order to recertify and extend equipment loans.

* c. The Supply and Equipment Management Officer, or designee, will maintain a suspense system on all outgoing leases in order to ensure that the equipment is returned on schedule or the lease extended. The NEMS Equipment Manager will request, as required, NEMS Report 133, Leased Out Equipment Return Candidate List. This report generates all outgoing leases due to expire within a selected date range. Authorizing officials must review and certify extension of expired leases prior to renewal in order to ensure outgoing leases do not exceed temporary use policy.

3.407 Control of Incoming Loans and Leases

* a. All incoming loans and leases of equipment that meet the criteria for control, regardless of source, will be processed at the time of receipt by the Supply and Equipment Management Officer, or designee. Any organization loaning equipment to NASA must have a written loan agreement with NASA. Equipment identified in writing for lease or loan for 60 calendar days or less need not be accountable in NEMS if appropriate documentation is on file in the equipment organization and equipment is physically identified as belonging to the loaner/leaser. The loanee/leasee is responsible for returning the equipment, through the equipment organization, within 60 calendar days. For all other equipment meeting control criteria, adequate controls will be established by processing NEMS
Transaction 8 (Receipt from Lease In) or Transaction 9 (Receipt from Loan In), as appropriate, in order to account for incoming loans and leases in NEMS during the loan or lease period at the Installation. The cost for incoming loaned and leased items will be the estimated fair market value and the capital sensitive code will be "X." See paragraph 3.407b for NEMS identification of leases subject to capitalization. The NEMS Equipment Manager will request, on a monthly basis, NEMS Report 130, Loaned In Equipment Expiration Report. This report generates all incoming loans due to expire within 30 days of the date of the report. The using official must review the loan requirement and arrange for return of the loaned equipment, or request extension from the authorizing official of the loaning organization. Also, the NEMS Equipment Manager will request, as required, NEMS Report 132, Leased In Equipment Return Candidate List. This report generates all incoming leases due to expire within a selected date range. The using official must review the lease requirement and arrange for return of the leased equipment or request extension from the authorizing official of the leasing organization.

* b. As required by FMM 9259-3, leased property is subject to capitalization if the fair market value is $5,000 or more, the useful life is 2 years or more, and the terms of the agreement are equivalent to an installment purchase. Installment purchase means: (1) lease transfer to ownership at end of lease; (2) lease contains option to purchase at a bargain price; (3) noncancelable length of lease is equal to or greater than 75 percent of the estimated economic life; or (4) present value of rental or other minimum lease payments equals or exceeds 90 percent of the fair market value. Criteria (3) and (4) do not apply if the beginning of the lease term falls within the last 25 percent of the total estimated economic life of the lease property. All incoming leased equipment will be reviewed by the financial management organization to determine when capitalization requirements apply. When financial management determines a leased item will be subject to capitalization, the NEMS Equipment Manager will ensure that the Loan/Lease Document Number field begins with a "C." As of September 30 each year, the NEMS Equipment Manager will request NEMS Report 136, Leased Equipment Subject to Capitalization. Report 136 will be forwarded to the financial management organization by October 10 for preparation of the Analysis of Leases Report (see FMM 9259-5).
3.408 Identification of Equipment on Loan or Lease to the Installation

Each Installation will affix a NEMS bar-coded loan-lease tag (see Appendix K) to incoming loaned or leased equipment at the time of receipt in order to clearly show that such equipment is not owned by the Installation (see exception in paragraph 3.407a).

*3.409 Leased Equipment Converted to Purchase

When NASA takes title to a leased item, the bar-coded paper lease tag should be replaced with a bar-coded permanent metal tag, and the item reentered in NEMS with Transaction 21 (Lease to Purchase). The add transaction should record the original lease tag number in the Previous ECN field, and record the estimated fair market value in the Cost field. The leased record is then deleted in NEMS with Transaction 87 (Conversion of Lease to Purchase).

3.410 Control of Borrows between Custodians and between NASA Installations

In order to differentiate internal loans from external loans within NEMS, the term "borrow" is used for items moving within NASA for temporary use (see paragraph 3.404d). Borrows are initiated by one custodian at the request of another custodian at the same Installation, or, by one NASA Installation at the request of another NASA Installation through NEMS Transaction 38, Borrowed Out. Transaction 38 generates monthly suspense reports as described in paragraph 3.410c. Return of a borrowed item to an accountable custodian is accomplished with Transaction 39, Borrowed Out-Returned.

a. Borrows between Custodians. Items to be borrowed by another custodian are authorized and recommended for all short-term uses in lieu of purchasing new equipment. Custodian borrows for less than 60 days may be controlled by the lending custodian by annotating his/her records accordingly. However, borrows between custodians for over 60 days will be processed through NEMS in order to create a monthly suspense file to ensure return or transfer of a borrowed item.

b. Borrows between NASA Installations. The Supply and Equipment Management Officer will initiate
another NASA Installation’s equipment borrow request through locally established documentation with the Supply and Equipment Management Officer of the requesting Installation. Borrows of equipment between NASA Installations normally will not exceed 1 year. Equipment required for more than 1 year will be transferred if no requirement exists at the holding Installation (see paragraph 3.104).

* c. Upon request, for a selected date range prior to the expiration of an equipment borrow, NEMS Report 134, Borrowed Equipment Return Candidate List, will be generated for action by the accountable custodian. NEMS Report 350, Borrow Out Greater Than One Year, also may be generated upon request in order to ensure equipment return or transfer.
PART 5 -- REMOVAL AND USE OF EQUIPMENT BY EMPLOYEES

3.500 **Scope of Part**

This part sets forth procedures and responsibilities for the removal and use of equipment off-site by NASA employees.

3.501 **Policy**

* a. Installation equipment may not be removed from the Installation by a NASA employee except for official temporary use and when such use is necessary or beneficial to the conduct of NASA's missions or other Government purposes. Temporary use is that short-term use required to complete an official and specific program/project assignment that cannot be accomplished on-site during normal business hours. This period of use normally will not exceed 30 calendar days. Temporary use requires written approval from the responsible division director/chief, following the requirements cited in paragraph 3.503b.

* b. The period of use may be extended by the responsible division director/chief with recertification (paragraph 3.502) not to exceed 6 months. Off-site use of equipment for 6 months or longer will conform to the conditions of subparagraphs (1)-(5) of paragraph 1.211a, Equipment Loan Policy, and will be supported by the appropriate shipping document.

*3.502 **Approval to Remove**

Approval to remove equipment from the Installation for temporary use by a NASA employee will be granted by the division director/chief, provided the request is in accordance with the policy of this part. Such approval is subject to division director/chief certification that removal of the property will not adversely affect the performance of official duties in the division by the requesting employee or any other division employee and that the property being removed is not excess property. Failure to meet policy and approval requirements can lead to disciplinary action for the employee, especially if loss, damage, or destruction occurs during the removal period.
3.503 **Procedures**

a. NASA Form 892, Property Pass and Removal Permit, will be used for the removal of Government-owned equipment from the Installation by a NASA employee.

* b. The requester will prepare the NASA Form 892, which will show the requester's name and organization code, the purpose for temporary removal of the equipment, the period of required use and what specific date the official, temporary use will be completed, and an explanation of why the official use cannot be accomplished on-site during normal business hours.

 c. The NASA Form 892 will be submitted to the division director/chief for approval as stated in paragraph 3.502.

* d. For controlled equipment, after approval by the division director/chief, the NASA Form 892 will be submitted to the property custodian who will annotate the custodian record to reflect the temporary use of the equipment. A copy of the NASA Form 892 will be retained by the property custodian until return of the equipment has been verified. Use approved beyond 30 calendar days will be revalidated every 30 calendar days by the property custodian and annotated on the NASA Form 892.

* e. The equipment will be returned by the date shown on the NASA Form 892; extensions beyond the original approval period will be authorized in writing by the division director/chief.

3.504 **Removal of Employee-Owned Equipment and Vendor-Owned Equipment**

For those Installations that allow employee-owned equipment and vendor-owned equipment on site, the Installation should have a mechanism for removal of employee-owned and vendor-owned equipment. It is suggested that the NASA Form 892, or other appropriate document, be used for this purpose. If the NASA Form 892 is used, the equipment control block should be annotated as "personally-owned" or "vendor-owned equipment"; and the use identified as "Employee's personal (or vendor's) equipment used in daily work assignments."
3.505 **Shipment by Installation**

The NASA Form 892 will not be used in lieu of a shipping document. In those cases in which shipment by the Installation is required, a properly prepared shipping document will accompany the equipment. A shipping document will also be prepared if accountability for the equipment changes, even though the equipment may be hand carried.
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SECTION IV
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)

Par.  Page

4.000 Scope of Section  4-1

PART 1 - GENERAL DESCRIPTION OF THE NASA EQUIPMENT
MANAGEMENT SYSTEM (NEMS)

4.100 Scope of Part  4-1
4.101 Requirement  4-1
4.102 General System Description  4-1
4.103 How NEMS Operates  4-2
4.104 NEMS Roles and Relationships  4-4

PART 2 - NEMS STATUS CODES FOR EQUIPMENT

4.200 Scope of Part  4-9
4.201 The Equipment Status Coding System  4-9
4.202 Status Code A - Active  4-10
4.203 Status Code B - Inactive Assigned  4-10
4.204 Status Code C - Inactive Unassigned  4-11
4.205 Status Code D - Excess  4-11

PART 3 - USING NEMS FOR EQUIPMENT AVAILABILITY
SEARCHES AND REDISTRIBUTION

4.300 Scope of Part  4-13
4.301 Screening New Procurement  4-13
4.302 Informal Review of Item Availability  4-13
4.303 Formal Procurement Request Screening  4-14
4.304 Supplemental Screening  4-15
4.305 Screening Approved Contractor Requirements  4-16
4.306 Screening the NEMS CDB File in Connection with New Starts
or Expanding Programs  4-16
4.307 Transfers of Equipment Identified as Available by NEMS  4-16
4.308 Holding and Acquiring Installation Responsibilities in Transfers  4-18
4.309 Procedures for Correcting Transfer Errors  4-20
4.310 NEMS Redistribution Reports  4-20
4.311 Loans of Equipment  4-21
4.312 Screening Before Excess  4-21
4.313 NEMS for NASA Excess Screening  4-22

PART 4 - NASA CONTRACTOR USE OF NEMS

4.400 Scope of Part  4-23


SECTION IV
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)

CONTENTS (Cont’d)

<table>
<thead>
<tr>
<th>Par.</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART 4 - NASA CONTRACTOR USE OF NEMS (Cont’d)</strong></td>
<td></td>
</tr>
<tr>
<td>4.401</td>
<td>Centrally Reportable Equipment</td>
</tr>
<tr>
<td>4.402</td>
<td>Policy</td>
</tr>
<tr>
<td>4.403</td>
<td>Contractor Equipment Records</td>
</tr>
<tr>
<td>4.404</td>
<td>Contractor Reporting</td>
</tr>
<tr>
<td>4.405</td>
<td>Acquisition of Contractor Data</td>
</tr>
<tr>
<td>4.406</td>
<td>Review and Verification of Data</td>
</tr>
<tr>
<td>4.407</td>
<td>Review of Contractor Equipment Acquisitions</td>
</tr>
<tr>
<td>4.408</td>
<td>DD Form 1419 Certificate of Nonavailability</td>
</tr>
<tr>
<td><strong>PART 5 - NEMS OPERATIONAL REQUIREMENTS</strong></td>
<td></td>
</tr>
<tr>
<td>4.500</td>
<td>Scope of Part</td>
</tr>
<tr>
<td>4.501</td>
<td>The NEMS Mandatory Data Elements</td>
</tr>
<tr>
<td>4.502</td>
<td>Operating Schedule</td>
</tr>
<tr>
<td>4.503</td>
<td>NEMS Output Products</td>
</tr>
<tr>
<td>4.504</td>
<td>Microfilm/Microfiche Requirements</td>
</tr>
<tr>
<td>4.505</td>
<td>Unique Equipment</td>
</tr>
<tr>
<td>4.506</td>
<td>NEMS Installation Transaction Information</td>
</tr>
<tr>
<td>4.507</td>
<td>NASA Form 1602, NEMS Transaction Document</td>
</tr>
<tr>
<td>4.508</td>
<td>NEMS CDB Transaction Information</td>
</tr>
</tbody>
</table>
SECTION IV

NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)

4.000 Scope of Section

This Section sets forth a general description of the NASA Equipment Management System (NEMS), NEMS status codes for equipment availability, the use of NEMS for equipment availability searches and redistribution, contractor use of NEMS, and the operational requirements of NEMS.

PART 1 -- GENERAL DESCRIPTION OF THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)

4.100 Scope of Part

This Part sets forth the authority and requirement for NEMS; a general system description of NEMS; and how NEMS operates.

4.101 Requirement

The NASA Equipment Management Program requires utilization of NEMS by all NASA organizations (plus those on-site accountable contractors who have agreed to use NEMS as their equipment control system) to identify, account for, and control NASA equipment. The system requires accurate and complete item description, location, condition, and availability so as to permit cost-effective and programmatic Agencywide control, accountability, equipment screening, and reuse consideration wherever located. Each Installation is required to implement NEMS in accordance with the provisions of this Section, and the Jet Propulsion Laboratory voluntarily operates and maintains an interface with NEMS.

4.102 General System Description

a. The NASA Equipment Management System (NEMS) is a standard, Agencywide automated system designed to simplify, standardize, and reduce the cost of managing and controlling NASA's equipment. Each NASA Installation's NEMS system is comprised of a computer data base (IBM 4341 or equivalent), on-line terminals (IBM 3270 or equivalent with associated communications equipment), portable bar-code scanners and readers for physical inventory, printers, and microfilm/microfiche equipment. NEMS
operates on ADABAS, a database management system, utilizing NATURAL programming language.

*b. NEMS provides all NASA organizations with the elements of information needed for an integrated system to identify, account for, and control NASA equipment. The mandatory and optional data elements, types of transactions, standard reports, standard tables and detailed transaction process flows may be found in the NEMS specifications document; descriptions of screen templates may be found in the NEMS User's Guide for NEMS Control; and responsibilities and transaction procedures required of property custodians may be found in NHB 4200.2, "NASA Equipment Management System (NEMS) User's Guide for Property Custodians."

*c. NEMS continues the equipment screening and redistribution policies previously required by the Equipment Visibility System (EVS); NEMS provides basic information about all equipment items valued at $1,000 or more held by NASA Installations and Centrally Reportable Equipment (CRE) held by NASA contractors. The basic mechanism for screening NEMS is by on-line terminal access for NASA Installations and by monthly microfiche lists for selected NASA contractors. NASA Installation NEMS Reutilization Coordinators conduct screening for those contractors not receiving microfiche (see paragraphs 4.310b and 4.402c).

4.103 How NEMS Operates

a. NEMS is an on-line, interactive system designed to process add, change, and delete transactions for controlled equipment items that reside in each Installation's NEMS data base. It is also designed to make ad hoc inquiries against the NEMS data base. The NEMS Main Menu displays the five subsystems (1. Ad Hoc Inquiries; 2. Equipment File Maintenance; 3. Maintenance; 4. Report Selection; and 5. Table File Update) the NEMS user is authorized to use (see detail in the NEMS User's Guide for NEMS Control).

b. There are five key positions established within the equipment management organization responsible for processing and maintaining NEMS data. The responsibilities of these positions are defined in Part 1.300. In brief: (1) the NEMS Equipment Manager is the key interface between the equipment organization and the property custodians and equipment users (see paragraph 1.311); (2) a NEMS
Cataloger reviews and standardizes item names and manufacturer codes and model numbers (see paragraph 1.312), and the NEMS Central Cataloger ensures Agencywide standardization and assigns unknown manufacturer codes (see paragraph 3.205c); (3) NEMS Control reviews and enters transaction data into NEMS and arranges for microfilm/microfiche filing of the source documents that authorize each transaction (see paragraph 1.313); (4) the NEMS Reutilization Coordinator screens equipment requests against NEMS prior to acquisition for potential reuse of existing, inactive equipment (see paragraph 1.314); and (5) the NEMS Configuration Control Board is a permanent technical control group responsible for maintaining configuration control for the system (see paragraph 1.315).

c. Each NEMS transaction requires a source document that authorizes the transaction. A standard transaction document, NASA Form 1602 (see paragraph 4.507), is the input document used by property custodians to initiate equipment transactions into NEMS. NEMS generates an Entry Reference Number for each transaction processed, and the authorizing source documents are filed on microfilm or microfiche by Entry Reference Number to establish a complete audit trail for each equipment item from its initial receipt, for each interim change (e.g., intercenter or custodian transfers), until deleted from the Agency’s records.

* d. NEMS provides five ad hoc inquiry files comprised of nine ad hoc inquiry functions. NEMS will sort ad hoc inquiries in accordance with the criteria selected by the user. Data requests not provided by NEMS standard reports or ad hoc inquiries may be created locally through Installation initiated NATURAL programs.

e. When an equipment record has been deleted from NEMS, the complete record is stored in a history file. The history file remains accessible by terminal, and by ad hoc inquiry, for at least 3 years. After 3 years, the file may be transferred to tape or other recorded media, and retained for an additional 10 years.

f. A NEMS Central Data Base (CDB) concatenates all NASA Installation NEMS data bases, processes changes submitted from those data bases overnight, and provides next-day, on-line access to the CDB for the purpose of screening equipment items available for
redistribution. The NEMS screening capability, previously conducted through the Equipment Visibility System (EVS), permits an Installation or contractor (through the Installation) to determine if a required item or an acceptable substitute is available in the NASA inventory before procurement action is initiated. This screening is required, and a certification that the items desired are not available must be included in the procurement package. NEMS screening requirements are discussed in more detail in Part 4.300.

g. The NEMS Central Data Base (CDB) also offers NASA Installations four methods for selecting some specific types of equipment data from the CDB. The ad hoc inquiries are by (1) manufacturer and model number; (2) item name (allowing three name combinations); (3) tag number (including ECN, old tag number, previous ECN, contractor tag number); and (4) field search, by certain data elements only. See paragraph 4.508 for more detailed information concerning CDB operations. Equipment transactions and report requests are transmitted from each Installation to the CDB overnight. The communication requirements to interface the NEMS CDB and the mechanics of overnight updating are managed by the Headquarters Information Resources Management Division (Code JT).

h. Other products available for use with NEMS include NASAMAIL, for written communications between Installations; the centralized communications network required for the CDB; data upload and download capabilities; scheduled generation of printed reports; word processing; and graphics and spread sheets (see various operating manuals for more detail).

* i. Subsystems using common data from the NEMS database also are being developed or are in the planning stage. In particular, the NASA Property Disposal Management System (NPDMS) interfaces NEMS. Future consideration may be given to an ADPE management system, aircraft and vehicle management, and equipment maintenance.

4.104 NEMS Roles and Relationships

a. The NASA Installations will collect the data necessary to build and maintain NEMS. Each Installation will obtain its contractors' inputs which, together with the data from the Installation
inventory, creates their NEMS data base. The system acquires inputs by on-line transaction updates. NEMS transaction programs only, and no locally developed programs, are authorized for updating NEMS. Each Installation must select and provide the inputs which enable NEMS to be a working accounting interface and control system. The effectiveness, accuracy, quality, and visibility of the system depend on the quality of each Installation’s effort.

b. NEMS required roles and relationships:

(1) The NEMS data base at each Installation is maintained by the Installation’s responsible data processing organization. The Installation’s equipment management organization operates NEMS control and analyzes its activities, making operational changes when necessary.

(2) The physical operation of the Central Data Base at NASA Headquarters is under the cognizance of the Information Resources Management Office. The Supply and Equipment Management Office monitors the operation of the system, analyzes its activities, and initiates necessary or desirable changes that ensure the system will have positive returns for its users.

(3) Each Installation acts as the input source and prime user of output data by collecting data about its contractor-held equipment and in-house holdings, and providing the basic information necessary to operate NEMS. In return, the Installation is furnished control and redistribution information about NEMS reportable equipment.

(4) NASA contractors, through the Installation which maintains their contract, use NEMS as outlined in Part 4.400. They provide information pertaining to the NASA equipment they hold and will use equipment made available through NEMS to meet approved requirements.

c. Each Installation has three focal points for its NEMS operations: the NEMS Equipment Manager, the NEMS Reutilization Coordinator, and NEMS Control. The Supply and Equipment Management Office, NASA Headquarters, will be informed of the names of the NEMS primary Equipment Manager and NEMS
Reutilization Coordinator, and the organizational location, mailing address, and telephone number of NEMS Control. The Supply and Equipment Management Office also will be informed of changes so that all Installations may be notified.

(1) A NEMS Equipment Manager’s primary responsibilities are identified in paragraph 1.311, and further include:

(a) Ensuring standardization and update of information pertaining to the Installation and contractor-held NEMS equipment data.

(b) Ensuring submission of NEMS equipment data to the NEMS CDB and any followup required for the resolution of problems related to data submission.

(c) Ensuring accurate equipment status codes are determined and reported.

(d) Ensuring that Unique Equipment is reported for Reutilization on NASA Form 1577.

(e) Providing the coordination required for the most effective use of NEMS output data in equipment utilization, including:

(i) Planning and budgeting for equipment;
(ii) New starts and program expansions;
(iii) Unique equipment redistribution; and
(iv) Overall equipment management.

(f) Monitoring and evaluating the use of NEMS data and providing activity reporting.

(g) Overseeing the Installation NEMS Control.

(2) The NEMS Reutilization Coordinator’s primary responsibility is highlighted in paragraph 1.314, and further includes:

(a) Being the Installation point of contact for the Agencywide redistribution
of NEMS identified equipment.

(b) Providing quick-reaction, informal screening service for equipment users.

(c) Screening approved contractor requests and Installation equipment procurement requests.

(d) Controlling and preparing NASA Form 1577 in conjunction with technical experts for Unique Equipment Reutilization.

(e) Ensuring identified redistributions to or from the Installation, or its contractors, are completed.

(f) Maintaining appropriate documentation to support NEMS redistribution actions.

(g) Serving as the Installation liaison with the Defense Industrial Plant Equipment Center (DIPEC).

(3) The NEMS Control representative’s primary responsibilities are identified in paragraph 1.313. NEMS Control provides the primary access to the Installation’s NEMS data base. It contains microfilm/microfiche equipment used for viewing the NEMS source documents that authorize the processing of all NEMS transactions.
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PART 2 -- NEMS STATUS CODES FOR EQUIPMENT

4.200 Scope of Part

This part defines the code structure for equipment status.

4.201 The Equipment Status Coding System

The availability of equipment listed in NEMS is central to the visibility required to make effective redistribution decisions. In order to provide a key to the relative availability of particular items, the entry for an item will contain a status code letter reflecting its degree of availability. The four status codes are A-active, B-inactive assigned, C-inactive unassigned, and D-excess. It is important to the operation of NEMS that the basic intent of these classifications be understood to facilitate optimum equipment reuse consistent with program requirements and priorities, economics, and common sense.

a. Status Code A items are considered unavailable in the normal conduct of business since they are by definition in use. Therefore, screening of items classified A is not a requirement of the system. On the other hand, an urgent requirement could conceivably be met at one Installation or contractor plant by another's status code A item; therefore, in this instance, the status code A file might profitably be screened. The item needed might be made available on loan or even permanently transferred if it is not critically needed by the holder.

b. Status Code B items are inactive, and considered sufficiently available to make screening worthwhile. The holder should normally be more receptive to loans or transfers of inactive items than active items.

c. Status Code C items are available on demand. They are required to be held in this category for 90 days to give the Agency assurance that adequate visibility has been achieved. If there are no claimants during the screening period, and the holder decides there is little likelihood of economic reutilization, these items may move to status code D, excess.
4.202 **Status Code A - Active**

Status code A is assigned to items of equipment that are in use and required in the performance of an approved NASA program or project. Items in this classification are not normally considered available for redistribution, though the holding Installation may make loans when requested. This status does not mean items are necessarily in continuous use, but they are assigned an active role integral to a program need, e.g., machines in a machine shop, Space Transportation System (STS) Orbiter flight simulators, or Scout launch vehicle ground support equipment. The NEMS screening program generates inactive status codes D, C, and B, in that order. Status code A items may be screened on a field search.

4.203 **Status Code B-Inactive Assigned**

Items classified in status code B are not being actively used on a project, but they are being held in reserve or otherwise retained for an approved program or project (e.g., Apollo equipment being retained for the Shuttle). Also see paragraph 2.212, Retention of Inactive Equipment. Status code B items will be included in the NEMS screening program of inactive items and generally should be screened by potential users. Transfers, however, will only occur with the approval of the holding Installation. Items generally coded B are:

- a. Equipment being held for firm future programs and projects identified to a specific requirement, the planning of which has been approved by the Installation Director;

- b. Equipment available for transfer from equipment pools;

- c. Equipment held in storage by operational organizations when the organization retains accountability;

- d. Equipment on loan subject to recall;

- e. Equipment being used under interagency use agreements subject to recall;

- f. Contractor-held equipment approved by the contracting officer for use under interagency use agreements on other Government work; and
g. Inactive equipment approved for retention as a national asset.

4.204 Status Code C - Inactive Unassigned

Status code C is assigned to an item which is available on demand for redistribution. Items in this classification are currently in the hands of the holding Installation or contractor but have no identified or justified program use. In addition, equipment in condition codes 1 through 7 will be placed in this classification before being declared excess. Unless the screening period is extended by the reporting Installation, items in condition codes 1 through 7 will remain in this status for 90 days, after which they may be reported excess and reclassified status code D. At some Installations, inactive items that have completed the 90-day screening period are deleted from NEMS and transferred directly to the 1800 excess account from status code C. Items of equipment generally assigned status code C are:

a. Equipment reported by contractors or NASA organizations as not required for, or actively being used in, support of NASA programs or projects; and

b. Equipment in storage and not identified to a specific need or a particular program or project requirement.

NOTE: See Appendix A for all Property Condition Codes and Definitions. Items in condition codes 8 and 9 may be valuable, and the Installation may consider screening as described in paragraph 4.313. However, items in condition codes X (salvage) and S (scrap) will not be screened.

4.205 Status Code D - Excess

Status code D identifies those items available for redistribution which are in the process of disposal. Equipment will be classified status code D when it is reported NASA excess. Items reported under this classification will remain in the NEMS screening program until the reporting Installation redistributes or deletes the items from its accountable records. Contractor-held equipment reported excess may be deleted as soon as declared NASA excess (after the required 90 days of status code C screening) rather than reporting it under status code D for the remainder of the plant clearance period.
PART 3 -- USING NEMS FOR EQUIPMENT AVAILABILITY SEARCHES AND REDISTRIBUTION

4.300 Scope of Part

This part describes the requirement for NEMS screening before new procurement are undertaken; how to redistribute equipment; the procedure to follow when resolving discrepancies in the redistribution process; and how excess property is handled within NEMS.

4.301 Screening New Procurement

Before new items of equipment are procured, the NASA Equipment Management System must be screened to determine if the desired item or an acceptable substitute is in the available file, i.e., in status code B, C, or D. This requirement applies to all Installation requests for new equipment items having an acquisition value of $1,000 or more. This requirement applies to contractor requests via DD Form 1419, DOD Equipment Requisition, for new Centrally Reportable Equipment (CRE) having an acquisition value of $1,000 or more (see Part 4.400). The screening process is capable of three variants: an informal review of the system before formal submission of the procurement request, the formal on-line screening of NEMS with the specifications contained in the procurement request, and a supplemental screening with the procurement request in hand to ensure that all potential candidates have been examined. Screening is conducted through the NEMS Central Data Base (CDB).

4.302 Informal Review of Item Availability

a. Each Installation, in establishing its NEMS Control Center, will make provisions for informal screening. This capability will be designed to permit technical users of equipment to rapidly determine the availability of particular types of equipment to fulfill requirements prior to the initiation of a procurement request. This informal review permits a user to quickly examine several makes and types of equipment which may meet equipment requirements.

b. Informal screening will be accomplished by using procedures most suitable to the particular Installation. Generally, a telephone service or simple form developed by the Installation NEMS
4.303

Formal Procurement Request Screening

* a. As required by paragraph 4.301, all Installation procurement requests for items of equipment estimated to cost $1,000 or more will be routed through the NEMS Reutilization Coordinator for screening. If a status code C or D item is not available through NEMS screening, a certification of nonavailability will be issued by the NEMS Reutilization Coordinator or designee.

b. A manufacturer and model search (see paragraph 4.508b), of the NEMS CDB screening file will be accomplished as a minimum. If an acceptable candidate item is identified, the steps described in paragraph 4.307 dealing with equipment redistribution will be followed. When the manufacturer and model of a needed item are known, the following steps are taken:

(1) Using the NEMS Manufacturers' Code Table, the Federal Cataloging Handbook, Series H4-1, or by contacting the NEMS Central Cataloger, determine the manufacturer's five-digit Federal code number.

(2) Using the NEMS central equipment file, ad hoc inquiries menu, select records by manufacturer code and model number. If the selected model number is not found, the model is either not available, or not in the data base as selected (e.g., model 123-A versus model 123A). The equipment record for each of the available items will be listed by ECN (or Contractor Tag Number), Item Name, Manufacturer Code, Model Number, Status Code, Zip Code, Installation Number (or Contractor Account Number), Cost, Year of Manufacture, and Data Available. These records will be stored in ascending order by manufacturer code and model number.

c. If no candidate items are found as a result of the manufacturer/model search, records may be selected by a manufacturer-multiple item name search, or by multiple item names only. NEMS allows a choice of three name combinations when searching for an item in order to increase the chances of selecting all available items (e.g., select;
computer, personal; personal computer; and PC). If there is a question as to the correct item name, contact the NEMS Central Cataloger for assistance. Equipment records for available items will be listed in the same format as shown in paragraph 4.303b(2) for the manufacturer code and model number records. If no candidate items are found as a result of the item name search, the NEMS Control screening representative will either:

(1) Certify item nonavailability on the procurement request and date it; or,

(2) Continue to search for a satisfactory item using the procedures in paragraph 4.304.

4.304 Supplemental Screening

The following additional screening steps are available:

a. Equipment items listed in the NASA FAR Supplement 18-45.7103 may be screened through the Defense Industrial Plant Equipment Center (DIPEC) following the procedures set forth in NASA FAR Supplement 18-52.24570. The NEMS Reutilization Coordinator will coordinate DIPEC screening with the procurement request originator.

b. The equipment classed as active in the data file (i.e., status code A) may be screened for possible loan or transfer if the need for the item is urgent and great. The NEMS Reutilization Coordinator may screen the NEMS CDB by using the central equipment file ad hoc menu for records by multiple data fields. If this screening is to be undertaken, the NEMS Reutilization Coordinator must assure the requirement is of such a nature that the holding Installation should be approached with a request to assist the requesting Installation. It may be advisable to have the requester talk with the technical personnel having the item to determine if it will fulfill the requirements and the conditions under which it can be made available. Once a loan or transfer has been agreed to, the NEMS Reutilization Coordinator should arrange the action under the provisions of paragraph 4.311 or 4.307, respectively.
4.305 **Screening Approved Contractor Requirements**

a. Contractor requests for screening the NEMS CDB file will be submitted on DD Form 1419, DOD Industrial Plant Equipment Requisition, or equivalent format for non-DIPEC items, via the contracting officer, to the NASA NEMS Reutilization Coordinator (required by NASA FAR Supplement 18-52.245-70). Contracting officers must authorize the request to screen before the NEMS Reutilization Coordinator will take action. Note that the contracting officer's authorization to screen is also authorization to acquire if the item is available through NEMS or DIPEC; it is not an authorization to purchase the item.

b. If the item requested on the DD Form 1419 is not available from NEMS, the DD Form 1419 will be so annotated and returned to the contracting officer for further action. If an item is identified as being available, steps will be taken to redistribute the item as set forth in paragraph 4.307.

c. If the DD Form 1419 is for one of the commodities managed by DIPEC (see NASA FAR Supplement 18-45.7103) and is not available from NEMS, the DD Form 1419 will be annotated "item not in NEMS." After notifying the contracting officer, the DD Form 1419 may be forwarded to DIPEC for screening. The NEMS Reutilization Coordinator will interface with DIPEC on such screening actions.

4.306 **Screening the NEMS CDB File in Connection with New Starts or Expanding Programs**

The NEMS CDB data file is structured so that requirements created by a new or expanding project can be compared with current equipment and systems inventories. The NEMS Reutilization Coordinator should make arrangements with each new project, or an expanding project, to review the current available NASA inventory in the data file.

4.307 **Transfers of Equipment Identified as Available by NEMS**

When an item is identified in NEMS as being available for transfer, and the requester has agreed to accept the item, the following actions will be taken:

4-16
* a. The NEMS Reutilization Coordinator at the acquiring Installation will call, or send a NASAMAIL message, to the NEMS Reutilization Coordinator at the holding Installation to determine if the item is still available and, if it is, request a freeze on the item. After the holding Installation verifies availability, within 3 working days the NEMS Reutilization Coordinator fills in a blank NASA Form 1602 as the source document submitted to the NEMS Control representative for processing NEMS Transaction 50, Freeze Number Assignment. Transaction 50 generates a 10-position freeze number as follows:

(1) Position 1-2 - Installation Code  
(2) Position 3-4 - Sub-Installation Code  
(3) Position 5-8 - Julian Date (YDDD)  
(4) Position 9-10 - Serial Control Number

EXAMPLE: If the Ames-Dryden Flight Research Facility froze an item on the last day of 1989 and it was the first item frozen by Ames that day, then the freeze number would be:

0204-9365-01

The holding Installation will notify the acquiring Installation of the freeze number assigned by calling, or sending a NASAMAIL message, to the acquiring Installation’s NEMS Reutilization Coordinator.

b. The acquiring Installation must confirm shipment within 10 working days, either by NASAMAIL, TWX, letter, or documented telephone conversation, citing the unfunded purchase request number or shipping document number and fund source that will authorize the transfer to the acquiring Installation’s equipment records. A fund source may not be required for shipment to or from an Installation’s own contractor. If confirmation is not received within 10 working days, the acquiring Installation must request an extension in order to prevent the holding Installation from removing the freeze number by processing Transaction 51, Freeze Number Removal. Once Transaction 51 has been processed, the item will again become available.
c. The acquiring Installation will process the unfunded purchase request or shipping document through the same management levels that would be required if the item were being purchased. The unfunded purchase request or shipping document will cite the freeze number, fund sources for the packing, crating, and transportation of the item, item name, manufacturer's code, model number, and acquisition cost. In the case of contractor requests, a purchase request is not required, but the contracting officer must provide fund source data (as applicable) when authorizing the screening on the DD Form 1419.

d. After the holding Installation's NEMS Reutilization Coordinator receives confirmation to ship and the fund source to be charged for packing, crating, and shipping, the NEMS Reutilization Coordinator will prepare a transfer/shipping document and have the item shipped. At this time the NEMS Reutilization Coordinator will submit a copy of the transfer/shipping document or a locally designed transaction source document to NEMS Control, citing the freeze number assigned, unfunded purchase request number, and the transportation fund source. NEMS Control will then process the appropriate delete transaction--Transaction 65, Transfer to Other NASA Installation; Transaction 67, Transfer of GFE to a Contractor; or, Transaction 68, Transfer of GFE by a Contractor.

4.308 Holding and Acquiring Installation Responsibilities in Transfers

a. Certain actions are required of the holding Installation when redistributing equipment to other NASA Installations or their contractors:

(1) When a request for a freeze number of a status code C or D item is received at the holding Installation, the item will be frozen on a first-come-first-served basis. The holding Installation will followup on the transfer request and ensure completion by generating and reviewing, on a monthly basis, or as needed, NEMS Report 360, Items Frozen Longer Than 30 Days List.

(2) After the holding Installation processes NEMS Transaction 65, Transfer to Another NASA Installation, (or Transaction 67, Transfer of GFE to a Contractor; or Transaction 68,
Transfer of GFE by a Contractor), the NEMS Reutilization Coordinator will telephone, or send a NASAMAIL message to the acquiring Installation’s NEMS Reutilization Coordinator confirming shipment to the acquiring Installation (or shipment directly to a NASA contractor, if applicable). Transactions 65, 67, and 68 will create a suspense file through the NEMS CDB at both Installations while the equipment is in transit the suspense file delivers an overnight message to the NEMS Control Centers of the holding (conveying) and acquiring (receiving) Installations stating the date shipped, and the gaining and losing Installation codes (and contractor number(s), if applicable), and the add transaction data elements required for the receiving Installation to add a transfer item to its NEMS data base.

(3) If a NEMS transaction is erroneously processed and the wrong item or wrong designation is made, the NEMS CDB removes the item from the CDB suspense file, regardless of location, when the correct gaining Installation adds the item to their NEMS equipment file. Errors caught after the 15 days allowed to return a record from the history file will be reentered using the add transaction that originally established the record in the NEMS equipment file.

b. Certain actions are required of the acquiring Installation when requesting equipment on its own behalf or for one of its contractors:

(1) When the acquiring Installation receives the suspense file message that states the requested equipment item has been shipped, the acquiring Installation should provide Receiving with a copy of the message for their due-in file. If the item is shipped directly to an Installation’s contractor, upon receipt of the suspense file message, the acquiring Installation will generate a partially prepared NASA Form 1342, DOD Property Record, and mail it to the contractor. The acquiring Installation will add the item to its NEMS data base through Transaction 06 after return receipt of the completed NASA Form 1342 from the contractor.
(2) When the acquiring Installation receives the requested equipment item, the NEMS Reutilization Coordinator authorizes the processing of add Transaction 04; or, after receipt of a completed NASA Form 1342 from a contractor, authorizes the processing of add Transaction 06. The add transaction clears the suspense file message at both the holding and acquiring Installations. The record was moved to the holding Installation's history file at the time the delete transaction 65, 67, or 68 was processed.

* (3) NASA Installations receiving redistributed property in less than the condition reported in NEMS or on the excess list, or not in accordance with the description given, will immediately inform the shipping Installation Supply and Equipment Management Officer in writing of the deficiency and furnish a copy to the Chief, Supply and Equipment Management Office, Code JIE, NASA Headquarters, Washington, DC 20546.

4.309 Procedures for Correcting Transfer Errors

a. After the requesting Installation is notified that an item has been shipped, if it does not arrive in a reasonable time, the sending (holding) Installation NEMS Reutilization Coordinator will trace the shipment and document for all parties an explanation of the circumstances and corrective actions required.

b. If, for any reason, the holding Installation cannot ship the item after receiving confirmation to ship, the holding Installation NEMS Reutilization Coordinator will notify the acquiring NEMS Reutilization Coordinator immediately and send a followup NASAMAIL message or memorandum as soon as possible. The Manager, Equipment Programs, Supply, and Equipment Management Office, NASA Headquarters, may be called upon to provide assistance when necessary to complete a transaction.

4.310 NEMS Redistribution Reports

* a. The NEMS CDB will generate on a monthly and quarterly basis Reports 641 and 642, Inactive Equipment Available for Redistribution. These reports generate all CDB items in status codes C, D, and B (in that order) by manufacturer code-model
number (Report 641) and by item name (Report 642). These reports are converted to microfiche on a monthly basis for NASA Installations, and selected NASA contractors that have been authorized to conduct their own screening of the NEMS CDB. The microfiche reports are mailed by NASA Headquarters to the Installations and applicable NASA contractors.

* b. The NEMS CDB will generate on a quarterly basis Report 710, NEMS Reutilization Summary Report. This report, distributed by the Supply and Equipment Management Office, informs each Installation of all redistributions to and from their Installation during the reporting period, including redistributions to and from NASA contractors.

4.311 Loans of Equipment

If a screening identifies an item in status code A or B which the holding Installation agrees to loan rather than transfer to the requester, the holding Installation's loan procedures will be followed. NEMS Control will process Transaction 38 (Borrowed Out) or Transaction 40 (Loan/Lease Out) as appropriate. Both transactions will update the location and status fields to reflect the loan. Accountability will remain with the loaning Installation.

*4.312 Screening Before Excess

a. To assure that optimum visibility is provided for equipment included in the data file, all items valued at $1,000 or more with condition codes 1-7 will be reported as status code C for 90 calendar days before being declared excess. After the 90 days, a decision may be made to either exceed the item or extend it. NEMS records the date an item is status coded, which will indicate how long an item has been in status code C.

It is not necessary to screen ADPE more than 8 years old for 90 days in NEMS; however, obsolete ADPE should be reported to the Installation ADPE intercenter committee representative for review.

b. Inactive NEMS equipment items requested by other Government agencies for use on NASA-related work or programs may be screened throughout NASA by NASAMAIL or by TWX (with an information copy to NASA Headquarters, Supply and Equipment Management
Office, Code JIE) for 10 days. Ten-day screening by TWX/NASAMAIL must include pertinent NEMS data on item(s) being offered. If no need is identified within NASA during the 10-day screening period, the item may be transferred to the other Government agency in accordance with the Space Act of 1958, Section 203(c) (6) (also see paragraph 1.214). A copy of the NASAMAIL message or TWX will be retained on file.

4.313 NEMS for NASA Excess Screening

a. Since status code C items are screened through NEMS, the system may be used as a substitute for the NASA excess screening of condition code 1-7 items. NEMS items which are in condition codes 8 and 9, which the holding Installation believes should be made available for redistribution, may be placed in status code C before they are declared excess in lieu of NASA screening through the excess route. For example, an Installation may have something in condition code 8 which it believes should be screened because it is particularly valuable and has a good possibility of being redistributed despite needed repairs. It should be coded C for the 90-day period to give it proper visibility (at the same time potential users should consider these items as a valuable resource available at minimum cost). NEMS items which are in condition codes X and S will not be screened through NEMS.

* b. NASA is required by FIRMR 201-33.001(a) to conduct concurrent screening of all excess ADPE components that are not outdated and have an original acquisition value of $1,000,000. The Property Disposal Officer will utilize a Standard Form 120 to report this type of excess equipment to the General Services Administration. This excess ADPE will be reported to NEMS for screening at least 60 days before the NASA release date. Excess ADPE components that are not outdated and have an original acquisition value of less than $1,000,000 will be reported to NEMS for NASA-wide screening.

c. Other reporting and screening actions required by the property disposal regulations will be accomplished for NEMS items in accordance with NHB 4300.1, "NASA Personal Property Disposal Manual." Specifically see Chapter 11, paragraph 1102, for screening requirements of status code C inactive NEMS equipment items qualifying for exchange/sale.
PART 4 -- NASA CONTRACTOR USE OF NEMS

*4.400 Scope of Part

a. This part of Section IV describes NASA policy for contractor use of NEMS; requirements for reporting contractor-held equipment to NEMS; and screening methods to be used by contractors. See NASA FAR Supplements 18-45.106-70(a), 18-45.505-670, 18-45.7102, and 18-45.7103.

b. This part previously referred to the Equipment Visibility System (EVS). The term EVS still appears in many contracts; therefore, for contractor use of NEMS, NEMS and EVS are interchangeable terms.

4.401 Centrally Reportable Equipment

Government-owned equipment reportable by contractors to NEMS is defined in NASA FAR Supplement 18-45.501 as follows: Centrally Reportable Equipment means that plant equipment, special test equipment (including components), special tooling, and non-flight space property (including ground support equipment) which is,

(a) generally commercially available and used as a separate item or component of a system;

(b) having an acquisition cost of $1,000 or more; and

(c) identifiable by a manufacturer and model number.

4.402 Policy

* a. According to NASA policy, contractors who have NASA-owned Centrally Reportable Equipment (CRE) in their possession will participate in and use NEMS by providing equipment data required by NEMS, and when additional equipment acquisitions are proposed, request screening of NEMS to determine the possible availability of existing equipment that NASA may provide in lieu of authorizing new procurement.

* b. Contractors who have a significant amount of screening activity may request through the contracting officer, self-screening authorization from the Chief, Supply and Equipment Management
Office. When such authorization has been granted, contractors will screen for equipment availability using NEMS microfiche.

* c. Contractors will report equipment and its use status (active or idle) on DD Form 1342, DOD Property Record, or equivalent, as the means to assure visibility of these assets and participation in the Agency reutilization program. The NEMS Reutilization Coordinator, in conjunction with the technical monitor, will determine the appropriate status codes to be reported to the NEMS CDB.

* d. NASA contractors generally will not have separate NEMS control centers but will use the NEMS control center at the contracting Installation. Contractors generally will not be provided access to the NEMS data base file. See paragraphs 4.102c and 4.310b.

* e. With the approval of the Chief, Supply and Equipment Management Office, certain NASA on-site contractors use NEMS as their equipment control system. In these cases the contractor will use NEMS as the official record for centrally reportable equipment in lieu of using a DD Form 1342, or an equivalent form. NEMS provides all of the DD Form 1342 data.

*4.403 Contractor Equipment Records

Contractor records of Government-owned property, which are maintained in accordance with the FAR 45.505 and NASA FAR Supplement 18-45.505, are the official Government property records for contractor-held items. The format for keeping records is determined by the contractor. When contractors provide data to NEMS, Section I of the DD Form 1342, Property Record, or equivalent format, will be used. The contractor may use DD Form 1342 as the official property record at the contractor's option if it meets and is maintained in accordance with the requirements of FAR 45.505(c). Whether or not the DD Form 1342 is used as the official record, the contractor is required to maintain the data required by Section I of the form for each item of CRE in the contractor's possession. For CRE shipped to a contractor by the Installation, NEMS will produce a partially prepared DD Form 1342 which the contractor will complete and return.
4.404 **Contractor Reporting**

* a. NASA FAR Supplement 18-45.505-670 requires contractors to report certain data and changes to NEMS within 15 working days.

* b. These reports of changes in equipment activity and status will be provided to the NEMS Reutilization Coordinator at the contracting Installation. Such changes will update NEMS as soon as they are processed. Reports may be made using contractor developed forms as an alternative to the submission of the DD Form 1342. The use of an alternate reporting format will not be acceptable unless the required NEMS documentation is contained in the report and is usable by the Installation. The contracting officer will be informed of any failure of the contractor to report required data, and the contracting officer will take necessary corrective action.

c. For equipment reported idle, the NEMS Reutilization Coordinator will acknowledge receipt of DD Form 1342 within 30 calendar days of receipt and will either initiate NASA screening or advise the contractor otherwise.

4.405 **Acquisition of Contractor Data**

Submission of data on Government-owned, contractor-held equipment is required as a normal function of contractor performance of contracts under which the use and management of Government property is involved. The submission of NEMS information is considered to be an indirect cost of contract performance.

4.406 **Review and Verification of Data**

a. Contractor data inputs to NEMS will be reviewed by the NEMS Reutilization Coordinator and verified for accuracy. If the information provided by the contractor is not consistent with requirements, the data will be returned to the contractor for correction and resubmission, unless the correction is minor and can be accomplished without difficulty. In those cases in which the data is not available to the contractor, the applicable portion of the DD Form 1342 will be left blank and a notation made of its nonavailability.
* b. Annually the NEMS Reutilization Coordinator will arrange to provide a verification listing by contract of NEMS data bank records as of June 30 for contractor-held equipment. Each listing shall be furnished to the contractor (through the property administrator) for verification to ensure record compatibility between the Installation and the contractor. A positive response must be obtained from the contractor in order to verify the correctness of the listing or obtain necessary corrections. The Installation may use hard copy prints of NEMS Report 730, Annual Contractor-held Equipment Verification List, to meet this requirement. Contractors will not be required to validate NEMS fields that are being standardized by the NEMS Central Cataloger. Accordingly, NEMS Report 730 includes the following statement: "The above manufacturer name, model number, and item name fields are being standardized in NEMS and do not require correction to this Report or an exact match in the contractor’s record."

c. Additionally, the NEMS Reutilization Coordinator or another Installation official will conduct an annual comparison of NEMS summary data (from summary figures, by contractor as of June 30, shown on NEMS Report 730), with the corresponding NASA Form 1018, Report of Government-Owned/Contractor-Held Property, data. The NEMS and NASA Form 1018 reports are different in nature and involve different definitions and reporting thresholds, so the data for any one contract should not be expected to precisely correspond. Both reports, however, do summarize the value of Government-owned, and contractor-held equipment; comparisons can detect possible failure to report or gross under-reporting to NEMS. The NASA Industrial Property Management Information System (NIPMIS), if used, automates these comparisons and facilitates the resulting correspondence.

4.407 Review of Contractor Equipment Acquisitions

a. Prior to approving a contractor requisition for the acquisition of NEMS reportable equipment, the requisition will be screened by the cognizant NEMS Reutilization Coordinator to determine whether or not there is equipment available to satisfy the requirement. To request NEMS screening, the contractor will complete a DD Form 1419, DOD Equipment Requisition, and forward it through the contracting officer for approval to the Installation
NEMS Reutilization Coordinator. Contractors may request NEMS screening utilizing alternative forms as long as the required information is provided.

b. The NEMS Reutilization Coordinator will provide a list of candidate items to the contractor for examination and consideration. The contractor will then deal with the NEMS Reutilization Coordinator of the activity holding candidate items with regard to item availability and acceptability. When an available item has been selected, the NEMS Reutilization Coordinator and the contracting officer will be advised, and they will work with the contractor in arranging shipment of the equipment. In those cases in which items are either not suitable or not available, including DIPEC items when screened, the NEMS Reutilization Coordinator will provide a certificate of nonavailability using the DD Form 1419. On-site logistics support contractors performing the NEMS screening function may provide the certificate of nonavailability utilizing other locally developed forms as long as the required information is provided.

c. The annual comparison of NEMS summary data with corresponding NASA Form 1018 data (see paragraph 4.406c) will include a comparison of certificate of nonavailability totals with NASA Form 1018 data on contractor-acquired equipment.

4.408

DD Form 1419 Certificate of Nonavailability

The certificate of nonavailability on DD Form 1419 (or locally developed form for on-site contractors as noted in paragraph 4.407b) provides:

a. Evidence that NEMS and DIPEC, when appropriate, have been screened and that existing available equipment will not meet the requirements of the user; and

b. The information upon which the contracting officer may authorize a new acquisition without further screening.
PART 5 -- NEMS OPERATIONAL REQUIREMENTS

4.500 Scope of Part

This part defines the mandatory data elements and standards used in the NEMS equipment record; prescribes the operating schedule to be used for the Installation NEMS data base and the NEMS Central Data Base (CDB); prescribes the output products and microfilm equipment requirements for NEMS; describes unique equipment requirements; describes the NEMS input transactions and output reports for the Installation and the NEMS CDB; describes Installation reporting requirements covering NEMS activities.

4.501 The NEMS Mandatory Data Elements

As described in paragraph 3.205, each controlled equipment record requires certain mandatory data elements to establish the record in the NEMS data base. The following paragraphs describe the mandatory data elements in detail:

* a. Equipment Control Number (ECN). The ECN is the key, unique identifier for each equipment record in NEMS. The ECN is assigned when an equipment item is first received in NASA; the ECN remains with the item until the equipment is permanently removed from NASA’s equipment records; the ECN is the primary key for extracting data from the NEMS data base. The NASA Headquarters, Supply and Equipment Management Office, is responsible for Agencywide control of ECN’s to prevent loss and duplication of ECN’s. All NEMS controlled equipment records must have a 6- or 7-position ECN as follows:

(1) Controlled Equipment. Controlled equipment item records are established with a 6- or 7-numeric ECN that corresponds to the bar-coded ECN tag or the mini-ECN tag that has been affixed to the equipment item (see tag samples in Appendix K). NASA Headquarters, Supply and Equipment Management Office, manages the procurement and controls assignment of the bar-coded (including mini) ECN’s by blocks of serially-assigned numbers distributed to each NASA Installation.
(2) **Contractor-Held Equipment**

(a) NASA contractor-acquired Centrally Reportable Equipment (CRE) item records are established with a 6- or 7-numeric pseudo ECN, all within the 0900000 series. NASA Headquarters has assigned a block within the 0900000 series numbers to each NASA contracting Installation for reassignment to their contractor-acquired CRE as it is added to the NEMS data base. NASA contractors affix their own contractor tag number to an acquired equipment item. This number is reported to the contracting NASA Installation on DD Form 1342 or equivalent format and is recorded in NEMS in the 13-position alphanumeric Contractor Tag Number field using Transaction 03, Receipt by Purchase-Reported by Contractor.

* (b) Controlled equipment shipped to a contractor as GFE will retain the NASA-affixed bar-code tag. The NASA contracting Installation will reenter a CRE item ($1,000 or more) with Transaction 07, Receipt by Transfer Reported by Contractor, upon return of DD Form 1342 from the contractor. Controlled equipment shipped as GFE to a contractor with an acquisition cost less than $1,000, and all controlled equipment shipped to a grantee, will be immediately reentered with Transaction 07 by the Installation since contractors and grantees are not required to report equipment at these thresholds back to the Installation. The bar-coded tag number will be reentered in the ECN field and may be used by contractors as their tag if desired. In this case, the bar-coded tag number will be entered in both the ECN field and the Contractor Tag Number field. If the bar-coded tag is not used by the contractor, the contractor will assign and affix a Contractor Tag Number and both tag numbers will be entered in the record (bar-coded ECN in the ECN field and contractor’s in the Contractor Tag Number field).
(3) **Loaned-Leased Equipment.** Equipment on loan to, or leased by a NASA Installation, will be controlled in NEMS and physically identified with a bar-coded loan-lease tag (see tag sample in Appendix K). NASA Headquarters, Supply and Equipment Management Office, manages the procurement and controls assignment of the bar-coded loan-lease tags by blocks of serially-assigned numbers distributed to each NASA Installation. The loan-lease tag number is a 6-position, alphanumeric number that always begins with an L, followed by 5 numbers. The loan-lease tag number is entered in the ECN field using Transaction 08, Receipt from Lease In or, Transaction 09, Receipt from Loan In. The loan-lease tags are removed from the equipment when it is returned to the vendor or loaner.

* b. **Installation Code.** Each Installation and sub-Installation, as appropriate, must be identified by two 2-position numeric codes within NEMS to identify the accountable Installation and track transfer actions in the CDB. Following is the NEMS NASA Installation Number Table:

<table>
<thead>
<tr>
<th>INST</th>
<th>INST ACCT</th>
<th>INSTALLATION NAME</th>
<th>ACRONYM</th>
<th>ZIP CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>01</td>
<td>Langley Research Center</td>
<td>LaRC</td>
<td>23665</td>
</tr>
<tr>
<td>02</td>
<td>02</td>
<td>Ames Research Center</td>
<td>ARC</td>
<td>94035</td>
</tr>
<tr>
<td>02</td>
<td>04</td>
<td>Dryden Flight Research Facility</td>
<td>DFRF</td>
<td>93523</td>
</tr>
<tr>
<td>03</td>
<td>03</td>
<td>Lewis Research Center</td>
<td>LeRC</td>
<td>44135</td>
</tr>
<tr>
<td>05</td>
<td>05</td>
<td>Goddard Space Flight Center</td>
<td>GSFC</td>
<td>20771</td>
</tr>
<tr>
<td>05</td>
<td>06</td>
<td>Wallops Flight Facility</td>
<td>WFF</td>
<td>23337</td>
</tr>
<tr>
<td>07</td>
<td>07</td>
<td>Jet Propulsion Laboratory</td>
<td>JPL</td>
<td>91103</td>
</tr>
<tr>
<td>08</td>
<td>08</td>
<td>Marshall Space Flight Center</td>
<td>MSFC</td>
<td>35812</td>
</tr>
<tr>
<td>08</td>
<td>81</td>
<td>Network Communications (PSCN)</td>
<td>MSFC</td>
<td>35812</td>
</tr>
<tr>
<td>09</td>
<td>09</td>
<td>Johnson Space Center</td>
<td>JSC</td>
<td>77058</td>
</tr>
<tr>
<td>09</td>
<td>91</td>
<td>White Sands Test Facility</td>
<td>WSTF</td>
<td>88001</td>
</tr>
<tr>
<td>09</td>
<td>92</td>
<td>Johnson Space Center (STSOC)</td>
<td>JSC</td>
<td>77058</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>Kennedy Space Center (NASA)</td>
<td>KSC</td>
<td>32899</td>
</tr>
<tr>
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<td>15</td>
<td>Kennedy Space Center (BOC)</td>
<td>KSC</td>
<td>32899</td>
</tr>
<tr>
<td>10</td>
<td>16</td>
<td>Kennedy Space Center (SPC)</td>
<td>KSC</td>
<td>32899</td>
</tr>
<tr>
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<td>17</td>
<td>Kennedy Space Center (Vandenberg AFB)</td>
<td>VAFB</td>
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</tr>
<tr>
<td>10</td>
<td>18</td>
<td>Kennedy Space Center (PGOC)</td>
<td>KSC</td>
<td>32899</td>
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<tr>
<td>10</td>
<td>19</td>
<td>Kennedy Space Center (RIC)</td>
<td>KSC</td>
<td>32899</td>
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<tr>
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<td>Headquarters</td>
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<td>20546</td>
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<tr>
<td>11</td>
<td>12</td>
<td>Headquarters (Space Station)</td>
<td>HQ</td>
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<tr>
<td>13</td>
<td>13</td>
<td>Stennis Space Center</td>
<td>SSC</td>
<td>39529</td>
</tr>
</tbody>
</table>
c. **Contract Number.** NEMS transactions processed for contractor-held equipment items must be identified to the contracting Installation as noted in paragraph 4.501b, and also to the 9-position, alphanumeric accountable contract number to identify the accountable contract and track contract transfer actions in the CDB. Contract numbers will begin with the Installation prefix, followed by a hyphen, the contract number, and an 'F' if it is a facilities contract (e.g., JSC contract 9-16492F). Contract numbers are right-justified in the NEMS equipment file. See paragraph 4.501a(2) concerning the corresponding pseudo ECN and Contractor Tag Number data elements that are mandatory for contractor-held equipment transactions.

* d. **Item Name.** Each equipment record must contain an item name as described in paragraph 3.205b. Item names must be assigned in a consistent manner that ensures accurate identification for locating all like items when screening NEMS for reutilization and other purposes. All equipment records added to the NEMS data base must be reviewed by an Installation NEMS Cataloger (see paragraph 1.312) to ensure standardization of all NEMS descriptive terms. The NEMS Central Cataloger provides cataloging services when requested; i.e., identifying, categorizing, classifying, and coding controlled equipment. The NEMS Central Cataloger performs systematic reviews of the central data base to validate item name inputs. See Appendix B for more information on the procedural requirements of the NEMS local and Central Cataloger.

* e. **Manufacturer’s Code.** Each equipment record in NEMS requires assignment of a manufacturer’s code as described in paragraph 3.205c. Each manufacturer’s code must correspond to the manufacturer’s name and address as shown in the NEMS Central Manufacturer’s Code Table maintained by the NEMS Central Cataloger. An equipment record with an unknown manufacturer, or a manufacturer without an assigned code, preferably will be referred to the NEMS Central Cataloger for the appropriate code prior to the processing of the add transaction; however, a record may be processed with 'xxxxx' if the manufacturer is not listed in the NEMS Central Manufacturer’s Code Table, or with 'zzzzz' if the manufacturer is unknown. When the manufacturer has been verified as unknown by visual inspection of equipment, "yyyyy" will be processed. An Installation NEMS Cataloger will work with the NEMS Central Cataloger to resolve the 'zzzzz' and
'xxxxx' entries. The NEMS Equipment Manager will ensure 'zzzzz' and 'xxxxx' manufacturer codes and data entry errors are resolved in a timely manner.

f. **Manufacturer's Model Number.** Each equipment record in NEMS requires the equipment item model number, when known, as described in paragraph 3.205d. If there is no model number, NEMS requires the word "none" in the model number field. An Installation NEMS Cataloger will review standardization of model numbers (e.g., model number 123A will always be entered as 123A and not as 123-A or 123/A). The Installation NEMS Equipment Manager will establish a procedure to ensure standardization of model numbers.

g. **Manufacturer's Serial Number.** Each equipment record in NEMS requires the equipment item serial number, when known, as described in paragraph 3.205e. If there is no serial number, NEMS requires the word "none" in the serial number field. Serial numbers do not require standardization procedures.

h. **Date Installation Acquired.** Each equipment record in NEMS requires the date the Installation acquired the item as described in paragraph 3.205f. The Date Installation acquired is entered by each Installation as equipment items transfer from one NASA Installation to another. Note: NEMS automatically generates the date an item initially enters NASA and permanently records this date in the Date NASA Acquired field (see paragraph 4.501q).

i. **Custodian Account Number.** Each equipment record in NEMS requires a Custodian Account Number as described in paragraph 3.205g. Each equipment item is assigned to a property custodian account located within the organization using the equipment item. All Custodian Account Numbers must be found in the NEMS Custodian Account Number Table that is established and maintained by each Installation.

j. **Federal Supply Class (FSC).** Each equipment record in NEMS requires the appropriate 4-digit FSC as described in paragraph 3.205h. NEMS provides for entry of the entire 13-position National Stock Number; however, only the 4-digit FSC is mandatory. The Federal Cataloging Handbooks, H2 series, classify all equipment.
k. **Acquisition Document Control Number.** Each equipment record in NEMS requires the Acquisition Document Control Number as described in paragraph 3.205i. The initial addition of an item to the NEMS database is authorized by a source document such as a purchase order, contract, receiving report, or other appropriate document. The control number on the source document is the Acquisition Document Control Number; the source document begins documentation of the audit trail for an item.

l. **Capital/Sensitive Code.** Each equipment record in NEMS requires the appropriate Capital/Sensitive Code as described in paragraph 3.205j. These codes are the mechanism for reporting capital equipment items to the financial management organization for entry in the general ledger 1500-series accounts established for equipment. The six capital/sensitive codes provide the distinction among capital, capital-sensitive, non-capital-sensitive, non-capital-nonsensitive controlled, contractor-held, and non-controlled equipment items for reporting and control purposes.

m. **Acquisition Cost.** Each equipment record in NEMS requires the Acquisition Cost of the item as described in paragraph 3.205k. The acquisition cost remains with an item through its life cycle within NASA unless the item cost has been increased or decreased by equipment modification as described in paragraph 2.211c. For a commercially manufactured item the acquisition cost will be the purchase price of the unit and, if capital equipment, will include transportation and Installation charges, and handling and storage costs if these costs are part of the purchasing document (i.e., purchase order or contract) and readily and distinctly related to an individual item purchased (see FMM 9255-3); for a NASA-fabricated item the acquisition cost will include production costs only, i.e., design, development, parts, and labor; for non-capitalized equipment transfers from other entities the acquisition cost will be the amount reimbursed or, if nonreimbursable, the fair market value; and, for capitalized equipment from other entities, the acquisition cost will be the amount reimbursed or, if nonreimbursable, the net book value of the transferor (capitalized value minus depreciation costs); for a leased item the acquisition cost field will be the estimated fair market value; when NASA takes title to a leased item the acquisition cost will remain the initial estimated fair market value;
for an outside loaned-in item the acquisition cost field will be the cost provided by the loaner, or an estimated fair market value. When the acquisition cost is unknown, an estimated fair market value based upon like items in the NEMS data base, or value based upon engineering estimates, will be entered. The NEMS 1-position Estimated Cost Code data element, designated as an "E," will be entered when the Acquisition Cost is estimated.

n. Year Manufactured. Each equipment record in NEMS requires the year equipment was manufactured as described in paragraph 3.2051. When the year the equipment was manufactured is not known, enter the year when first added to the accountable records.

o. Status Code. Each equipment record in NEMS requires a status code as described in paragraph 3.205m. Equipment items with capital-sensitive code X (non-controlled, nonsensitive equipment) will be reported in status code A since they are not part of the NEMS equipment reutilization program. Contractor-held equipment (CRE) items are reported in status codes A, B, and C; contractor-held equipment reported excess offsite may be deleted as soon as declared NASA excess in lieu of reporting under status code D for the remainder of the plant clearance period. Status codes will be updated when the degree of availability changes for equipment items (e.g., equipment sent out on temporary loan or placed in temporary storage will be changed to status code B and returned to status code A when put back into active use in the accountable property custodian account).

p. Location. Each equipment record in NEMS requires a zip code and building location as described in paragraph 3.205n. The zip code will be updated when an equipment item is temporarily moved to another zip code area but remains on the equipment records of the accountable Installation (e.g., out on loan, or in use at a component location such as a tracking station). On-site equipment will be identified to its building or other geographical location. This location must be found in the NEMS Building Number Table that is established and maintained by each Installation. The location may be further identified to the optional Room Location field. Room locations are not controlled by a NEMS table.
q. **NEMS Computer Generated Mandatory Data Elements.** Three mandatory data elements are automatically generated by NEMS as described in paragraph 3.2050:

(1) The *Equipment Type Account*, that is, General Ledger Accounts 1551-1563, are generated by the NEMS Equipment Type Account Table as cross-referenced to the NEMS Federal Supply Group Table. The Equipment Type Accounts are used for financial reconciliation with finance.

(2) The *Date NASA Acquired* is that date when an item is initially entered into the NEMS database. NEMS automatically assigns and permanently records the initial acquisition date. See paragraph 4.501h for Date Installation Acquired.

(3) The *Acquisition Entry Reference Number* is that number automatically generated by NEMS when an item is initially entered into the NEMS database to begin an audit trail. All NEMS transactions receive an Entry Reference Number for the purpose of tracking each action taken, from initial receipt, to all changes (e.g., location or account changes), until deleted from the NEMS equipment records.

r. **Mandatory Fields for Certain Add Transactions.** Four NEMS data fields become mandatory under certain conditions as described in paragraph 3.205p. The four fields are User Number, Condition Code, Other Government Agency, and Contractor Number (Accountable).

s. **Other NEMS Data Fields.** Detailed descriptions of the optional data elements may be found in the NEMS Specifications document.

4.502 **Operating Schedule**

Operating schedules are established for both the Installation NEMS updates and the CDB NEMS updates.

a. **Installation Operating Schedule.** Each Installation must establish a schedule for the on-line entry of NEMS transactions to the NEMS data base based upon computer response time at the Installation. For instance, if response time is slow during certain peak hours, NEMS data entry should be scheduled prior to or after the peak hours. NEMS
Control personnel will schedule report requests and printing of NASA Form 1602's for overnight batch processing. Small ad hoc reports and single or small quantities of NASA Form 1602's, however, may be requested and printed at NEMS Control during the working day, as deemed appropriate by the NEMS Equipment Manager.

b. CDB Operating Schedule. The CDB is updated daily via electronic communication between the Installation mainframe computer and the NEMS central mainframe computer. Verification of transmission can be accomplished by dialing into the NEMS central mainframe and making an ad hoc inquiry on a transmitted record.

4.503 NEMS Output Products

NEMS generates several types of output products at an Installation and generates ad hoc reports from the CDB.

a. Installation Output Products

* (1) NEMS produces reports on a daily, monthly, quarterly, semiannual, annual, and triennial basis as scheduled, and on-request reports as selected. Regularly scheduled reports are batch processed overnight and distributed to the NEMS Equipment Manager on the following day. NEMS data requested from ad hoc inquiries may be printed on the NEMS Control printer, or downloaded to the NEMS personal computer. When specific data requests are unavailable from NEMS standard reports or ad hoc inquiries, the NEMS Equipment Manager may create his/her own natural program reports and print them on the NEMS Control printer or, if locally authorized, request batch processing overnight from the NEMS mainframe.

(2) NEMS produces a NASA Form 1602, NEMS Transaction Documents, for distribution to the accountable property custodian upon initial custodian account receipt of an equipment item and also when change transactions revise key data in an equipment record. NEMS transactions authorize NEMS Control to request the printing of NASA Form 1602's by overnight batch processing, or singly at the time a transaction is processed. Generally, only special requests are printed in NEMS Control; all other NASA
Form 1602's are batch processed. See Part 4.507 for a description and sample of the NASA Form 1602.

b. **CDB Output Products.** Each Installation may use the CDB for equipment redistribution screening requirements, for locating missing equipment records that may have been moved to another Installation's NEMS data base, or for making equipment record inquiries on a limited number of specified data fields. CDB ad hoc inquiries will display up to 50 CDB records. Those records may be printed from the personal computer screen to the NEMS Control printer, or downloaded to the NEMS personal computer. See paragraph 4.508 for more detail on CDB capabilities. All requests for CDB inquiries requiring more than 200 records will be referred to the Manager, Equipment Programs, Supply and Equipment Management Office, NASA Headquarters.

4.504 **Microfilm/Microfiche Requirements**

NEMS requires microfilm/microfiche products at the Installation and microfiche products at the CDB.

* a. **Installation Microfilm/Microfiche.** Each Installation NEMS transaction is supported by an authorizing source document. Each source document is annotated with the Entry Reference Number (ERN) generated by NEMS when the transaction is processed. Source documents (including those for the inventory subsystem) will be compiled in ERN sequence and converted to microfilm/microfiche on a routine basis. The microfilm/microfiche files support the transaction audit trail for each equipment record in NEMS. The NEMS Equipment Manager will ensure that the number of source documents submitted for microfilm/microfiche processing are the same number reproduced and returned. The original source documents need not be retained by the equipment management organization; however, the financial management organization may wish to retain original source documents that support financial changes. NEMS Control will use microfilm/microfiche readers with a print capability for making hard copy from a frame of microfilm/microfiche.

b. **CDB Microfiche.** On a monthly and quarterly basis the NEMS CDB generates Report 641, Equipment Available for Redistribution (status codes C, D, and B by manufacturer code-model number), and Report 642, Equipment Available for Redistribution (status
codes C, D, and B by item name). These reports are converted to microfiche by NASA Headquarters and distributed to selected NASA contractors that have been authorized to conduct their own screening of the NEMS CDB. Requests for, or changes to, authorized contractors will be submitted to the Manager, Equipment Programs, Supply and Equipment Management Office, NASA Headquarters, for review and approval.

4.505 Unique Equipment

a. NASA Form 1577, NASA Unique Equipment Utilization Review (see Appendix I), will be used to conduct utilization reviews of NASA inactive unique equipment. Before such equipment is reported excess, the Installation NEMS Reutilization Coordinator will distribute to all other NEMS Reutilization Coordinators a fully executed NASA Form 1577, including a photograph of the equipment. As with NEMS items, minimum period for this review will be 90 calendar days. Freeze and redistribution actions will be handled the same as for NEMS items as specified in paragraph 4.307-4.310. Redistributions of unique equipment will be reported through NEMS following NEMS procedures.

b. For control purposes and to interrelate in the NEMS CDB items pertaining to a unique equipment capability, a unique equipment number will be developed and assigned to each NASA Form 1577 case when prepared. The number shall be structured as follows:

(1) The first two positions will be the Installation number as set forth in paragraph 4.501b.

(2) The next three positions will be an Installation developed acronym for the unique equipment.

(3) The last four positions are the total number of NEMS reportable items making up the unique equipment.

c. As the NASA Form 1577 is distributed, the unique equipment number will be added to the Installation NEMS data base and the NEMS CDB for all applicable NEMS items by NEMS Transaction 60, NASA-Held Equipment Record Data Change.
d. NEMS Reutilization Coordinators receiving NASA Form 1577 will make sufficient copies and distribute them within their Installations to ensure that a complete redistribution review is conducted of the unique equipment.

4.506 NEMS Installation Transaction Information

a. NASA’s controlled equipment items are added to, changed in, or deleted from the Installation NEMS data base through the submittal of on-line updates to the NEMS mainframe computer from a computer terminal in NEMS Control. To facilitate initial data entry, the NEMS Equipment Manager may develop a data entry form that allows quick entry of the data elements required to establish an equipment record in NEMS. Whether the NEMS Control representative uses the incoming document (e.g., purchase order, contract, receiving document, etc.) or a data entry form created from the incoming document, all mandatory data fields must be verified and standardized as described in paragraph 4.501 prior to data entry.

* b. There are add, change, and delete transactions allowable in NEMS. The templates designed for each transaction and a brief purpose for the transaction are shown in the NEMS User’s Guide for NEMS Control. The functions and actions for each transaction are shown in the NEMS specifications document.

c. After initial entry of an equipment record into NEMS, most transactions will be initiated by property custodians. NHB 4200.2, "User’s Guide for NEMS Property Custodians," describes custodian initiated transactions in detail showing sample NASA Form 1602’s for the change and delete transactions that can be submitted by a property custodian. In order to meet the unique needs at each NASA Installation, the NEMS Equipment Manager will develop and update as appropriate a supplement to NHB 4200.2 (local Appendix L) that addresses property custodian transaction requirements applicable to their Installation only. The NEMS Equipment Manager will ensure that all NASA Form 1602’s are submitted with required approvals and appropriate supporting documents prior to data entry by the NEMS Control representative.

* d. NEMS transaction processing will generate the following reports: (1) NEMS Report 010, Daily Valid Transaction Register (sequenced by Transaction
4.507 NASA Form 1602, NEMS Transaction Document

a. NASA Form 1602 is the standard Agency form that reflects equipment information contained in the NEMS data base, that controls all equipment transactions after initial entry into the NEMS data base, and that serves as the property custodian's detailed record and NEMS input document for each assigned equipment item.

b. The NASA Form 1602 is a multi-part form 5 1/2" X 8 1/2" in size. The form is sprocketed on the sides so that it feeds through a line printer that is located in either NEMS Control or in the computer center where the NEMS mainframe computer is located. The printer has been programmed to generate equipment data from the NEMS data base onto the designated blocks of the form (see paragraph 4.507c). Details on the use of this form by a property custodian are found in NHB 4200.2, "NEMS User’s Guide for Property Custodians."

c. The NASA Form 1602 has the following characteristics:

(1) Brief instructions for use are on the reverse side of the Suspense Copy (Copy 4) of the form.
(2) Transactions are initiated by checking the appropriate block(s) in the right-hand column and by following individual instructions for Blocks 31-35.

* (3) Data in Blocks 1-28 and 36-38 are computer-generated. Any changes submitted by a property custodian for Blocks 1-28 are annotated in Block 33, Remarks. Blocks 36-38 show the control numbers assigned for the last transaction, the last transaction type, and the last transaction name for ready reference. Block 39 is annotated by hand in NEMS Control at the time a new transaction is being processed. Once a transaction has been completed, the new entry reference number that was noted in Block 39 of the input transaction becomes the Block 36 entry reference number on the new NASA Form 1602 that is generated for the accountable custodian’s file. NOTE: At times, NEMS Control may find it necessary to make a correction to an equipment record, which will generate a new NASA Form 1602 for the accountable custodian. As a result, it is possible for the custodian to receive more than one NASA Form 1602 at the same time. The custodian can identify the most current transaction, and therefore the most current form to be filed, by reviewing Block 36. Block 36 is 10 positions consisting of:

Position 1-2 Sub-Installation number (see paragraph 4.501b for Installation numbers)

Positions 3-6 Julian date (yddd)

Positions 7-10 Sequence number assigned each transaction during the day, starting each day with 0001

Therefore, if a custodian has received two NASA Form 1602’s for the same item, one, for example, with an entry reference number of 0193350010, and the other with an entry reference number of 0193350015, the latter entry reference number is the most current.

* (5) Blocks 1, 8, 9, 11, and 12 are outlined for easily identifying the equipment control
number, accountable property custodian, organization mail stop, and location.

* (6) The Equipment Control Number (1), Cost (3), Date NASA Acquired (17), Federal Supply Class (7), Manufacturer's Name (13), Model No. (14), and Serial No. (15) are only changed by a Property Custodian if erroneous data is suspected in these fields. The property custodian should discuss potential errors with the NEMS Equipment Manager for verification prior to submittal of a Record Change (60) transaction.

4.508 NEMS CDB Transaction Information

* The NEMS CDB is designed to provide equipment visibility for screening and redistributing NASA’s equipment valued at $1,000 or more and for locating specific equipment items or specific equipment data for management purposes. The NEMS CDB is comprised of each Installation’s NEMS data base. Each working day Installations will submit their NEMS transactions processed that day to the NEMS CDB for update. The NEMS CDB will track transfers, provide screening and ad hoc inquiry functions, and produce reports as follows:

a. Transfer Transactions. The NEMS CDB will track Transfer actions between NASA Installations and NASA contractors through the Installation Number (conveyor and receiver) and Contractor Number (conveyor and receiver) data elements as they are applied to the following NEMS transactions:

(1) Transaction 04 - Receipt by Transfer - from NASA Installation.

(2) Transaction 06 - Receipt by Transfer - from Contractor.

(3) Transaction 07 - Receipt by Transfer - Reported by Contractor.

(4) Transaction 65 - Transfer to Another NASA Installation.

(5) Transaction 67 - Transfer of GFE to a Contractor.

(6) Transaction 68 - Transfer of GFE by a Contractor.
The above transactions will produce NEMS Report 710, Redistribution Summary—from Center, on a quarterly and annual basis.

NOTE: The NEMS Central Equipment File conveyor delete should be processed prior to the receiver add in order to delete the conveyor's record from the transfer file and to convert the record to the receiver in the Central Equipment File. If the receiver adds the item prior to conveyor delete, the NEMS CDB will accept the duplicate record. The conveying Installation is then responsible for submitting the delete transaction as soon as possible to remove the duplicate record from the NEMS CDB.

The NASA Headquarters Supply and Equipment Management Office can request an ad hoc inquiry by Freeze Number assignments to identify those transfers that were made as a result of the NEMS screening capabilities. See Part 4.300 for NEMS redistribution requirements.

b. CDB Screening and Ad Hoc Report Capabilities.
The NEMS CDB provides six methods of data selection available to a NASA Installation:

1. Equipment Search by Manufacturer Multiple-Model Numbers. The NEMS Reutilization Coordinator will conduct NEMS screening requirements in accordance with Part 4.300. At a minimum, the NEMS Reutilization Coordinator will screen procurement requests for equipment acquisitions $1,000 or greater by the requested equipment manufacturer and model number. To accomplish this screening, the NEMS CDB provides an inactive equipment search by Manufacturer Multiple-Model Numbers, selecting up to three variations of the model number. Selected records will be restricted to Capital/Sensitive Codes M, N(greater than $1,000), P, Q, and E, and Status Codes C, D, and B, in that order. A summary number of records found will be displayed and up to 50 records may be displayed or downloaded.

2. Equipment Search by Manufacturer Multiple-Item Names. The NEMS Reutilization Coordinator may screen by an equipment manufacturer and item name to locate a similar item by the requested manufacturer or another manufacturer. To accomplish this screening, the NEMS CDB provides an inactive equipment search by Manufacturer Multiple-Item Names, selecting
* (3) Equipment Search by Multiple Item Names. The NEMS Reutilization Coordinator may screen by an equipment manufacturer and item name in order to locate a similar item if a manufacturer and model number are unknown. The NEMS CDB provides an inactive equipment search by Multiple Item Names, selecting up to three variations of the item name. Selected records will be restricted to Capital/Sensitive Codes M, N (greater than $1,000), P, Q, and E, and also to Status Codes C, D, and B, in that order. A summary number of records found will be displayed and up to 50 records may be displayed or downloaded. NEMS CDB sorts by item name, or manufacturer-item name, and require lengthy processing time; therefore, manufacturer-model number searches are preferable. Avoid selecting common item names with hundreds or thousands of records in the NEMS data (e.g., oscilloscope).

(4) Equipment Search by an Equipment Control Number (ECN). There may be occasions when an equipment item cannot be found in an Installation NEMS data base even though the item contains a NASA control number. The NEMS CDB provides a search in the active and inactive NEMS CDB file by:

- (a) a single, current ECN,
- (b) an Old Tag Number,
- (c) a Previous ECN, or
- (d) a Contractor Tag Number.

Full record data on three screens will be displayed for the selected tag number (or numbers, if more than one record is found with the same number).

(5) Equipment Search by Multiple Data Elements. There may be occasions when an Installation needs to conduct a broader search
for equipment information than paragraphs (1) - (4) provide. Therefore, each Installation may create ad hoc reports from the NEMS CDB. An Installation may select from the following CDB fields:

(a) Item Name;
(b) Manufacturer Code;
(c) Manufacturer Model Number;
(d) Availability Status Code;
(e) Date Installation Acquired;
(f) Installation Number;
(g) Cost;
(h) Year of Manufacture;
(i) Condition Code; and
(j) Contract Number.

The Installation may select two sorts of the selected data and may display up to 11 fields:

(a) ECN;
(b) Installation Number;
(c) Item Name;
(d) Manufacturer Code;
(e) Manufacturer Model Number;
(f) Year of Manufacture;
(g) Cost;
(h) Availability Status Code;
(i) Date Installation Acquired;
(j) (Condition Code); and
(k) Contract Number.

Ad hoc inquiries display a summary number of records selected and up to 200 records may be displayed from the NEMS personal computer screen. Requests for more than the first 200 records will be submitted to the Manager, Equipment Programs, NASA Headquarters, for approval. If approved, the NEMS CDB computer facility will create the ad hoc report on a floppy disk, tape, or hard copy, as appropriate, for delivery by mail.

* (6) NEMS Transfer File. The NEMS Transfer File generates NEMS Transactions 38 (Borrowed Out), 65 (Transfer to Another NASA Installation), 67 (Transfer of GFE to a Contractor) and 68 (Transfer of GFE by a Contractor) onto a central file for review of those items transferring between NASA Installations and contractors. The file displays sending and receiving Installations, number of items in
transit, and number of days in transit. An item is deleted from the Transfer File when an add transaction is processed by the receiving Installation.

Note: If a receiving Installation processes an add transaction for an item transferred from another Installation before the sending Installation has processed the transfer (delete) transaction, then the Transfer File record cannot be automatically cleared. In such a case, the circumstances should be documented and forwarded to the Manager, Equipment Programs, NASA Headquarters, for review and action to remove from the data base file.

c. CDB Reports

(1) NEMS is designed to generate special data reports upon request. Most data fields can be sorted or compared with other data fields. NEMS CDB equipment data requests beyond the capabilities of the ad hoc report described in paragraph 4.508b(5) will be submitted by the Installation NEMS Equipment Manager to the Manager, Equipment Programs, NASA Headquarters, for approval, generation, and distribution. Such requests must indicate the nature of the special data request, including the preferred output product format, and a statement of requirements for which the output will be used. Approved reports may be created on a floppy disk, tape, or hard copy, as appropriate, for delivery by mail.

* (2) Standard reports generated by the NEMS CDB on a daily, monthly, quarterly, semiannual, or annual basis are shown in the NEMS specifications document. The NEMS Error Report, Central Equipment File Update, will show ECN’s that are already assigned to the active NEMS CDB by the same NASA Installation. Equipment transactions are not accepted into the NEMS CDB when errors are shown on the NEMS Error Report, Central Equipment File Update. A Report of duplicate ECN’s held by two different Sub-Installation codes in the NEMS CDB will be generated quarterly. NASA Headquarters will distribute the duplicate ECN Report to the Installations involved for resolution. Upon resolution of the discrepancy, the Installation with the incorrect record will be responsible for deleting their record from the NEMS CDB.

4-47
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### SECTION V
**EQUIPMENT PHYSICAL INVENTORIES**
(Installation Equipment)

**CONTENTS**

<table>
<thead>
<tr>
<th>Par.</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.000</td>
<td>Scope of Section</td>
<td>5-1</td>
</tr>
</tbody>
</table>

**PART 1 - INVENTORY SCHEDULING AND PERSONNEL**

| 5.100  | Scope of Part                                         | 5-1  |
| 5.101  | Purpose and Objectives                                | 5-1  |
| 5.102  | Types and Frequency of Inventories                    | 5-2  |
| 5.103  | Cyclic Inventory Control Schedule                     | 5-3  |
| 5.104  | Inventory Personnel                                   | 5-4  |

**PART 2 - INVENTORY PROCEDURES**

| 5.200  | Scope of Part                                         | 5-5  |
| 5.201  | Pre-Inventory Actions for Cyclic Inventory            | 5-5  |
| 5.202  | Actions During Cyclic Inventory                       | 5-5  |
| 5.203  | Cyclic Inventory Reconciliation and Adjustment        | 5-8  |
| 5.204  | Sensitive Item Inventory                              | 5-9  |
| 5.205  | New Property Custodian Inventory                      | 5-9  |
| 5.206  | Special Inventory                                     | 5-10 |

**PART 3 - INVENTORY REPORTS AND FILES**

| 5.300  | Scope of Part                                         | 5-11 |
| 5.301  | Inventory Reports to Division Directors/Chiefs and Property Custodians | 5-11 |
| 5.302  | Reports to Management of Inventory Results            | 5-12 |
| 5.303  | Files to be Maintained                                | 5-13 |
SECTION V

EQUIPMENT PHYSICAL INVENTORIES
(Installation Equipment)

5.000 Scope of Section

This section sets forth the requirements and procedures for physical inventories of Installation equipment.

PART 1 -- INVENTORY SCHEDULING AND PERSONNEL

5.100 Scope of Part

This part sets forth the purpose, objectives, types, schedules, and personnel required for equipment physical inventories.

5.101 Purpose and Objectives

a. As an essential element of an equipment management system, physical inventories provide a means for:

(1) Determining the completeness and accuracy of the equipment records and financial equipment accounts;

(2) Reconciling and adjusting the equipment records and financial accounts as required;

(3) Assessing the effectiveness of equipment control procedures and operations; and

(4) Obtaining information needed for accomplishing broader aspects of equipment, such as equipment utilization and repair.

b. In general, physical inventories are designed to achieve the following objectives, depending on the type of inventory being taken:

(1) Verifying that recorded equipment is still on hand;

(2) Confirming or determining current location and custodial responsibility for equipment;

(3) Identifying unrecorded equipment which qualifies for control;
(4) Locating or identifying missing equipment;

(5) Identifying obviously unused or underutilized equipment; and

(6) Identifying equipment obviously in need of repair or rehabilitation.

5.102 Types and Frequency of Inventories

* a. Triennial or Annual Inventory (hereinafter referred to as cyclic). A complete physical inventory of controlled equipment will be taken at each Installation at least once every 3 years. Those Installations with a full-time property custodian program have the option to conduct the inventory on an annual basis. A complete cyclic inventory must, as a minimum, achieve the objectives as set forth in paragraph 5.101b. This requires a total "wall-to-wall, floor-to-ceiling" sighting and recording of all items of controlled equipment, including those that meet the criteria but are unrecorded. An inventory which merely serves to locate items currently charged to a property management area does not meet the requirement for a complete physical inventory. Also, items on loan to other Installations or to organizations outside of NASA will be identified by the NEMS inventory program "out code" data element and their status must be verified to complete the cyclic physical inventory. The NEMS inventory subsystem accepts those items in a NEMS "out code" as inventoried and automatically assigns an inventory date. Those items identified on NEMS Report 772, Items in Out Code Status, must be certified on the report, however, as in a valid "out" code (i.e., review storage document, loan document, shipping document).

* b. Sensitive Item Inventory. Annually, the NEMS Equipment Manager will direct unannounced inventories of 20 percent or more of the Installation's sensitive items. The findings will be documented and filed. This unannounced annual inventory of sensitive items will, as a minimum, encompass objectives (1), (2), and (4) as set forth in paragraph 5.101b. If an annual inventory is conducted, the 20 percent sensitive item inventory requirement is waived.

c. New Property Custodian Inventory. Inventories of property management areas will be taken when a new property custodian is assigned. As a minimum, the
inventory will encompass objectives (1), (2), and (4) as set forth in paragraph 5.101b.

d. **Special Inventory.** Special inventories may be taken at the discretion of the Installation. A special inventory may be designed to achieve one or more of the objectives set forth in paragraph 5.101b, depending on the purpose for which the inventory is being taken.

*5.103 Cyclic Inventory Control Schedule*

a. The NEMS Equipment Manager will develop a documented schedule and plan, including allowances for contingencies, for accomplishing the complete physical inventory of controlled equipment. Current information comparing the status of inventory progress to the schedule will be maintained and used to revise the schedule, when necessary, to ensure completion of the inventory within the prescribed period. Two pre-inventory reports will be provided within the NEMS inventory module to aid each Installation in the development of its inventory schedule. These reports will sort inventory accounts both by location and by number of items to schedule multiple accounts located in the same area at the same time. When developing the inventory schedule, it is important to ensure that no more than five accounts in the same area and no more than 40 total accounts (plus two centerwide accounts) are scheduled to be active at the same time (see paragraph 5.202c).

b. A cyclic inventory control schedule, developed from the pre-inventory reports, may be maintained manually or as a locally developed program within NEMS, and will contain, as a minimum, the data elements listed below. Inventory completion dates and all actions taken are maintained by the NEMS inventory module (see NEMS Inventory Subsystem Handbook).

1. **Identification**
   a. Name of Property Custodian
   b. Identification Account Symbol
   c. Location of Accounts

2. **Events**
   a. Schedule Start Date
   b. Actual Start Date

5-3
(3) Notifications, which may be preprogrammed standard notifications from a locally developed program within NEMS, are:

(a) Date Pre-inventory Notification
(b) Date Custodian Notified of Results
(c) Date Division Notified of Results

* c. Calendar years will be used as the basis for scheduling, planning, and conducting complete physical inventories. To assist in Agencywide reporting and surveillance, a uniform 3-year cycle, with approximately one-third of the inventory being completed each year, or an annual complete inventory, is prescribed. The 3-year cycle commencing on January 1, 1989, will end on December 31, 1991. Subsequent cycles follow in chronological sequence, e.g., January 1992 through December 1994.

**5.104** Inventory Personnel

The Supply and Equipment Management Officer will designate, in writing, individuals responsible for conducting cyclic, sensitive, and special inventories. These individuals will be fully instructed in inventory techniques, including proper use and care of the optical and laser bar-code scanning equipment. Persons designated as being responsible for taking the inventory will be assisted by the cognizant property custodian, the NEMS Equipment Manager, or other persons, as deemed necessary by the Equipment Manager, from within the property management area. Property custodians will not inventory their own accounts, except in the case of a new property custodian inventory (see paragraph 5.205).
PART 2 -- INVENTORY PROCEDURES

5.200 Scope of Part
This part establishes basic procedures required to properly prepare for and take complete physical inventories, sensitive inventories, new property custodian inventories, and special inventories. The detailed operating instructions used by each Installation must, as a minimum, incorporate these procedures.

5.201 Pre-Inventory Actions for Cyclic Inventory

a. Determine the scope of the effort required to take the inventory of the property management area involved, and make arrangements for personnel assistance as required.

b. Identify all specific locations within the areas which must be covered during the inventory.

c. Select and designate the persons responsible for taking the inventory, as prescribed in paragraph 5.104.

d. Advise the property custodian and division director/chief, in writing, of the planned inventory at least 30 calendar days in advance, including instructions as to prior actions to be taken to expedite the inventory.

e. Assure that the property custodian has a current record of all controlled equipment charged to the custodian's area.

5.202 Actions During Cyclic Inventory

a. The inventory team will systematically proceed through each inventory area. Using the light wand or laser gun bar-code scanner and bar-code reader, the inventory team will scan each tagged item, separately key in each non-bar-coded mini-tagged item, separately record each untagged item which appears to meet the criteria for control within an inventory account. See the Inventory Subsystem Handbook for more detailed instructions on using the bar-code scanning equipment.

b. The inventory team has the option of selecting one main account, plus four additional single accounts, and two centerwide accounts that may be
all located within the physical area of the one main account being inventoried. All items scanned within the selected accounts will process as inventory updates if the account and location correspond to the account and location recorded in the NEMS database. The location of an equipment item will automatically change (unless requested otherwise) if the item is found in the current account but at a new location.

c. If one main account with four subaccounts has been selected, an additional account cannot be added until the main account has been completed and uploaded to the mainframe. Subaccounts should only be used when other accounts are located within the physical area of a main account. Subaccounts must be converted to main accounts in the same order in which they are initially selected. All single location accounts are considered main accounts, with no subaccounts attached. Data from a main account may be loaded into the PC in intervals, but the entire account must be complete prior to uploading the data to the mainframe. The personal computer (PC) program and the inventory module will accept up to 40 pending accounts, plus the two centerwide accounts, at the same time. The two centerwide accounts may be closed when completed or stay open for the duration of the cyclic inventory. If closed early, another centerwide account can be opened.

d. A small adhesive sticker showing the year of inventory may be attached to each item in a readily visible position near the equipment control tag as the item is scanned.

e. Items borrowed by other management areas will be scanned during the borrowing custodian’s inventory. NEMS will verify the borrows when the inventory account is processed against the NEMS database. If a borrowed item was not submitted to NEMS for update at the time of the borrow, the item appears on the inventory results report as either not found within the accountable property custodian’s area, if borrowed by someone else; or, as an overage within the borrowing property custodian’s area, if the borrower is the first of the two accounts inventoried. It is the responsibility of the accountable property custodian to resolve any borrow discrepancy and submit a change transaction update to NEMS, if appropriate.
* f. As stated in paragraph 3.410a, property custodian borrows for less than 60 days may be controlled by the lending (accountable) custodian by annotating his/her records accordingly, rather than submitting the change to NEMS for the short-term update. If such a borrow appears on the inventory results report as a discrepancy, the discrepancy may be removed from the inventory file by processing Transaction I34, Inventory, Update - No Change to the Equipment File (see paragraph 5.203b for further instructions concerning Transaction I34).

g. Equipment on loan or lease from organizations outside of the Installation should contain bar-coded loan-lease tags, which will be scanned as they are found within the inventory accounts. Loan and lease items will process as inventory updates if the equipment account and location correspond to the account and location recorded in the NEMS data base.

h. Equipment that appears obviously excess, worn-out, or in need of repair will be noted during an inventory by coding an "R" into the bar-code reader. The results of the inventory report will highlight the finding for appropriate followup action by the accountable property custodian or equipment user.

i. Equipment that appears obviously unused or underutilized will be noted during an inventory by coding an "I" into the bar-code reader. The results of the inventory report will highlight the finding in order for the accountable property custodian to obtain user verification of status or turn-in, as appropriate.

* j. Equipment found on station (FOS) during the inventory, which meets the criteria for control, will be identified to the using organization, tagged, and manually recorded during the inventory. The inventory team will promptly submit FOS items to the NEMS Equipment Manager for investigation and addition to the NEMS data base. Following the procedures of paragraph 3.108, a written determination, using NASA Form 1618, Found on Station (FOS) Equipment Investigation, will be obtained from the using organization. The written determination will include the reason why control was not established at time of receipt and the corrective action to be taken to prevent recurrence of the incident.
k. All unlocated items found subsequent to the initial inventory pass will be verified by an inventory team member and the verification documented in the inventory file with date found, location, and individual sighting the item.

5.203 Cyclic Inventory Reconciliation and Adjustment

a. Reconciliation and adjustment consists of those actions required to bring the accountable records, the custodian records, and the financial equipment accounts into agreement with the results of the inventory. Reconciliation and adjustment must be accomplished on a timely basis as the inventory progresses, but in no event take longer than 60 calendar days from the completion of the physical taking of the inventory. All reconciliations and adjustments to the inventory will be supported by documentation. The NEMS Equipment Manager will:

(1) Take action to enter into the equipment records and into the financial accounts equipment found during the inventory which had not previously been recorded and which meets the criteria for control. Action also must be taken to assure that these items are promptly tagged within 30 calendar days of such discovery.

(2) Obtain reports of survey for unlocated items in accordance with Part 3.300 and delete such items from the records and accounts.

(3) Determine the property custodian charged with equipment found in other property management areas for which there is no documented loan. Such equipment will be returned to the assigned area, transferred between custodians, or documented as a loan.

b. When Transaction I34 (Inventory Update - No Change to the Equipment File) is used to release an inventory discrepancy, the I34 Transaction must be adequately defined, particularly when an item is found in the correct account and location. In such cases the date sighted, location, and individual sighting the item should be annotated on the discrepancy report.

c. The NEMS Equipment Manager will ensure that the Supply and Equipment Management Officer reviews all adjustments to determine any actions needed to
reduce the necessity for future adjustments, including the need for greater attention to prescribed controls or better procedural guidance.

d. The Supply and Equipment Management Officer will promptly report to the Installation Director, in writing, any conditions revealed as a result of any inventory that indicate more than minor noncompliance with the Installation's equipment control program.

5.204 Sensitive Item Inventory

a. A sample of 20 percent of all the Installation's sensitive items will be random-number generated by NEMS Report 190. NEMS will sort the 20 percent sample by property custodian account.

b. The inventory requires an actual sighting of the sensitive item. A separate sensitive inventory file will be established each year which includes the property custodian verifications required by paragraph 2.207(b). Any custodian not able to produce a sensitive item during the 20 percent spot check will undergo a 100 percent sensitive item inventory (also see paragraph 2.207,a(1)-(5)).

* c. Annual, unannounced 20 percent sample sensitive item inventories need not be conducted for those accounts inventoried annually by full-time property custodians.

* d. Annual, unannounced 20 percent sample sensitive item inventories need not be conducted for those accounts undergoing the cyclic inventory during that same year. If a scheduled cyclic inventory slips and is rescheduled to another year, then the 20 percent sample inventory will be conducted for every account not undergoing cyclic inventory.

* e. The sensitive item inventory will be considered complete when reports of survey have been submitted in accordance with paragraph 3.300.

5.205 New Property Custodian Inventory

When a property management account is assigned a new property custodian, a 100 percent inventory will be taken of the area. A statement will be submitted to the NEMS Equipment Manager from the old custodian (or division director/Chief if the custodian left the Agency) and the new custodian that the inventory
was accomplished and that all items were found or reports of survey were submitted. Each Installation will set its own policy and procedure regarding the use of the light wand or laser bar-code scanner and bar-code reader for new property custodian inventories.

5.206 Special Inventory

Special inventories may be conducted as directed by the Supply and Equipment Management Officer.
PART 3 -- INVENTORY REPORTS AND FILES

5.300 Scope of Part

This Part prescribes the inventory reports to be provided to division directors/chiefs, property custodians, and the Installation Director, and the cyclic inventory files to be maintained for each property management area.

5.301 Inventory Reports to Division Directors/Chiefs and Property Custodians

a. The results of inventory reports provided to division directors/chiefs and property custodians may be developed and maintained as standard reports, locally developed on the NEMS PC with word processing software.

b. The Supply and Equipment Management Officer will, within 30 working days after completion of the inventory of a property management area, provide the property custodian and the appropriate division director/chief a report of the results of the inventory. This report will include, as a minimum, the:

(1) Start and completion dates of the inventory;

(2) Number and value of recorded items charged to the property custodian account which were found in the area;

(3) Number and value of recorded items charged to another property custodian account which were found in the area and not covered by documented loans;

(4) Number and value of recorded items charged to the property custodian account which were not found in the area and not covered by documented loans; and

(5) Number and value of unrecorded items found in the area which meet the criteria for control.

In addition, specific instructions will be given to the property custodian to resolve discrepancies and adjust the records.
c. The property custodian will be allowed a maximum of 30 working days for correction of the cited discrepancies and submission of survey reports, unless an extension, in writing, has been granted by the Supply and Equipment Management Officer. A suspense date will be maintained by the Supply and Equipment Management Officer, and failure of any property custodian or division director/chief to respond satisfactorily will be brought promptly to the attention of appropriate management officials.

d. After all accounts within a division have been completed, the Supply and Equipment Management Officer will provide the responsible division director/chief with a summary report of all accounts within the division following paragraph 5301, b(1)-(5), and an analysis of the results of this inventory versus the previous cyclic inventory.

5.302 Reports to Management of Inventory Results

a. A report showing the results of the physical inventory during the preceding calendar year will be prepared annually by the Supply and Equipment Management Officer, NASA Headquarters. This report will be submitted on or before April 1 of each year to the Installation Director with a copy forwarded to the Supply and Equipment Management Office (Code JIE), NASA Headquarters. This report will include:

(1) Number of property management areas and number of items scheduled for inventory during the year;

(2) Number of property management areas for which physical inventory was completed during the year;

(3) Number of items and value of equipment inventoried,

(4) Number of adjustments to the records, including custodian transfers, resulting from the physical inventory;

(5) Number and value of items added to the records as a result of the physical inventory;

(6) Number and value of unlocated items surveyed from the records as a result of physical inventory;
(7) Number and value of items which were previously surveyed and added to the records as a result of the physical inventory;

(8) Number of property management areas and number of items remaining to be inventoried in order to complete the current cyclic inventory cycle;

(9) Number of items excessed or otherwise disposed of as a result of inventory;

(10) Number of items identified as needing repair as a result of inventory; and

(11) Conclusions and any procedural changes initiated following analysis of the inventory results.

b. The final report for each cycle will be accompanied by a summary report which reflects the overall results of the inventory for the period. Senior management should be informed of reasons for large increases or decreases in adjustments, adds, and surveys.

5.303 Files to be Maintained

a. In addition to the overall inventory schedule and plan prescribed by this section, a central file will be established and maintained with separate folders for each property management area. Each folder will contain all necessary documents to clearly indicate the status and results of the inventory in each area. Examples of documents to be included are:

(1) Notification to the property custodian of the schedule for inventory;

(2) Designation of individuals responsible for taking the inventory;

(3) Listing of items charged to the area at the beginning of the inventory; the size of the listing for a large account may prohibit retention in the central file;

(4) Work sheets used by inventory personnel when conducting the inventory, and
NEMS-generated status reports used by equipment management personnel to follow-up on and resolve inventory actions;

(5) Report to the property custodian and the respective division director/chief of the inventory results, as prescribed in paragraph 5.301; and

(6) Copies of, or suitable cross-reference notations leading to, all adjustment actions resulting from the inventory.

b. A new file folder for each property management area will be established for each inventory cycle. File folders generated during the preceding inventory cycle will be retained at the Installation. Older inventory cycle files may be destroyed.
SECTION VI
EQUIPMENT MANAGEMENT REVIEWS

CONTENTS

<table>
<thead>
<tr>
<th>Par.</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.000</td>
<td>Scope of Section</td>
<td>6-1</td>
</tr>
</tbody>
</table>

PART 1 - EQUIPMENT MANAGEMENT REVIEW PROGRAM

| 6.100| Scope of Part                                        | 6-1  |
| 6.101| Types of Reviews                                      | 6-1  |
| 6.102| Prior Installation Notification                       | 6-1  |
| 6.103| Review Team                                           | 6-2  |
| 6.104| Installation Preparation                              | 6-2  |
| 6.105| Self-Evaluation                                       | 6-2  |
| 6.106| Entrance and Exit Meetings                            | 6-2  |
| 6.107| Report of Findings                                    | 6-3  |
| 6.108| Purpose of the Review Criteria                        | 6-3  |
| 6.109| Review Criteria                                       | 6-3  |
| 6.110| Using the Review Criteria                             | 6-3  |

PART 2 - THE SUPPLY AND EQUIPMENT MANAGEMENT REVIEW REPORT

| 6.200| Scope of Part                                        | 6-5  |
| 6.202| Review Followup (Reassessment)                       | 6-6  |
SECTION VI
EQUIPMENT MANAGEMENT REVIEWS

6.000 Scope of Section

This Section sets forth the requirements, procedures, criteria, and evaluation process used for conducting functional reviews of Installation equipment management programs.

PART 1 -- EQUIPMENT MANAGEMENT REVIEW PROGRAM

6.100 Scope of Part

This part sets forth the requirement for periodic review and assessment of equipment management to ensure that the objectives and standards of this Manual are effectively accomplished by NASA Installations.

6.101 Types of Reviews

There are two types of equipment management reviews:

a. Self-evaluation by each Installation as set forth in paragraph 6.105; and

b. Equipment management reviews conducted by a review team from NASA Headquarters on a triennial basis, and for selected Installations on a biennial basis.

6.102 Prior Installation Notification

The Installation will be notified in writing 90 days before a Supply and Equipment Management Review will be conducted. Such notification will request that a senior Installation management official act as the Installation’s coordinator and be named to the Headquarters Supply and Equipment Management Office.

6.103 Review Team

A review team consisting of individuals with appropriate supply and equipment management expertise will be appointed by the Chief, Supply and Equipment Management Office. The review team leader will be responsible for organizing and conducting the review and subsequent publication of the report of findings.
Installation Prepartion

The Installation will be requested, by letter, to prepare copies of specified documents and policies relating to equipment management for use by the review team. An Installation presentation at the entrance meeting detailing equipment management workings, relationships, and activities will enable the review team to more fully understand the Installation's implementation of the Equipment Management Manual.

Self-Evaluation

Upon notification of a scheduled review, Installations may wish to conduct a self-evaluation using the criteria in Appendix M. As the review is designed to be a management strengthening process, it is felt such self-evaluations are of significant value to the Installation in assessing both weaknesses and strengths within the equipment management program. Effective self-evaluation also enables the Installation to be better prepared for the functional review.

Entrance and Exit Meetings

The review team will hold both entrance and exit meetings with appropriate Installation personnel.

a. The entrance meeting will be conducted for an overview of equipment management operations at the Installation, identification of key personnel, arrangements for appropriate meetings and interviews, and establishing provisions for the conduct of the review.

b. The exit meeting will be devoted to a summary presentation by the review team of its findings and evaluations.

Report of Findings

A draft report of review findings will be provided at the exit meeting for appropriate review and comment. The draft report will include required actions in the case of identified conflicts with published instructions, recommendations in those areas in which the team believes operational improvements might be achieved, and commendable findings for noteworthy accomplishments. After receipt of Installation comments, a final report
will be prepared, incorporating the Installation comments and any additional Headquarters comments.

6.108 **Purpose of the Review Criteria**

To fully review the supply and equipment management programs of an Installation, it is necessary to measure what is being accomplished against the Agency's requirements. NASA's equipment management requirements are set forth in this Manual. The Manual is structured in Sections which are further divided into parts. Each part of the Manual represents a "TASK" needing to be accomplished to effectively maintain an Installation equipment management program. Consequently, each part of the Manual is equated to a task which, when all taken together, forms the basic structure for the review criteria. Certain elements are necessary to accomplish each task. These are identified as "FACTORS" in the criteria and equate generally to the paragraphs within the Manual.

6.109 **Review Criteria**

Appendix M of this Manual constitutes the Equipment Management Review Criteria showing each necessary task, which part of the Manual it relates to, and what factors are necessary for its proper accomplishment.

6.110 **Using the Review Criteria**

The team reviews the activities, systems, and procedures of the Installation against what is required for each factor as specified in the review criteria. Appropriate copies of documents, procedures, and working papers are collected by the team to support all evaluations and to document, as necessary, specific areas of the review. All "required actions" identified by the team to the Installation in the report are further identified to specific citations in this Manual.
PART 2 -- THE SUPPLY AND EQUIPMENT MANAGEMENT REVIEW REPORT

6.200 Scope of Part

This part describes the elements and preparation of the functional review report.

6.201 (The) Supply and Equipment Management Review Report

a. During the exit meeting, the review team will identify those functions that are not being performed in accordance with regulations and discuss what is needed to bring them to full compliance, as well as make recommendations to improve operations. As part of the review, the team will prepare a draft report and present it to the Installation at the exit meeting for review and comment. In the final report, the team will include the Installation comments and the team's response to those comments, when appropriate. The final report will be issued through the cognizant Institutional Associate Administrator to the Installation Director and Agency management for information and appropriate action. A copy of the final report is provided to all NASA Installations for information.

b. The Report on Supply and Equipment Management will be structured as follows:

(1) Digest, wherein the significant findings deserving the attention of senior management are highlighted.

(2) Table of Contents.

(3) Introduction, which summarizes the overall program at the Installation, addresses the events of the function review, and describes the review process.

(4) Functional Sections, such as Supply Management, Equipment Management, Warehousing, and Disposal, and (depending on the particular Installation being reviewed) Contract Management/Contract Property Management. These sections will describe the detailed findings, evaluation, recommendations, and required actions identified by the review team.

(5) Attachments, which includes related memoranda, organization charts, and other appropriate backup documentation.
6.202 **Review Followup (Reassessment)**

Line management at the Installation is responsible for implementation of the required actions and accepted recommendations. The cognizant Institutional Program Office is responsible for systematic followup on implementation of these actions.
APPENDIX A
PROPERTY CONDITION CODES
AND
DEFINITIONS

A-i
APPENDIX A

PROPERTY CONDITION CODES AND DEFINITIONS

Advertised excess property cannot be utilized to fill requirements unless a clear and complete description is given, e.g., test equipment -- input and output voltages as well as frequencies involved should be given. Nonstandard items -- purpose for which item was or could be used should be given. Condition codes are very important and should be determined as accurately as possible, since, in many cases, this will determine further utilization. A list of condition codes and definitions follows.

<table>
<thead>
<tr>
<th>Disposal Condition Code</th>
<th>Brief Definition</th>
<th>Expanded Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unused-good</td>
<td>Unused property that is usable without repairs and identical or interchangeable with new items from normal supply resources.</td>
</tr>
<tr>
<td>2</td>
<td>Unused-fair</td>
<td>Unused property that is usable without repairs, but is deteriorated or damaged to the extent that utility is somewhat impaired.</td>
</tr>
<tr>
<td>3</td>
<td>Unused-poor</td>
<td>Unused property that is usable without repairs, but is considerably deteriorated or damaged. Enough utility remains to classify the property better than salvage.</td>
</tr>
<tr>
<td>4</td>
<td>Used-good</td>
<td>Used property that is usable without repairs and most of its useful life remains.</td>
</tr>
<tr>
<td>5</td>
<td>Used-fair</td>
<td>Used property that is usable without repairs, but is somewhat worn or deteriorated and may soon require repairs.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Details</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Used-poor</td>
<td>Used property that may be used without repairs, but is considerably worn or deteriorated to the degree that remaining utility is limited or major repairs will soon be required.</td>
</tr>
<tr>
<td>7</td>
<td>Repairs required-good</td>
<td>Required repairs are minor and should not exceed 15 percent of original acquisition cost.</td>
</tr>
<tr>
<td>8</td>
<td>Repairs required-fair</td>
<td>Required repairs are considerable and are estimated to range from 16 percent to 40 percent of original acquisition cost.</td>
</tr>
<tr>
<td>9</td>
<td>Repairs required-poor</td>
<td>Required repairs are major because the property is badly damaged, worn, or deteriorated and are estimated to range from 41 percent to 65 percent of original acquisition cost.</td>
</tr>
<tr>
<td>X</td>
<td>Salvage</td>
<td>Property has some value in excess of its basic material content, but repair or rehabilitation to use for the originally intended purpose is clearly impractical. Repair for any use would exceed 65 percent of the original acquisition cost. NOTE: Code X applies only to items identified with a National Stock Number (NSN) or Local Stock Number (LSN).</td>
</tr>
<tr>
<td>S</td>
<td>Scrap</td>
<td>Material that has no value except for its basic material content.</td>
</tr>
</tbody>
</table>
APPENDIX B

NEMS STANDARDIZATION, CATALOGING, AND CONFIGURATION CONTROL BOARD

B1 NEMS DATA STANDARDIZATION

B2 NEMS CATALOGING RESPONSIBILITIES

B3 NASA EQUIPMENT MANAGEMENT SYSTEM CONFIGURATION CONTROL BOARD CHARTER
APPENDIX B

NEMS DATA STANDARDIZATION

Standardization of Equipment Files

The objective is to use the same model number and item name for all identical pieces of equipment in the NASA system. Department of Defense guidance published in Defense Logistics Agency (DLA) Cataloging Handbook H6 and DOD 4100.39-M will be used by the NEMS Central Cataloger to establish standard item names. The NEMS Central Cataloger will exercise final authority over establishing standard item names and model numbers. Examples of acceptable and unacceptable names and model numbers are:

<table>
<thead>
<tr>
<th>Acceptable Name</th>
<th>Unacceptable Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving Set, Television</td>
<td>Television Set, Black &amp; White Color TV</td>
</tr>
<tr>
<td>Optical Reader, Data Entry</td>
<td>Bar Code Reader Data Entry Reader</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acceptable Model</th>
<th>Unacceptable Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>VR201A</td>
<td>VR 201A</td>
</tr>
<tr>
<td></td>
<td>VR-201A</td>
</tr>
<tr>
<td></td>
<td>VR 201-A</td>
</tr>
<tr>
<td>LQP02-AA</td>
<td>LQP02.AA</td>
</tr>
<tr>
<td></td>
<td>LQP02 AA</td>
</tr>
<tr>
<td></td>
<td>LQP-02-AA</td>
</tr>
</tbody>
</table>

Maintenance of Equipment Files

The NEMS Central Cataloger periodically reviews all NASA Installation inputs and changes to the equipment file. This review ensures that uniformity of model numbers and item names is maintained. The Central Cataloger processes global changes, as required, to maintain standardization. The Central Cataloger exercises final authority over assignment of item names and model numbers to ensure that equipment records have the same data for identical items. When a conflict with CDB data exists, the Central Cataloger will consult with the Manager, Equipment Programs, NASA Headquarters, for resolution and final action.
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Objective

The NEMS equipment cataloger is responsible for maintaining the NASA central manufacturers' code table 030.

Activities

There are five major functions performed by the NEMS cataloger.

a. Assignment of five-digit Federal or NASA Supply Codes for Manufacturers (FSCM/NSCM).

b. Standardization of the central equipment file to ensure uniformity of Item Name, Model Number, and Federal Supply Class (FSC).

c. Standardization of the central manufacturers' code table.

d. Maintenance of the central manufacturers' code table.

FSCM/NSCM Assignment

NASA activities forward requests to the NEMS central cataloger for code assignment on all equipment items that do not have a code assigned (new purchases and equipment found that is not on record). The request contains the manufacturer’s name, address, and item name. Upon receipt of the request, the NEMS central cataloger performs the following:

a. Checks the central manufacturers’ code table to determine if a code exists for the manufacturer.

b. Screens Federal Supply Handbook H4-1, -2, and -3 to determine if an FSCM is assigned to the manufacturer.

c. Reviews the Thomas Register to determine if company name is correct.

d. Where a code already exists, the code is passed back to the requester for update of the equipment record. If no code exists, the NEMS central cataloger assigns a unique five-digit alpha code and passes this back to the requester. At the same time, the NEMS central cataloger updates the central manufacturer’s code table with the code assigned, manufacturer’s name, and address.
Standardization of Manufacturers, Model Numbers, and Item Names in the Equipment File

NASA Headquarters contracts for a NEMS Cataloger to support all NEMS standardization efforts. As cataloging items are standardized, the NEMS tables are updated and locked on the standard elements. For support or information regarding NEMS standardization, contact NASA Headquarters at FTS 453-2627.

Manufacturer’s Code Table

The manufacturer’s code table will be standardized by reviewing each code, manufacturer’s name, and address on the code table (approximately 6,200 records). These records will be researched against the H4-1, -2, and -3 to ensure accuracy and currency of the existing record. Where errors are found, the code table is updated to reflect the current data.

Maintenance of the Manufacturer’s Code Table

Handbooks H4-1, -2, and -3 are published bimonthly. Upon receipt of the new Handbook, Part One (changes since the last publication date) is screened against the code table file. This screening is accomplished to determine whether:

a. There is now a Federal Code (FSC) or (FSCM) for a manufacturer previously assigned a NASA code.

b. There are changes to be made to the code, manufacturer, name, or address of records currently in the code table.

Semiannually a computer dump is taken of the manufacturer’s code table. The output product is transferred to microfiche and subsequently mailed to the NASA activities maintaining NASA equipment.
Purpose

Provide a control mechanism to take action on proposed NASA Equipment Management System (NEMS) software, hardware and documentation changes; and to ensure that proposed changes are adequately defined, prioritized, and implemented to achieve a uniform system throughout the Agency.

Membership

The NEMS Configuration Control Board (CCB) will consist of one equipment management representative and one ADP representative from each Installation. The CCB will also consist of ex officio (nonvoting) members for advisory and observatory purposes. A Chairperson and Vice Chairperson will be elected from among CCB equipment management members. The Chairperson and Vice Chairperson will serve 2-year terms at the conclusion of which the Vice Chairperson automatically becomes Chairperson. A new Vice Chairperson is then elected. In addition to assuming the duties of the Chairperson, when required, the Vice Chairperson will represent NEMS as an ex officio member of the NMIS and NPDMS Configuration Control Boards.

The current membership of the Board, including ex officio members, designated by each Installation and concurred in by the NASA Headquarters Chief, Supply and Equipment Management Office, is listed in Appendix A of the official NEMS CCB Charter. As it becomes necessary for members to leave the CCB, each Installation will notify the Chairperson of replacements. The Chairperson will be responsible for updating Appendix A, and all other portions of the Charter as required.

Voting

Each Installation is limited to one vote. The equipment management representative or designee shall cast the Installation vote. A voting majority will be six votes, unless there are abstentions, in which case a simple majority of voting members shall prevail. A majority of abstentions or a tie will result in an item being deferred.

Governing Procedures

The business of the Board will be conducted in accordance with "NEMS System Change Processing Procedures" below. Any Agency user may propose change processing procedures.
Changes to Charter

Any CCB member or ex officio member may propose changes to the Charter at any time. The proposed change, along with the supporting rationale, will be submitted to the Chairperson. The Chairperson will distribute the proposal to the Board for review. A majority vote of the Board will be required to approve a recommendation of a proposed change to the Charter.

The Headquarters Supply and Equipment Management Office and the Information Resources Management Office must concur with all changes to the Charter. All changes/modifications to the Charter will be issued in the form of an amendment.

Functional Responsibilities

- Supply and Equipment Management Office

As the Functional Sponsor for the NEMS, the Supply and Equipment Management Office is responsible for overseeing the Board’s actions; must approve all actions of the Board which bear on or conflict with Agency property management policy and objectives, and otherwise advise the board of such policy implications, as necessary; serves as the advocate for securing Agency funding for the Board’s activities, and is prime interface with the Information Resources Management Office for incorporation of funding for approved changes into the Agency budget; and determines final priorities of changes approved by the Board when required by funding limitations. The Chief, Supply and Equipment Management Office, is responsible for functional oversight and for appointing a functional Program Manager.

- Automated Information Management (AIM) Program Office

Provides technical management for both system sustaining engineering and maintenance. The AIM Program Office is responsible for technical oversight and for appointing a Program Technical Manager.

- Development Installation (DI)

Provides support for day-to-day management of contractor activities for system sustaining engineering and maintenance; and for preparing annual budget requirements and justifications.

- CCB Chairperson

Responsible for the Board’s operations and for coordinating the requirements, approved and prioritized by the Board, with the Program Technical Manager and Program Functional Manager.
- **CCB Vice Chairperson**

Responsible for representing NEMS at NMIS and NPDMS Configuration Control Board meetings and for providing backup support to NEMS CCB Chairperson.

- **CCB Members**

Functional users from within the Agency responsible for representing the Installations in terms of user requirements, identifying proposed system changes to the Board for consideration, voting on the adoption of changes, and prioritizing approved changes for implementation.

- **Program Technical Manager**

Responsible for communicating Headquarters technical requirements and providing overall technical direction to the Development Installation Project Manager (DIPM) and for oversight of the budget from which the Board's changes are funded; must concur on approved changes before forwarding to the DIPM; must approve all actions of the board which bear on or conflict with Agency ADP policy and guidelines; must assure that such changes are incorporated into the Agency budget; and serves as an ex officio member of the Board.

- **Program Functional Manager**

Responsible for determining Headquarters functional requirements and providing overall functional guidance to the Program Technical Manager (PTM)/Development Installation Project Manager (DIPM); must concur on approved changes before forwarding to the DIPM; must approve all actions of the board which bear on or conflict with Agency equipment management policy and guidelines; and serves as an ex officio member of the Board.

- **Development Installation Project Manager**

Serves as an ex officio member of the Board with responsibility for ensuring that proposed changes are assessed for technical feasibility, and that budget and schedule impacts are provided to the Board; responsible for the implementation of approved actions.

- **ADP Representative**

Responsible for providing advice and assistance to Installation functional users in the areas of ADP and telecommunications as they affect local NEMS operations.
NEMS System Change Processing Procedure

- Documentation

Installations will fully document all proposed changes on a NASA Form 1620, "Change Control Request." To expedite the solution process, NASA Form 1620 will be forwarded directly to the CCB Chairperson. Each request will be assigned a priority by the requestor using the following guidelines:

a. **Priority A** - Maintenance - Lack of capability that is severely hampering operations, or causing significant resources impacts for which an adequate work around does not exist.

b. **Priority B** - Sustaining Engineering - Lack of capability, the implementation of which would substantially improve operations.

c. **Priority C** - Enhancement - Lack of capability, the implementation of which would improve operations and/or allow the discontinuance of an inefficient work around.

- Software Problem

If the DI designates the submission as a software problem, it will be corrected as soon as possible consistent with its priority within the sustaining engineering human resources levels. The DI will provide completion and implementation dates.

- New Requirement

If the Installation designates the submission as a new requirement, the DI will confirm and provide as assessment of the proposed new requirement or revision of an existing requirement, the design impact and manpower required, and the proposed schedule for implementation subject to authority and funding to proceed. Proposed changes and the Development Installation’s assessments will be distributed by the CCB Chairperson to the CCB members for coordination.

- Meetings of the Board

Periodically, the Chairperson shall conduct a CCB meeting to vote on proposed changes. The Chairperson shall prepare an agenda and send it to all members as notification of the meeting.
- Approval/Disapproval of Change Control Requests

A simple majority of votes cast will constitute approval/disapproval of a proposed change. Changes that are disapproved by the Board cannot be resubmitted for consideration for 1 year from date of disapproval. Rationale must be provided for any nonconcurrence on implementation of an approved proposed change.

- Prioritization of Changes

CCB members will be required to prioritize all approved changes. If a large backlog develops, it may become necessary to periodically conduct a reprioritization effort on all outstanding actions. The CCB chairperson may convene a meeting or teleconference to accomplish this task.

- Implementation

The Development Installation is responsible for implementation of approved changes and will provide a periodic status report to the CCB members. The Development Installation will initially perform functional testing ("Alpha Test") of all software changes. Subsequently, one Installation will perform an independent "Beta Test" for a given software release. NASA Headquarters, Code JIE, will be responsible for and give final approval of user acceptance testing. NASA Headquarters (Code JIE/JTI) shall propose an Installation to perform a "Beta Test," giving first consideration to that Installation with the majority of proposed changes.
APPENDIX C

DEFINITIONS OF TERMS
APPENDIX C
DEFINITIONS OF TERMS

As used throughout this Manual, the words and terms defined in this Appendix shall have the following meanings:

Accessory Item - An item which facilitates or enhances the operation of equipment but which is not essential for its operation such as a remote control device.

Assembly Item - An item without which the basic unit of equipment cannot operate, such as motors for pumps and machine tools.

*Automated Calibration Recall and Data System - Local data base whereby Installation instrument calibration and maintenance functions can maintain current historical data on each item of equipment that is repaired and/or calibrated. System will track costs (labor and parts), staff hours expended, equipment condition when received for service, and work performed for each item in the data base, as well as other metrology-related data.

Auxiliary/Accessorial ADP Equipment - Auxiliary or accessorial ADP equipment includes plotters, tape cleaners, tape testers, data conversion equipment, source data automation recording equipment (optical character recognition devices, computer input/output microfilm and other data acquisition devices), or computer performance evaluation equipment designed for use with digital, analog, or hybrid computer equipment, either cable or modem connected, wire connected, or stand-alone, and whether selected or acquired with a computer or separately.

Auxiliary Item - An item without which the basic unit of equipment cannot operate, such as motors for pumps and machine tools.

Borrows - Term used to differentiate internal loans (between custodians at same Installation or between Installations) from external loans within NEMS.

Calibration - The process of determining the deviation from a standard so as to ascertain the proper correction factors for measuring instruments.

Cannibalization - The removal of serviceable parts, components, or assemblies from one piece of equipment to be used as replacement in other equipment or to fabricate another item.
**Capital Equipment** - An item of equipment with an acquisition cost of $5,000 or more, that has an estimated service life of 2 years or more, which will not be consumed in an experiment, and which most generally will be identified as an independently operable item.

**Centrally Reportable Equipment** - That plant equipment, special test equipment (including components), special tooling, and non-flight space property (including ground support equipment) which is (i) generally commercially available and used as a separate item or component of a system, and (ii) is valued at $1,000 or more, and (iii) is identifiable by a manufacturer and model number.

**Collateral Equipment** - Encompasses building-type equipment, built-in equipment, and large, substantially affixed equipment, and is normally acquired and installed as a part of a facility project.

(1) **Building-Type Equipment** - A term used in connection with facility projects meaning that equipment which is normally required to make a facility useful and operable. It is built-in or affixed to the facility in such a manner that removal would impair the usefulness, safety, or environment of the facility. Such equipment includes elevators; heating, ventilation, and air conditioning systems; transformers; compressors, and other like items generally accepted as being an inherent part of a building or structure and essential to its utility. It also includes general building systems and subsystems such as electrical, plumbing, pneumatic, fire protection, and control and monitoring systems.

(2) **Built-In or Large, Substantially Affixed Equipment** - A term used in connection with facility projects and is that unit of equipment of any type other than building-type equipment which is to be built-in, affixed to, or installed in real property in such a manner that the installation cost, including special foundations or unique utility services, or the facility restoration work required after its removal, is substantial.

**NOTE:** For capitalization purposes, the costs and installation of the above equipment are generally included in the real property accounts. However, the cost of affixed equipment classified as personal property upon completion of a project will be recorded as such if it otherwise meets the capitalization criteria in FMM 9250-32.
**Component Equipment Item** - An item of equipment which is used as a subassembly to a larger assembly. Parts are not to be considered component equipment items.

**Condition Code** - A code assigned to indicate the physical condition and useability of equipment.

**Contract Number** - A unique identifier assigned to each NASA Contract pursuant to the NASA PR.

**Contracting Officer** - Any person with the authority to enter into and administer contracts and make determinations and findings with respect thereto, or with any part of such authority.

**Contracting Technical Monitor** - An authorized representative of a contracting officer acting within the limits of his/her authority.

**Contractor Acquired Equipment** - Equipment procured or otherwise provided by the contractor for the performance of a contract, title to which is vested in the Government.

**Controlled Equipment** - All equipment with an acquisition cost of $1,000 or more, that has an estimated service life of 2 years or more, which will not be consumed or expended in an experiment, and selected items of equipment with an acquisition cost of less than $1,000 designated, and identified as sensitive by the holding Installation.

**Custodial Records** - Written memoranda or identifying checks of any description or type used to control items of equipment, such as requisitions, NASA Form 1602 transaction documents, tool checks, stock record books, machine records, etc.

**Disposal** - The process of transferring NASA excess personal property to another Federal agency, or donating, selling, abandoning, or destroying surplus personal property.

**Duplicate Records** - An equipment control number (ECN) held accountable by two different sub-Installation codes in the NEMS Central Data Base at the same time.

**Entry Reference Number** - A unique control number generated by NEMS for each transaction input to NEMS.
Equipment - An item of real or personal property generally in the configuration of a mechanical, electrical, or electronic apparatus or tool, normally costing in excess of $100, which may perform a function independently or in conjunction with other equipment or components.

Equipment Acquisition Document (EAD) - NASA Form 1511, to be completed and forwarded for NASA Headquarters approval when an item of equipment valued at $250,000 or more, or a group of items valued at $1 million or more for the same purpose, is proposed to be acquired with R&D or SFC&DC funds for use at a NASA Installation.

Equipment Control - The maintenance of records or documents of equipment transactions which provide information such as item identification number, description, and current physical location.

Equipment Control Number - The identification number assigned and affixed to each item of equipment for control purposes (tag/decal number).

Equipment Control Number Register - A written record of the assignment of Equipment Control Numbers.

Equipment Found on Station - Any equipment meeting the criteria for control for which formal accountability has not been established.

Equipment Pool - The collection, at a central point, of equipment under control for issue to individuals or organizations.

Equipment Record - A record maintained by the Supply and Equipment Management Officer which provides selected information about each item of controlled equipment.

Equipment Reutilization Screening - The examination of existing equipment documentation for the purpose of fulfilling equipment requirement through reassignment.

Equipment Systems - Assemblies of component equipment items designed and operated to accomplish specific functions.

Equipment Utilization Program - A program to ensure maximum effectiveness in the management and utilization of NASA equipment.

Excess Turn-In (see NASA Excess) - Personal property determined unnecessary to the need and discharge of the holding organization and therefore turned in to the property organization for reutilization or disposal.
Fabricated Item - Personal property which is manufactured for, or constructed by, the using organization. Fabricated items meeting the controlled equipment criteria will be controlled as set forth in Section II of this Manual.

Facilities Contract - A contract type under which Government facilities and equipment are provided to a contractor by the Government for use in connection with the performance of separate related procurement or support services contracts for supplies or services. The term includes facilities acquisition contracts, facilities use contracts, and consolidated facilities contracts.

Federal Supply Class (FSC) - A 4-digit property identification code describing commodity classification (see Federal Cataloging Handbooks H2 series and NHB 4410.1, "Utilization and Maintenance of Federal Cataloging").

Fixed Assets - Assets of a permanent character having a continuing value such as land, buildings, and other structures and facilities, including collateral and noncollateral equipment meeting the criteria for capitalization.

Freeze Number - A uniquely assigned 10-digit number generated by the NEMS Control Data Base verifying the availability of an item for transfer.

Government-Furnished Equipment - Equipment either furnished to a contractor, as in Government-Furnished Equipment, or acquired by the contractor, as in Contractor-Acquired Equipment.

Leased Equipment - Equipment that has been conveyed by or to NASA by contract for a certain time period in consideration of payment of rental fee.

Loaned Equipment - Equipment in temporary use by other than the accountable organization.

Maintenance and Repair of Equipment - Recurring day-to-day, periodic, or scheduled activity required to keep equipment in working condition, or to resolve it or its components to a condition substantially equivalent to its original designed capacity and efficiency.

Manufacturer’s Model Number - The identification of a single type item of a manufacturer’s product line.
Modification - A basic or functional change made to an equipment item to give a new orientation, or to serve a new purpose.

NASA Excess - Personal property which is determined to be unnecessary to the needs and discharge of the responsibilities of all NASA Installations.

NASA/FAR Supplement - A document which, with the Federal Acquisition Regulation (FAR), establishes uniform policies and procedures relating to the procurement of property and services. The NASA/FAR Supplement applies to all purchases and contracts made by NASA for property and services which obligate appropriated funds.

NEMS Cataloger - The Agency-wide individual(s) responsible for ensuring that all equipment item names, manufacturer codes, model numbers, and Federal Supply Groups are kept standard within NEMS.

*NEMS Central Data Base - Provides equipment visibility for screening and redistributing NASA equipment valued at $1,000 or more and locates specific equipment items or data for managerial purposes. The NEMS CDB is comprised of each Installation NEMS data base. Installations submit NEMS transactions processed on a daily basis to the NEMS CDB for update. The NEMS CDB tracks transfers, provides screening and ad hoc inquiry functions, and produces management reports as requested.

NEMS Configuration Control Board - A permanent technical control group responsible for maintaining NEMS configuration control. Members come from each Field Installation and NASA Headquarters. The Board Chairperson convenes the group as necessary.

NEMS Control - That segment of the equipment management organization that processes all equipment transactions and generates applicable forms and reports (see Transaction Document).

NEMS Equipment Manager - The key individual(s) within the equipment management organization interfacing with the property custodians and equipment users. Maintains and controls equipment records, and assists custodians and users in property procedures for, and documentation of, equipment actions.

National Asset - Equipment may be classified as a national asset and be retained by the Installation in an inactive status provided the item is (i) of special purpose in...
nature; (ii) costly in its design and development; (iii) one of a kind or nationally scarce; or (iv) its reuse potential warrants retention, even though a firm future requirement does not exist.

*Noncapital, Nonsensitive Controlled Equipment - Items with an acquisition cost between $1,000 and $4,999 and not identified as sensitive items.

**Noncollateral Equipment** - Noncollateral equipment imparts to the facility or test apparatus its particular character at the time; e.g., furniture in an office building, laboratory equipment in a laboratory, test equipment in a test stand, machine tools in a manufacturing facility, computer in a building useful or operable as structure or building. Such equipment, when acquired and used in a facility or a test apparatus, can be severed and removed after erection or installation without substantial loss of value or damage thereto or to the premises where installed.

*Noncontrolled Equipment - Items of equipment not designated as sensitive which have an acquisition cost of less than $1,000.

**Nonreportable Property** - Excess personal property that does not meet the minimum requirements as specified in NHB 4300.1, "NASA Personal Property Disposal Manual," Appendices H and J.

**Personal Property** - Property of any kind, including equipment, materials, and supplies, but excluding real property.

**Plant Clearance** - All actions related to the screening, redistribution, and disposal of contractor inventory from a contractor's plant or work site (contractor's plant includes a Government facility when contractor-operated).

**Plant Equipment** - Personal property of a capital nature (consisting of equipment, machine tools, test equipment, furniture, vehicles, and accessory and auxiliary items, but excluding special tooling and special test equipment) used, or capable of use, in the manufacturing of supplies, in the performance of services, or for any administrative or general plant purpose. (Note: This definition applies only to contractor-held property so classified for contract purposes.)
Property Accountability - A record of transactions, systematically maintained, which at any given time will disclose item identification, quantity, cost, location, and custodial responsibility of personal property controlled by an Installation or a contractor.

Property Administrator - An individual duly designated by the contracting officer to administer contract requirements and obligations relative to Government property. The Property Administrator is an authorized representative of the contracting officer (see NASA Far Supplement (NFS) Subpart 18-45.72).

Property Custodian - An individual organizationally responsible for all controlled equipment assigned to a designated property management area.

Property Disposal Officer - The official appointed by the Installation Director responsible for managing the Installation's screening, redistribution, and disposal functions.

Property Management Area - An area of property management responsibility by organization or segment thereof, selected by the Supply and Equipment Management Officer in conjunction with the head of the organizational unit, for the assignment of a property custodian for property control.

Property Survey Board - Composed of two or more members (with alternates as appropriate) and a chairperson which will investigate and make recommendations concerning the loss, damage, or destruction of property exceeding $1,000 in acquisition value. The Property Survey Officer, Supply and Equipment Management Officer, or individuals involved in the maintenance of official property records will not be designated to serve on the Board.

Purchase Request/Purchase Order - A document utilized to state requirement for, and to authorize purchase of, goods and services.

Redistribution - The reassignment of equipment for other use with appropriate transfer of accountability.

Relocatable Buildings - Buildings or other enclosed structures used as working space, shelter, or to store equipment and other personal property which are designed to be easily erected, dismantled, moved and reused. Includes office/house trailers, pre-fabricated modular structures, tents, rigid and nonrigid inflatable structures, and similar structures unless excluded. Specifically excluded
from this definition are built-in-place, pre-engineered metal buildings, wood frame buildings, and mobile equipment acquired through the normal facility or equipment approval process, as appropriate.

**Salvage** - Personal property that has some value in excess of its basic material content but which is in such condition that it has no reasonable prospect to use for any purpose as a unit (either by the holding or any other Federal agency) and its repair or rehabilitation estimated to cost in excess of 65 percent of acquisition cost would be considered "clearly impractical" for purposes of this definition.

*Sensitive Item* - An item of equipment which, due to its pilferable nature or the possibility of its being a hazard, requires a stringent degree of control. A sensitive item can be capital or non-capital equipment. Generally, sensitive items are controlled at an acquisition cost of $100 or more.

**Shipping Document/Request for Shipping** - The authorization and acceptance document that accompanies equipment when it is being sent to another location.

*Space Property* - As set forth in the NFS Subpart 18-45.501, personal property which is peculiar to aeronautical and space programs of NASA, and is not otherwise included in the categories of property set forth in FAR Subpart 45.101. It includes such items as aircraft, engines, space vehicles, and other similar components and related support equipment furnished for use as a standard or model, to establish equipment compatibility, or for such other similar reasons as may be determined by the contracting officer. Note: This definition applies to contractor-held property so classified for contract purposes. Upon transfer or delivery to the Government, it becomes equipment or material according to paragraph 3.109 of this Manual. If such property is later provided to a contractor, it is again considered to be space property.

**Spare** - An item peculiar to a system or end item and held in reserve.

**Special Test Equipment** - As set forth in the FAR Subpart 45.101, either single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special purpose testing in performing a contract. A testing unit consists of all electrical, electronic, hydraulic, pneumatic, mechanical or other items or assemblies of equipment including standard or general purpose items or components that are
mechanically, electrically, or electronically interconnected so as to become a new functional entity, causing the individual item or items to become interdependent and essential in the performance of special purpose testing in the development or production of particular supplies or services. The term "special test equipment" does not include: material, special tooling; buildings and nonseverable structures (except foundations and similar improvements necessary for installing special test equipment); and plant equipment items used for general plant testing purposes. Note: This definition applies only to contractor-held property so classified for contract purposes.

**Special Tooling** - As set forth in the FAR Subpart 45.101, all jigs, dies, fixtures, molds, patterns, taps, gauges, other equipment and manufacturing aids, and replacements of these items, which are of such a specialized nature that without substantial modification or alteration their use is limited to the development or production of particular supplies or parts thereof, or to the performance of particular services. The term includes all components of such items, but does not include: material, special test equipment, or buildings and nonseverable structures (except foundations and similar improvements necessary for the installation of special tooling); general or special machine tools; or similar capital items. Note: This definition applies only to contractor-held property so classified for contract purposes.

**Status Code** - A key to the relative availability of NEMS reportable equipment by codes, A (active), B (inactive assigned), C (inactive unassigned), and D (excess).

**Surplus Personal Property** - Personal property not required for the needs and the discharge of the responsibilities of all Federal agencies.

**Survey Report** - A report of administrative action taken to investigate and review the loss, damage, or destruction of Government property and to assemble pertinent facts and determine the extent of such loss, damage, or destruction.

**Transaction** - Each add, delete, or change to an equipment record in NEMS.

**Transaction Control Document (NASA Form 1602)** - The document generated by NEMS that controls property custodian equipment transactions after initial entry into the NEMS data base, and that serves as the property custodian's detailed record for each assigned equipment item.

C-10
Unique Equipment - Specialized equipment items or equipment systems normally not commercially available that are identified as unique when the equipment becomes inactive.
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APPENDIX D

EQUIPMENT TYPE ACCOUNTS
APPENDIX D

EQUIPMENT TYPE ACCOUNTS

Title and Definition

1551 Mechanical Equipment

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>Engines, Turbines, and Components</td>
</tr>
<tr>
<td>30</td>
<td>Mechanical Power Transaction Equipment</td>
</tr>
<tr>
<td>31</td>
<td>Bearings</td>
</tr>
<tr>
<td>35</td>
<td>Service and Trade Equipment</td>
</tr>
<tr>
<td>36</td>
<td>Special Industry Machinery</td>
</tr>
<tr>
<td>37</td>
<td>Agricultural Machinery and Equipment</td>
</tr>
<tr>
<td>38</td>
<td>Construction, Mining, Excavating, and Highway Maintenance Equipment</td>
</tr>
<tr>
<td>41</td>
<td>Refrigeration, Air Conditioning, and Air Circulating Equipment</td>
</tr>
<tr>
<td>42</td>
<td>Fire Fighting, Rescue, and Safety Equipment</td>
</tr>
<tr>
<td>43</td>
<td>Pumps and Compressors</td>
</tr>
<tr>
<td>44</td>
<td>Furnace, Steam Plant, and Drying Equipment; and Nuclear Reactors</td>
</tr>
<tr>
<td>45</td>
<td>Plumbing, Heating, and Sanitation Equipment</td>
</tr>
<tr>
<td>46</td>
<td>Water Purification and Sewage Treatment Equipment</td>
</tr>
<tr>
<td>47</td>
<td>Pipe, Tubing, Hose and Fittings</td>
</tr>
<tr>
<td>48</td>
<td>Valves</td>
</tr>
</tbody>
</table>

1552 Laboratory Equipment

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>Medical, Dental and Veterinary Equipment and Supplies</td>
</tr>
<tr>
<td>66</td>
<td>Instruments and Laboratory Equipment</td>
</tr>
<tr>
<td>88</td>
<td>Live Animals</td>
</tr>
</tbody>
</table>
### 1553 Shop Machinery and Equipment

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Woodworking Machinery and Equipment</td>
</tr>
<tr>
<td>34</td>
<td>Metalworking Machinery</td>
</tr>
<tr>
<td>49</td>
<td>Maintenance and Repair Shop Equipment</td>
</tr>
<tr>
<td>51</td>
<td>Hand Tools</td>
</tr>
<tr>
<td>52</td>
<td>Measuring Tools</td>
</tr>
</tbody>
</table>

### 1554 Photographic Equipment

This category includes equipment identifiable to Federal Supply Group:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>67</td>
<td>Photographic Equipment</td>
</tr>
</tbody>
</table>

### 1555 Electrical and Electronic Equipment

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>Communication, Detection, and Coherent Radiation Equipment</td>
</tr>
<tr>
<td>59</td>
<td>Electrical and Electronic Equipment Components</td>
</tr>
<tr>
<td>60</td>
<td>Fiber Optics Materials, Components, Assemblies, and Accessories</td>
</tr>
<tr>
<td>61</td>
<td>Electric Wire, and Power and Distribution Equipment</td>
</tr>
<tr>
<td>62</td>
<td>Lighting Fixtures and Lamps</td>
</tr>
<tr>
<td>63</td>
<td>Alarm and Signal Systems</td>
</tr>
</tbody>
</table>

### 1556 Training Equipment

This category includes equipment identifiable to Federal Supply Group:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>Training Aids and Devices</td>
</tr>
</tbody>
</table>
1557 **Furniture and Office Equipment**

This category includes equipment identifiable to Federal Supply Group:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>71</td>
<td>Furniture</td>
</tr>
<tr>
<td>72</td>
<td>Household and Commercial Furnishings and Appliances</td>
</tr>
<tr>
<td>74</td>
<td>Office Machines and Visible Record Equipment</td>
</tr>
<tr>
<td>75</td>
<td>Office Supplies and Devices</td>
</tr>
<tr>
<td>76</td>
<td>Books, Maps, and Other Publications</td>
</tr>
</tbody>
</table>

1558 **Motor Vehicles and Transportation Equipment**

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Ships, Small Craft, Pontoons, and Floating Docks</td>
</tr>
<tr>
<td>20</td>
<td>Ship and Marine Equipment</td>
</tr>
<tr>
<td>22</td>
<td>Railway Equipment</td>
</tr>
<tr>
<td>23</td>
<td>Ground Effect Vehicles, Motor Vehicles, Trailers, and Cycles</td>
</tr>
<tr>
<td>24</td>
<td>Tractors</td>
</tr>
<tr>
<td>25</td>
<td>Vehicular Equipment Components</td>
</tr>
<tr>
<td>26</td>
<td>Tires and Tubes</td>
</tr>
<tr>
<td>39</td>
<td>Materials Handling Equipment</td>
</tr>
</tbody>
</table>

1559 **Aircraft**

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Aircraft and Airframe Structural Components</td>
</tr>
<tr>
<td>16</td>
<td>Aircraft Components and Accessories</td>
</tr>
<tr>
<td>17</td>
<td>Aircraft Launching, Landing, and Ground Handling Equipment</td>
</tr>
</tbody>
</table>
### 1560 Personal Services Equipment

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>73</td>
<td>Food Preparation and Serving Equipment</td>
</tr>
<tr>
<td>77</td>
<td>Musical Instruments, Phonographs, and Home-Type Radios</td>
</tr>
<tr>
<td>78</td>
<td>Recreational and Athletic Equipment</td>
</tr>
<tr>
<td>84</td>
<td>Clothing</td>
</tr>
<tr>
<td>85</td>
<td>Toiletries</td>
</tr>
<tr>
<td>89</td>
<td>Subsistence</td>
</tr>
</tbody>
</table>

### 1561 Space Vehicles

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Guided Missiles</td>
</tr>
<tr>
<td>18</td>
<td>Space vehicles</td>
</tr>
</tbody>
</table>

### 1562 Miscellaneous Equipment

This category includes equipment identifiable to Federal Supply Groups:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Weapons</td>
</tr>
<tr>
<td>11</td>
<td>Nuclear Ordinance</td>
</tr>
<tr>
<td>12</td>
<td>Fire Control Equipment</td>
</tr>
<tr>
<td>13</td>
<td>Ammunition and Explosives</td>
</tr>
<tr>
<td>29</td>
<td>Engine accessories</td>
</tr>
<tr>
<td>40</td>
<td>Rope, Cable, Chain, and Fittings</td>
</tr>
<tr>
<td>53</td>
<td>Hardware and Abrasives</td>
</tr>
<tr>
<td>54</td>
<td>Pre-fabricated Structures and Scaffolding</td>
</tr>
<tr>
<td>55</td>
<td>Lumber, Millwork, Plywood, and Veneer</td>
</tr>
<tr>
<td>56</td>
<td>Construction and Building Materials</td>
</tr>
<tr>
<td>68</td>
<td>Chemicals and Chemical Products</td>
</tr>
<tr>
<td>79</td>
<td>Cleaning Equipment and Supplies</td>
</tr>
<tr>
<td>80</td>
<td>Brushes, Paints, Sealers, and Adhesives</td>
</tr>
<tr>
<td>81</td>
<td>Containers, Packaging, and Packing Supplies</td>
</tr>
<tr>
<td>83</td>
<td>Textiles, Leather, Furs, Apparel and Shoe Findings, Tents, and Flags</td>
</tr>
<tr>
<td>87</td>
<td>Agricultural Supplies</td>
</tr>
<tr>
<td>91</td>
<td>Fuels, Lubricants, Oils, and Waxes</td>
</tr>
<tr>
<td>93</td>
<td>Nonmetallic Fabricated Materials</td>
</tr>
<tr>
<td>94</td>
<td>Nonmetallic Crude Materials</td>
</tr>
<tr>
<td>95</td>
<td>Metal Bars, Sheets, and Shapes</td>
</tr>
<tr>
<td>96</td>
<td>Ores, Minerals, and Their Primary Products</td>
</tr>
<tr>
<td>99</td>
<td>Miscellaneous</td>
</tr>
</tbody>
</table>

1563 **Automatic Data Processing Equipment**

This category includes equipment identifiable to Federal Supply Group:

<table>
<thead>
<tr>
<th>FS Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>General Purpose Automatic Data Processing Equipment, Software, Supplies, and Support Equipment</td>
</tr>
</tbody>
</table>
CROSS REFERENCE: FEDERAL SUPPLY GROUPS TO TYPE ACCOUNTS

<table>
<thead>
<tr>
<th>FS GROUP</th>
<th>TYPE ACCOUNTS</th>
<th>FS GROUP</th>
<th>TYPE ACCOUNTS</th>
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<tbody>
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<tr>
<td>16</td>
<td>1559</td>
<td>60</td>
<td>1555</td>
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APPENDIX E

SURVEY REPORT FORMS

(NASA FORMS 598 AND 599)
Survey Report

PART I - BASIC DATA

<table>
<thead>
<tr>
<th>Name and Title</th>
<th>2 Survey Report No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bob King, Logistics Management Specialist</td>
<td>92-1</td>
</tr>
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<table>
<thead>
<tr>
<th>Organization</th>
<th>4 Entry Reference No.</th>
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<tr>
<td>Supply and Equipment Management Division</td>
<td>1120310043</td>
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<table>
<thead>
<tr>
<th>Installation</th>
<th>7 Date of Discovery</th>
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<tbody>
<tr>
<td>NASA Headquarters</td>
<td>January 3, 1992</td>
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<table>
<thead>
<tr>
<th>IDENTIFICATION OF EQUIPMENT</th>
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<tbody>
<tr>
<td>EQUIPMENT CONTROL NO.</td>
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<tr>
<td>---------------------------------</td>
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<tr>
<td>G085843</td>
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</table>

9 Equipment Listed Above Was (Check appropriate box)
☐ LOST ☐ DAMAGED ☐ DESTROYED

10 Statement of Circumstances (Continue on separate sheet if necessary)

This item was first known to be missing when it could not be located during a divisional walk-through inspection conducted January 3, 1992. It was last seen November 13, 1991, during a demo of bar code scanning equipment/systems. All potential users have been contacted. A thorough search of divisional offices was made following the walk-through in an attempt to locate the bar code reader. It was reported to the Headquarters Security Branch on January 10, 1992, and subsequently to the Federal Protective Service for investigation.

11 Signature

Appropriate Signature, Appropriate Title

12 Date of Report

January 13, 1992
The division property custodian and all personnel have been directed to institute tighter controls over sensitive, pilferable equipment to prevent losses in the future. This includes physical security measures such as keeping portable, highly desired property under lock and key. Responsible personnel have been made aware of equipment control and accountability requirements, including awareness of equipment location, use, and movement.

A complete search has been made of the office suite on the premises where the bar code reader was being used. Reports have been made to the appropriate security organizations and an investigation is ongoing. The property is presumed to be stolen or borrowed without the knowledge of the property custodian.
3. Recommendations (based on findings in item 2 above)

☐ a. All concerned should be relieved of accountability and responsibility for property listed in Part I.

☐ b. The named responsible individuals (specified in the findings) are considered accountable, and this report will be referred to their supervisors for the Contracting Officers for possible disciplinary or other appropriate action.

4. Specific Corrective or Preventive Action to be Taken to Prevent Recurrence of Incident (Continue on separate sheets if necessary)

Physical security measures cited in Part II, to be instituted by the division responsible for the loss, will have a significant effect in preventing such losses in the future. If feasible, potentially pilferable, portable equipment should be secured when not in use. Awareness of user and property custodian roles in equipment control and accountability are actively being pursued.

<table>
<thead>
<tr>
<th>PART IV - ACTION OF THE PROPERTY SURVEY BOARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME</td>
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<tr>
<td>Chairman</td>
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<tr>
<td>Appropriate Name</td>
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<tr>
<td>Member</td>
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<tr>
<td>Member</td>
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<tr>
<th>PART V - ACTION OF THE PROPERTY SURVEY OFFICER</th>
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<td>Name</td>
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<tr>
<th>PART VI - DISTRIBUTION OF SURVEY REPORT</th>
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<tbody>
<tr>
<td>ORIGINAL - Survey Report File</td>
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<tr>
<td>COPY TO - Responsible individual (Named in Part I):</td>
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<tr>
<td>REPORT NO</td>
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APPENDIX F

EQUIPMENT ACQUISITION DOCUMENT (EAD)

(NASA FORM 1511)
NOTICE

This appendix is canceled and reserved for future use.

The requirement for Equipment Acquisition Documents (EAD’s) has been canceled. Continued use of EAD’s is at the discretion of NASA Center Management, and will be at the Center level only.
APPENDIX G

REQUEST FOR CANNIBALIZATION/MODIFICATION
OF CONTROLLED EQUIPMENT
(NASA FORM 1617)
Request for Cannibalization/Modification of Controlled Equipment

NAME OF REQUESTER: Mel Potts

ORG CODE: EB32

SECTION I - EXISTING EQUIPMENT

DESCRIPTION (Include item name, manufacturer, model number, serial number, etc.):
Laser Unit, Spectra - Physics, Mode 165 S/N None
Year of Manufacture 1982

EQUIP CONTROL NO: 1065611
USER DIVISION: EB31
CONDITION CODE: 4
ACQ VALUE: 2,127,500

SECTION II - EQUIPMENT CHANGE DATA

DESCRIPTION (Include new name, value and name of new remaining components type and value of residue if cannibalization estimated overall value):
Welding Joint Analyzer, Laser $120,000.00
Physic Power Supply (Internal) 195.00
Laser exciter, Spectra Physics 1,750.00
Rack adapter 100.00
Computer, Micro (ECN 1017211), Kaypro 3,450.00
Model 165, year of manufacture 1982

SECTION III - CANNIBALIZATION/MODIFICATION

DESCRIPTION (Give justification for dismantling alteration change removal etc. Continue on separate sheet if necessary):
Original system was purchased as a one-of-a-kind system and is now outdated and non-repairable. By modifying the unit and interfacing it with the computer, a useful equipment item can be realized. Since this new system only uses the laser head, power supply, exciter, rack mount adapter, and the computer, the residual components and cabling will be turned-in as excess.

SIGNATURE OF REQUESTER
Appropriate Signature

SECTION IV - CERTIFICATION

I CERTIFY THAT IF THE ABOVE ITEMS ARE APPROVED FOR CANNIBALIZATION THE RESIDUE WILL BE TURNED IN TO THE PROPERTY DISPOSAL OFFICER FOR FURTHER UTILIZATION OR DISPOSITION

SIGNATURE OF PROPERTY CUSTODIAN
Appropriate Signature

SECTION V - ACTIONS

USER DIVISION/DIRECTORATE REVIEW
APPROVED
X YES
NO
REASON (if checked "No")

CONTRACTING OFFICER'S OR OTHER OFFICIAL'S REVIEW, AS REQUIRED
APPROVED
X YES
NO
REASON (if checked "No")

SUPPLY AND EQUIPMENT MANAGEMENT OFFICER OR CONTRACT PROPERTY ADMINISTRATOR REVIEW
APPROVED
X YES
NO
REASON (if checked "No") AND REMARKS

NAME
Appropriate Name
SIGNATURE
Appropriate Signature
DATE 10/7/91

NASA FORM 1617 JUL 84
APPENDIX H

FOUND ON STATION (FOS) EQUIPMENT INVESTIGATION

(NASA FORM 1618)
**Found On Station (FOS) Equipment Investigation**

**Note:** See instructions on reverse. Please type or print clearly.

**Name:** Mel Potts, Manager Equipment Programs

**OFFICEMAIL CODE**

**PROPERTY CUSTODIAN (NAME AND SIGNATURE):**

Bob King

**LOCATION OF EQUIPMENT**

- **BLDG:** 5006
- **ROOM:** 006
- **OTHER:**

**ACQUISITION COST**

- **1,600.00 (E)**

**LOCATION OF EQUIPMENT**

- **DATE FOUND:** 1-10-92

**PART I – INVESTIGATION AND STATEMENT OF CIRCUMSTANCES**

1. **SOURCE OF EQUIPMENT FOUND (CHECK AND COMPLETE WHERE APPLICABLE):**
   - **PURCHASED**
   - **LEASED**
   - **GOVERNMENT TRANSFER**
   - **GOVERNMENT EXCESS**
   - **CONTRACTOR**
   - **OTHER**

2. **PROPERTY CUSTODIAN (NAME AND SIGNATURE):**

Bob King

**FROM:**

- **PC Warehouse**

**CITY AND STATE:**

- **Arlington, VA**

**AUTHORITY:**

- **Purchased by Contractor while working at NASA Headquarters**

**METHOD OF DELIVERY:**

- **CONTRACTOR/VENDOR TO USER**
- **RECEIVING DOCK TO USER**
- **CONTRACTOR INSTALLED**

**FACTO R FREIGHT CARRIER:**

- **N/A**

**HAND CARRIED BY:**

- **N/A**

**FABRICATED BY:**

- **N/A**

**SIGN**

- **N/A**

**METHOD OF DELIVERY:**

- **CONTRACTOR/VENDOR TO USER**

**RECEIVING DOCK TO USER**

- **CONTRACTOR INSTALLED**

**METHOD OF DELIVERY:**

1. **RECOMMENDATION TO PREVENT RECURRENCE:**

The employee has been instructed on his responsibilities for reporting equipment of this nature to the Property Management Organization. This was discussed at all branch staff meetings the week of January 10th.

**PART II – ACTIONS**

**INVESTIGATION AND FINDINGS BY (NAME AND SIGNATURE):**

**DATE:**

1-14-92

**APPROPRIATE NAME, APPROPRIATE SIGNATURE:**

**APPROPRIATE NAME, APPROPRIATE SIGNATURE:**

**DATE:**

1-16-92

**SOURCE OF EQUIPMENT FOUND:**

- **N/A**

**PROPERTY CUSTODIAN (NAME AND SIGNATURE):**

Bob King

**LOCATION OF EQUIPMENT:**

- **DATE FOUND:** 1-10-92

**PROPERTY CUSTODIAN (NAME AND SIGNATURE):**

Bob King

**LOCATION OF EQUIPMENT:**

- **DATE FOUND:** 1-10-92
2 EQUIPMENT MANAGEMENT REPRESENTATIVE REVIEW

A RECOMMENDATIONS

An article was published in the Headquarters bulletin notifying all employees about this specific contractor and about reporting found equipment. Headquarters Contracts was informed of our actions and is assisting in follow-up activity. The inventory team was briefed on the types of equipment this contractor acquired.

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3 SUPPLY AND EQUIPMENT MANAGEMENT OFFICER REVIEW

A INVESTIGATION AND RECOMMENDATIONS

Prior to final award, this contract was reviewed by my staff and found to contain the proper property clauses. The contractor did not follow appropriate equipment control procedures. Information from our investigation has been included as part of the NEMS FOS transaction. No further action is deemed to be in the best interest of the Government.

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GENERAL INFORMATION

All capital equipment, that equipment with an acquisition cost of $500 or more, that has an estimated service life of one year or more, which will not be consumed or expended in an experiment, and selected items of equipment designated and identified as sensitive by the installation must be (1) recorded in the NASA equipment control records, which are subsidiary records to the NASA General Ledger Accounts; and (2) physically marked with an equipment control number.

In coordination with the cognizant property custodian, it is the responsibility of an individual possessing untagged equipment that appears to meet the criteria for control to ensure (1) prompt preparation and submittal of a Found on Station (FOS) Equipment Investigation; and (2) immediate notification to Equipment Management in order to facilitate prompt tagging of the equipment.

INSTRUCTIONS

Document No. – A transaction number assigned by the NASA Equipment Management System (NEMS) for maintaining accountability of the controlled equipment item.

Part I – Investigation and Statement of Circumstances – To be completed by the individual possessing equipment, that individual's property custodian, or other individual responsible for investigating the circumstances that allowed the equipment item, apparently qualifying for control, to bypass physical identification and property and financial control. Note that an example of "other" source may be a "loan-in" which requires the application of a "loan-in" identification tag.

Part II – Action. – Self-explanatory. However, Equipment Management representative may wish to obtain concurrence of Receiving Supervisor or other individual(s) involved, and so annotate concurrence as part of his/her review.
APPENDIX I

NASA UNIQUE EQUIPMENT UTILIZATION REVIEW
(NASA FORM 1577)
The 5 ft. chamber was used to test solar array segments under space conditions. Large segments required that the chamber have removable end bells.

The chamber's vacuum capability of $10^{-8}$ to $10^{-9}$ torr range is achieved with a mechanical pump and cryopumping with liquid nitrogen. The aluminum cryo shroud (93 sq. ft.) is thermally conditioned using liquid nitrogen heat exchangers in a closed loop system.

Manufacturer's pump-down data for the chamber is available from the technical contract.
INTENTIONALLY LEFT BLANK
APPENDIX J

AGENCY MINIMUM STANDARD SENSITIVE ITEMS LIST
APPENDIX J
AGENCY MINIMUM STANDARD SENSITIVE ITEMS LIST

Includes only items with an acquisition value of $100 or more.

1. AUTOMATED DATA PROCESSING EQUIPMENT (ADPE), which includes:
   a. DISK DRIVES
   b. MEMORY EXPANSION UNITS
   c. MONITORS
   d. PRINTERS
   e. TERMINALS
   f. COMPUTERS, PERSONAL, which includes:
      (1) LAPTOPS
      (2) PERIPHERALS
      (3) EXTERNAL MODEMS
      (4) PORTABLES
      (5) WORD PROCESSORS

2. BINOCULARS
3. CALCULATORS
4. CAMERAS (MOVIE, STILL, AND TELEVISION)
5. DICTATING AND TRANSCRIBING MACHINES
6. ENVIRONMENTALLY HAZARDOUS DEVICES
7. MICROSCOPES
8. PLAYERS, AUDIO AND VIDEO CASSETTE
9. PROJECTORS, SLIDE AND MOTION PICTURE
10. RADIOS, RECEIVERS, TRANSMITTERS AND TRANSCEIVERS
11. RECORDERS, AUDIO AND VIDEO
12. TELESCOPES, PORTABLE
13. TELEVISIONS
14. TYPEWRITERS, ALL
15. WEAPONS, ALL, INCLUDING PELLET RIFLES
16. OTHER ITEMS WHICH HAVE A HIGH LOSS HISTORY AS REFLECTED BY REPORTS OF SURVEY.
APPENDIX K

NASA EQUIPMENT CONTROL NUMBER

TAG SAMPLES
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)
EQUIPMENT CONTROL NUMBER TAG

The tag is 5/8 x 1-13/16 inches (15.88 x 46.04 mm) with the NASA logotype, "Property of U.S.
Government" lithographed, and the bar code with human-readable interpretation in black on an
aluminum background.

NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)
EQUIPMENT CONTROL NUMBER TAG (MINI)

The mini-tag is 1/4 x 1-3/8 inches (6.350 x 34.925 mm), with the NASA logotype "U.S. GOVT.
PROP." lithographed, and the bar code with human-readable interpretation in black on an
aluminum background.

NASA NONCONTROLLED PROPERTY TAG
NASA FORM 1517 AND NASA FORM 1517A

The noncontrolled property tags are round with the blue letters on a silver background. The
NASA logotype and "PROPERTY U.S. Government" are lithographed around the outside border. They
are issued in two sizes, 1 inch diameter (2.5 cm) and 9/16 inch diameter (1.4 cm).
APPENDIX L

COMMONLY USED ITEMS COVERED

BY GSA REGIONAL SERVICE CONTRACTS
COMMONLY USED ITEMS COVERED BY GSA REGIONAL SERVICE CONTRACTS

Adding and calculating machines
Air-ground support equipment
Carpet cleaning, repairing, and laying (and related services)
Compressors
Electric motors and generators
Electric typewriters
Engines (gas, diesel, liquid, and air cooled)
Fire extinguishers
Furniture rehabilitation
Fusion and grinding of engines
Heavy construction equipment (and related items, i.e., ground powered equipment, etc.)
Household and industrial appliances
Lawn mowers and ground maintenance equipment
Manual typewriters
Materials handling equipment
Mattresses
Precision instruments
Rust proofing of motor vehicles
Scales and commissary equipment
Sleeping bags, blankets, and protective clothing
Tires and tubes
Tractors and motor vehicles
TV’s and radios
Typewriter platens
Venetian blinds
Watches and clocks
APPENDIX M

EQUIPMENT MANAGEMENT

REVIEW CRITERIA

This Appendix is presently undergoing revision to bring the review criteria under self assessment. The new self assessment criteria will be provided at a later date.