# NID 9250.137
# NPR 9250.1C
# NASA Interim Directive
# NRW 1400.152

## NID 9250.137

**Effective Date: May 18, 2021**
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**Extended to May 18, 2024**

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**Property, Plant, and Equipment and Operating Materials and Supplies**

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_ **Responsible Office: Office of the Chief Financial Officer**

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# Preface

## P.1 Purpose

This NASA Interim Directive (NID) document provides the financial management requirements for the identification, valuation, recognition, and reporting of capitalized Property, Plant, and Equipment (PP&E) (which includes contractor acquired property) and Operating Materials and Supplies (OM&S).

## P.2 Applicability

a. This NID is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers. This language applies to Jet Propulsion Laboratory, other contractors, grant recipients, or parties to agreements only to the extent specified or referenced in the appropriate contracts, grants, or cooperative agreements.

b. In this interim directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term “shall.” The terms: "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended, but not required, “will” denotes expected outcome, and “are/is” denotes descriptive material.

## P.3 Authority

a. Chief Financial Officers (CFO) Act of 1990, Pub. L. 101-576, 104 Stat. 2838 (1990).

b. Government Management Reform Act (GMRA) of 1994, Pub. L. 103-356, § 403, 108Stat. 3410 (1994).

c. Federal Financial Management Improvement Act (FFMIA) of 1996, Pub. L. 104-208, §801, 110 Stat. 3009-314, 3009-389 (1996).

d. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 CFR pt. 200.

e. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 CFR pt. 1800, (NASA adoption of 2 CFR Part 200).

f. Federal Property Management Regulations (FPMR), 41 CFR ch. 101.

g. Federal Acquisition Regulations (FAR), 48 CFR ch.1.

h. OMB Circular No. A-11, Preparation, Submission, and Execution of the Budget, app. B (07/10/2020).

i. OMB Circular No. A-123, Management’s Responsibility for Enterprise Risk Management and Internal Control (07/15/2016).

j. OMB Circular No. A-136, Financial Reporting Requirements (08/27/2020).

k. Statement of Federal Financial Accounting Standards (SFFAS) No. 3, Accounting for Inventory and Related Property.

l. SFFAS No. 6, Accounting for Property, Plant, and Equipment (as amended by SFFAS Numbers 14, 16, and 23).

m. SFFAS No. 8, Supplementary Stewardship Reporting (as amended by SFFAS Numbers 16 and 23).

n. SFFAS No. 10, Accounting for Internal Use Software.

o. SFFAS No. 29, Heritage Assets and Stewardship Land.

p. SFFAS No. 42, Deferred Maintenance and Repairs: Amending Statements of Federal Financial Accounting Standards 6, 14, 29 and 32.

q. SFFAS No. 44, Accounting for Impairment of General Property, Plant, and Equipment Remaining in Use.

r. SFFAS No. 50, Establishing Opening Balances for General Property, Plant, and Equipment.: Amending SFFAS 6, 10, and23, and Rescinding SFFAS 35.

s. Federal Accounting Standards Advisory Board (FASAB), Federal Financial Accounting and Auditing Technical Release 7: Clarification of Standards Relating to the National Aeronautics and Space Administration's Space Exploration Equipment.

t. Technical Release 15: Implementation Guidance for General Property, Plant, and Equipment Cost Accumulation, Assignment and Allocation.

u. Technical Release 16: Implementation Guidance for Internal Use Software.

v. Accounting Standards Codification (ASC) 730, Research and Development

w. NASA Policy Directive (NPD) 9010.2, Financial Management.

x. NPD 9250.1, Capital Asset Identification and Treatment.

## P.4 Applicable Documents and Forms

a. Budget Enforcement Act of 1990, Pub. L. No. 101-508, 104 Stat. 1388-573 (1990).

b. Acquisition Planning, 48 CFR pt.7.

c. Government Property, 48 CFR pt.45.

d. Acquisition Plan, NASA FAR Supplement (NFS) 48 CFR pt. 1807.

e. Government Property, NASA FAR Supplement (NFS) 48 CFR p. 1845

f. NASA Contractor Financial Management Reporting, NFS 48 CFR subpt.1842.72.

g. NASA FAR Supplement (NFS), 48 CFR. pts. 1801-1854.

h. NPD 9501.1, NASA Contractor Financial Management Reporting System.

i. NPR 1387.1, NASA Exhibits Program.

j. NPR 1441.1, NASA Records Management Program Requirements.

k. NPR 4200.1, NASA Equipment Management Procedural Requirements.

l. NPR 4300.1, NASA Personal Property Disposal Procedural Requirements.

m. NPR 4310.1, Artifact Identification and Disposition.

n. NPR 4500.1, Administration of Property in the Custody of Contractors.

o. NPR 7120.5, NASA Space Flight Program and Project Management Requirements.

p. NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements.

q. NPR 7120.8, NASA Research and Technology Program and Project Management Requirements.

r. NPR 8800.15, Real Estate Management Program.

s. NPR 9010.2, The Continuous Monitoring Program of Financial Controls.

t. NPR 9060.1, Accrual Accounting – Revenues, Expenses, and Program Costs.

u. NPR 9090.1, Partnership Agreements-Financial Requirements and Administration.

v. NPR 9260.1, Liabilities

w. NPR 9501.2, NASA Contractor Financial Management Reporting.

x. NASA Grant and Cooperative Agreement Manual.

y. NASA Form (NF) 1018, NASA Property in the Custody of Contractors.

z. NASA Form (NF) 1739, Capitalization Determination Form (CDF).

## P.5 Measurement/Verification

Quality control reviews and analysis of financial reports and data submitted through the continuous monitoring program (CMP) will be used to measure compliance with this NID.

## P.6 Cancellation

None.

# Chapter 1 Overview of Capitalized Property, Plant, and Equipment

## 1.1 Overview

1.1.1 The National Aeronautics and Space Administration's programs and projects advance science, technology, aeronautics, and space exploration (collectively Research and Development or R&D) initiatives that use Property, Plant, and Equipment (PP&E) to support NASA's missions, goals, and objectives.

1.1.2 The identification, valuation, recognition, and reporting of PP&E are integral parts of NASA's ability to generate accurate and reliable financial statements and management reporting while ensuring compliance with accounting standards and Federal financial reporting requirements. This NID prescribes the accounting standards and policy for recognizing and reporting PP&E and OM&S, including the application of NASA's capitalization criteria. NASA utilizes the Asset Accounting module within SAP(Systems, Applications & Products), NASA's enterprise resource management system, to financially account for and report capitalized PP&E.

## 1.2 Categories of PP&E

1.2.1 PP&E is defined as tangible assets that (1) have an estimated useful life of two or more years, (2) are not intended for sale in the ordinary course of business, and (3) are intended to be used or available for use by the entity.

1.2.2 Two categories of PP&E, General PP&E and Stewardship PP&E, have been defined for accounting and reporting purposes.

a. General PP&E. General PP&E consists of tangible assets that meet NASA's capitalization criteria. General PP&E includes the following categories:

(1) Real Property. Land, land rights, buildings, other structures and facilities, construction in process, and capital improvements/modifications.

(2) Personal Property. General equipment, Work-in-Process (WIP), and capital improvements/modifications.

(3) Capital Leases. Leases and leasehold improvements.

(4) Internal Use Software.

b. Stewardship PP&E. Stewardship PP&E consists of tangible items of PP&E that are not capitalized because their value may be indeterminable or it is meaningless to capitalize them due to its unique nature. Stewardship PP&E includes the following categories:

(1) Heritage Assets. Heritage Assets are PP&E of historical, natural, cultural, educational significance, artistic importance, or significant architectural characteristics. Heritage Assets are not capitalized.

(2) Stewardship Land. Stewardship Land is land and land rights other than that acquired for or in connection with General PP&E. Stewardship land is not capitalized.

## 1.3 Capitalization of PP&E

1.3.1 Capitalization Criteria. The following capitalization criteria apply to General PP&E. NASA shall capitalize individual items of PP&E acquired by construction, purchase, transfer, donation, or exchange, which meet all of the following criteria:

a. Have a total cost (see Section 2.2) of $500,000 or more for personal and real property ($1,000,000 or more for internal use software).

b. Have an estimated useful life of two years or more.

c. Are not intended for sale in the ordinary course of operations.

d. Have been acquired or constructed with the intention of being used, or being available for use, by NASA.

e. If acquired for an R&D activity, have an alternative future use. See Section 1.3.2 for the definition of alternative future use.

1.3.2 Capitalization of R&D Assets. (ASC) 730, Research and Development, and FASAB Technical Release 7 provides the standards for accounting for R&D costs versus capital costs. ASC 730 states that the costs of materials and equipment or facilities that are acquired or constructed for R&D activities and that have an alternative future use should be capitalized as tangible assets when acquired or constructed.

1.3.2.1 For an asset acquired for use in R&D activities to have an alternative future use, the following factors must be met:

a. There is a reasonable expectation (e.g., greater than 50 percent likelihood) at the time of acquisition that the item will be used in an alternative manner with an anticipated economic benefit on an identified project that has not yet commenced.

b. If the alternative future use will be another R&D activity, the R&D project has not yet commenced at the acquisition date.

c. Such alternative future use will require no significant modification or further development of the asset, but may include minor adaptations of existing capabilities to a particular requirement.

1.3.2.2 If the use of the acquired asset is only in one or more other R&D projects of the NASA that have commenced at the acquisition date, that use represents a present (as opposed to a future) use, and the cost of that asset should be immediately charged to expense.

1.3.3 Items not meeting the above capitalization criteria, or those specifically identified as prototypes or test articles, are considered R&D as defined by Accounting Standards Codification. The costs of materials, equipment, or facilities that are acquired or constructed for a particular research and development project that are not reasonably expected to have alternative future use and, therefore, provide no separate economic values are defined as R&D costs.

1.3.4 The costs of items identified as R&D will be expensed as incurred at the time the items are acquired, fabricated, or constructed. However, some PP&E may be used to support other projects commencing after the PP&E item is acquired. Identification of these items and their capitalization determination will be accomplished through completion of the CDF, NF 1739.

1.3.5 Items not classified as General PP&E on NASA's financial statements:

a. Items in which NASA has a reversionary interest. For example, NASA sometimes retains an interest in PP&E acquired with grant or cooperative agreement funds in the event that the recipient no longer uses the PP&E in the activity for which the award was originally provided and the PP&E reverts to NASA.

b. Items classified as Heritage Assets or Stewardship Land.

c. Items that should be expensed as R&D costs.

d. Items classified as Other Assets. Property surplus to the needs of NASA are removed from capital accounts, and no additional depreciation is taken while assets await final disposition.

1.3.6 NF 1739, Capitalization Determination Form (CDF).

1.3.6.1 The NF 1739, CDF, will be completed by the program/project manager or designee prior to acquiring, fabricating, or modifying any PP&E items that meet the thresholds identified in paragraph 1.3.1 above, including pieces that will be assembled into an end item whose total cost will equal or exceed one of the thresholds listed above. The Center Office of the Chief Financial Officer (OCFO) Property Accountant shall identify on the NF 1739 each item as capital or non-capital in accordance with the capitalization criteria outlined above. The NF 1739 Panel shall provide oversight and concur/nonconcur with the capitalization determination documented by Center Property Accountants via the NF 1739. If any NF 1739 Panel member nonconcurs, the NF 1739 shall be discussed at the weekly NF 1739 Panel meeting and elevated to the Agency Director of Financial Management or designee, if necessary.

1.3.7 Identification and Tracking of Capital PP&E.

1.3.7.1 Assets identified as capital on the NF 1739, CDF, will be segregated for identification and tracking through the establishment of unique WBS elements with capital asset indicators. This will allow for the separate identification, funding, and accumulation of capital costs within NASA's official accounting system associated with each acquired, fabricated, or modified PP&E item.

1.3.7.2 Joint costs that are commonly used to support the production of multiple assets within a single project that cannot be directly traced to each final asset should be directly traced to the project via the establishment of unique WBS element(s) with a capital asset indicator(s) at the project level. Joint or common project costs, as well as other indirect costs that cannot be directly traced to the project or capital asset in an economically feasible manner, will be allocated to the final asset(s) based on a reasonably supportable allocation methodology. For example, inspection or survey costs that cannot be traced to a specific end item may be allocated to the final asset based upon percentage of total inspections or surveys, square footage, or project size.

1.3.7.3 Assets or projects identified as capital, but where a unique WBS was not previously established, should be capitalized only with the prior approval of NASA-Agency OCFO, Director of Financial Management, and supporting documentation as required in Section 2.8.

## 1.4 PP&E Life Cycle

1.4.1 Purpose. This section describes the PP&E life cycle from a financial accounting perspective. The descriptions in the following paragraphs provide a summary of the major PP&E life cycles and financial requirements for capital PP&E identification, cost accumulation, reporting, receiving, and disposal.

1.4.2 PP&E Life Cycle Phases. The following sections describe the major phases of the PP&E life cycle:

1.4.2.1 Planning. PP&E items NASA plans to acquire, fabricate, or modify should be identified and evaluated through the completion of the NF 1739, CDF by the program/project manager or designee and the Center Office of the Chief Financial Officer (OCFO) Property Accountant to determine if the PP&E meets NASA's capitalization criteria. Those PP&E items that meet established capitalization criteria will be capitalized as General PP&E and segregated for identification and tracking through the establishment of unique WBS elements with capital asset indicators.

(i) The unique WBS element(s) will be established with a capital asset indicator in NASA's Metadata Manager (MdM). The four asset indicator attributes in MdM, which are based on the nature of and information provided on the NF 1739, CDF are:

a. PP&E - Fabricated equipment.

b. PP&E - Purchased equipment.

c. Real property.

d. Software (Internal use software $1M and over).

1.4.2.2 Acquiring, Fabricating, or Modifying. Acquiring, fabricating, or modifying General PP&E may occur through a variety of methods. These may include simplified acquisitions, vendor acquisitions, fabrication, construction, and/or modifications. General PP&E may also be transferred between contractors and NASA, donated, transferred from other Federal Agencies, or acquired through Capital Lease.

(i) Costs incurred by NASA or its contractors, grant, and cooperative agreement recipients for an asset meeting the capitalization criteria will be identified and tracked using a separate unique WBS element with a capital asset indicator.

(ii) Identified capital costs will be accumulated against the unique WBS element as an Asset Under Construction (AUC) and recorded as WIP. These capital costs will be transferred from WIP at the time of delivery or completion and settled against a final asset or sub-asset(s) as General PP&E in the general ledger.

1.4.2.3 Disposition. General PP&E identified as excess (permanently not in use) to the needs of NASA and/or identified as no longer in operation will be removed from the General PP&E general ledger accounts and recognized as other assets in accordance with SFFAS No. 6 until the asset is sold, scrapped, donated or decommissioned.

## 1.5 Reconciliation and Reporting

1.5.1 Reconciliations and validations will be performed, documented, and reviewed in accordance with the Continuous Monitoring Program (CMP) requirements per NPR 9010.2, Continuous Monitoring Program of Financial Controls.

1.5.2 CMP activities and supporting work papers should be maintained by the Center Chief Financial Officer (CFO)/Deputy Chief Financial Officer (Finance) (DCFO(F)) and will be available for review upon request or as required in the CMP.

## 1.6 Roles and Responsibilities

1.6.1 The Center Program/Project Managers or Designees shall:

a. Inform the NASA-Agency OCFO, Property Branch, of acquisition strategy meetings.

b. Submit to the Center OCFO the completed NF 1739, CDF, for each PP&E asset the program/project is planning to acquire, fabricate, or modify that has been identified per the requirements set forth in NPR 7120.5, NASA Space Flight Program and Project Management Requirements, NPR 7120.7, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements, NPR 7120.8, NASA Research and Technology Program and Project Management Requirements, and NPR 8800.15, Real Estate Management Program.

c. Ensure a unique WBS element is created within the project WBS structure for assets meeting the capitalization criteria as identified through the use of NF 1739, CDF.

d. After Center CFO review, ensure that the completed NF 1739, CDF, is attached to the MdM request using the attachment feature in MdM.

e. Create Purchase Requisitions (PRs) to fund identified PP&E items meeting the capitalization criteria ensuring that the PRs are funded by the unique WBS element and the applicable capital asset indicator.

1.6.2 The NASA-Agency OCFO shall:

a. Review and approve the MdM requests for unique WBS elements with a capital asset indicator for assets identified as meeting the capitalization criteria through the review of the attached NF 1739, CDF.

b. Develop, in conjunction with procurement, project management personnel, and Center finance personnel, the financial policies and procedures and standard financial management reporting requirements to be included in solicitations and contracts to support separate cost reporting of each identified capital asset.

1.6.3 The Center OCFO shall:

a. Ensure that adequate financial controls are in place and financial records and reports accurately reflect the status and value of capital PP&E.

b. Ensure that adequate supporting documentation is maintained and is readily available to support audit requests and other quality control reviews. (See Section 2.8 of this NPR.)

c. Ensure that the CMP activities are completed in accordance with NPR 9010.2.

d. Work with project managers, procurement officers, resource managers, real property officers, and logistics personnel to review project work that will acquire, fabricate, construct, or modify/improve capital assets to ensure all General PP&E is properly identified and unique WBS elements are created so that the assets can be accurately valued and reported.

e. Review submitted NF 1739s, CDFs, for PP&E acquired or fabricated beginning October 1, 2014, to ensure that all identified, planned PP&E comply with NF 1739 CDF, and NASA capitalization requirements and that unique WBS elements have been identified for PP&E that meet capitalization requirements.

f. Provide the initial capitalization determination for all identified PP&E. The final capitalization determination shall be reviewed and approved by the NF 1739 CDF Panel.

g. Maintain the original completed and approved NF 1739, CDF.

h. Ensure that each identified asset meeting the capitalization criteria has a unique WBS and that the correct capital asset indicator attribute has been assigned to the MdM record.

i. Work in close liaison with NASA-Agency OCFO, procurement, and project management personnel to develop the financial management reporting requirements and instructions to be included in solicitations and contracts that support the separate reporting of each item of General PP&E.

j. Review identified capital assets recorded as AUCs and ensure that the AUCs are settled to a final asset or sub-asset(s) upon delivery or completion and the value of the final asset or sub-asset(s) is properly supported.

k. Review contractor, grant, and cooperative agreement recipient requests to purchase PP&E in order to ensure that a unique WBS element(s) and separate reporting of individual PP&E has been established.

l. Identify costs to be capitalized and maintain financial records for each capital facility project in progress. These records are the source for entries to the general ledger WIP.

m. Review the assessment of impairment losses of General PP&E provided by their respective Logistics and Facilities offices and submit to the Agency OCFO, Property Branch for concurrence in determining if the decline in service of the asset meets NASA criteria for impairment loss recognition.

1.6.4 Center Procurement Officers shall support the Center OCFO in identifying and reporting identified capital PP&E through implementation of the Federal Acquisition Regulation (FAR), 48 CFR ch. 1 and the NASA FAR Supplement (NFS), 48 CFR pts. 1801-1854, the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 CFR pts. 200 and1800 in the following areas:

a. Prior to Contract Award.

(1) Ensure that the types and approximate quantities of Government-furnished property and contactor acquired property are identified in solicitations and are discussed in procurement plans and procurement strategy meetings, whereby Center OCFO representatives are included in the procurement planning process per Acquisition Planning, 48 C.F.R. pt. 7 and Government Property, NFS 48 CFR pt. 1807.

(2) Ensure that NASA technical, program control, procurement, financial, and resource personnel have taken part in developing the reporting structures as defined in NPD 9501.1,

NASA Contractor Financial Management Reporting System for solicitations that include acquiring, fabricating, constructing, or modifying Government property.

(3) Ensure that the appropriate solicitation instructions, provisions, and contract clauses are included in solicitations and contracts per Government Property, 48 CFR pt. 45 and NFS Government Property, 48 C.F.R. pt. 1845, in order that:

(a) The solicitation identifies all Government property that may be made available for performance of the contract.

(b) Contractors are required to identify any Government property desired and required for performance of the effort.

(c) The resulting contract includes a listing of all Government property supplied for use under the contract.

(d) Contractors are required to obtain approval for the purchase or fabrication of property for which the Government will have title, unless the property is a deliverable itemized under the contract or a component of or material for that deliverable or property approved as part of the contract award or specifically required within the statement of work.

(e) Support the cognizant financial management and project management personnel in the development of contractor cost reporting requirements (where cost reporting is required) that include a separate reporting category for each identified capital asset per NASA Contractor Financial Management Reporting, 48 C.F.R. subpt. 1842.72 and NPR 9501.2, NASA Contractor Financial Management Reporting.

(4) For contracts that do not require cost reporting, as defined in NPD 9501.1, create a separate contract line item or unique task/delivery order for each capital asset for which the Government will have title.

(5) Require that invoices/vouchers or other supplemental cost reports or task orders/delivery orders are submitted by contract line item, clearly identifying each item of PP&E.

b. Prior to Grant or Cooperative Agreement Award:

(1) Ensure that the types and approximate quantities of Government-furnished property and grantee-acquired property are identified in solicitations and are discussed in grants planning and strategy meetings, whereby Center OCFO representatives are included in the planning process, where applicable.

(2) Ensure that the appropriate solicitation instructions and terms and conditions are included in solicitations and grant/cooperative agreement awards per 2 CFR pts. 200 and 1800.

(3) For grantee-acquired property, ensure all pre-award requirements identified in 2 CFR pts. 200 and 1800 and the Grant and Cooperative Agreement Manual are met.

c. After Contract Award.

(1) Review for approval all contractor requests to purchase and/or fabricate PP&E which the Government will have title to in accordance with the FAR Government property clause. Forward

approved requests with an expected total cost (see Section 2.2) equal to or greater than the thresholds identified in paragraph 1.3.1.a. above to the Center DCFO in accordance with NFS Government Property, 48 C.F.R. pt. 1845.

(2) For contracts requiring financial management and cost reporting, ensure that contractors report approved PP&E purchases and/or fabrications that have been determined to meet the capitalization criteria as separate line items (as initially established in the contract).

(3) For firm fixed price contracts, ensure that the invoice, and/or progress payment requests, or other interim payment requests contain the contract line item level detail to allow proper costing of each item of PP&E.

d. After Grant or Cooperative Agreement Award:

(1) For grants and cooperative agreements to commercial firms, ensure that the invoice or payment request contains the line item level detail to allow proper costing of each item of PP&E.

1.6.5 The Center Real Property Accountable Officer shall:

a. In consultation with the Center Facility Utilization Officer or Facility Utilization Board, notify the Center CFO/Center DCFO(F) when there is a change in the status of real property for which the Center is accountable (including NASA property held by contractors), including new construction, capital improvements, or changes in operational status such as standby, mothballed, or abandoned.

b. Assist the Center CFO/DCFO(F) as requested, with the reconciliation of real property reports to the accounting system.

1.6.6 The Center Supply and Equipment Management Officer and the Center Real Property Accountable Officer shall:

(a) Document permanent impairments identified during the course of regular surveys and inspections. The documentation will include a description of the impairment and the calculations used to determine the impairment loss.

(b) Forward impairment documentation to the Center CFO for review and a determination whether recognition of the loss is required.

# Chapter 2 PP&E Policies for Valuation and Recognition

This chapter sets forth general principles, standards, and policies to assure compliance with statutory and regulatory requirements regarding the valuation and recognition of NASA's General PP&E. These requirements ensure effective financial control over NASA-owned PP&E. Chapter 7 of this NPR establishes the general principles, standards, and policies for NASA's Heritage Assets.

## 2.1 Capitalization Criteria

2.1.1 The following capitalization criteria apply to PP&E. NASA shall capitalize individual items of PP&E acquired by construction, purchase, transfer, donation, or exchange which meet all of the following criteria:

a. Have a total cost of $500,000 or more for personal and real property ($1,000,000 or more for internal use software) (See Section 5.3).

b. Have an estimated useful life of two years or more.

c. Are not intended for sale in the ordinary course of operations.

d. Have been acquired or constructed with the intention of being used, or being available for use, by NASA.

e. If acquired for an R&D project, have an alternative future use. See Section 1.3.2 for the definition of alternative future use.

2.1.2 Items not meeting the above criteria are expensed in the period incurred.

2.1.3 Bulk Purchase. PP&E items acquired as part of a bulk purchase that individually meet the capitalization criteria should be capitalized in accordance with the policies established in this NPR. If the cost per item purchased in bulk does not meet the capitalization threshold, the bulk purchase will be expensed in the period acquired. For bulk purchase of internal use software, refer to Chapter 5 of this NPR.

2.1.4 Collateral Equipment.

2.1.4.1 Collateral equipment includes fixtures, built-in equipment, and large affixed equipment normally installed during the construction or modification of a facility project. Such a project is considered a single event for the purposes of determining whether the PP&E meets the capitalization criteria.

2.1.4.2 Collateral equipment is not severable and is considered part of the facility project through which it is installed. Therefore, the cost of collateral equipment should be included in the value of the project in making the determination as to whether the project meets the capitalization criteria specified above. If the project meets the capitalization criteria, the value of the collateral equipment will be included in the capitalized value.

2.1.4.3 The replacement cost of collateral equipment or the addition of collateral equipment to an existing facility will be treated as either a capital improvement or maintenance, depending on the circumstances.

2.1.4.4 Non-collateral equipment, when acquired and used in a facility or test apparatus, can be severed and removed after construction without substantial loss of value or damage to the equipment or the premises where it is installed.

2.1.4.5 Each non-collateral equipment item should be considered separately in relation to the capitalization criteria, and non-collateral equipment which meets the capitalization criteria will be recorded in the general ledger PP&E accounts.

2.1.5 Modifications.

2.1.5.1 NASA shall capitalize individual PP&E modifications as capital improvements when the modification has a cost of $500,000 or more for personal and real property, and $1,000,000 or more for internal use software, and meets one of the following criteria:

a. Extend the useful life of the asset by two years or more.

b. Enlarge or improve its capacity.

c. Otherwise upgrade it to serve needs different from, or significantly greater than, those originally intended.

2.1.5.2 Facility modifications shall be:

a. Identified on the NF 1739, CDF.

b. Assigned a unique WBS element(s) with the appropriate capital asset indicator(s) if it meets the capitalization criteria as a capital improvement. Capital improvements are capitalized and depreciated. Modifications that do not meet the capitalization criteria are expensed.

2.1.5.3 In situations where of PP&E items or modifications to existing PP&E items are linked to an end item, the cost of such individual items or modifications should be included in the cost of the end item. In these situations, the combined cost of the individual items that make up the end item is to be used in determining if the item meets the capitalization criteria.

2.1.5.4 Where a replacement occurs due to a capital improvement, the accounts will be appropriately adjusted to remove the values of items replaced (where those original values are $500,000 or more for personal and real property, and $1,000,000 or more for internal use software). If only a portion of the property is being replaced and that portion is not separately identifiable in the accounting records, the value of the replaced portion will be estimated and the accounts adjusted accordingly.

2.1.5.5 Removal of an item's recorded cost will be treated as a separate accounting transaction from the recording of additions or replacements.

2.1.5.6 Replacements due to maintenance will be expensed.

2.1.5.7 If an individual item's total cost (see Section 2.2) is below $500,000 for personal and real property, and $1,000,000 for internal use software when it is first acquired and it is not, therefore, originally capitalized, it should not be capitalized later regardless of whether the value of all subsequent modifications results in a cumulative value exceeding the applicable threshold.

2.1.5.8 If a single subsequent modification meets the capitalization criteria, that modification will be capitalized only in accordance with the capitalization criteria. Each modification will be considered a single event.

2.1.5.9 If a reduction in the capitalized value of an asset occurs because of a modification and causes the value of the asset to drop below the applicable threshold, it should be removed from the general ledger accounts for capitalized PP&E.

2.1.6 Maintenance. Expenses incurred to maintain an asset in a useable condition do not meet the criteria for capitalization and are thus expensed in the accounting period in which the costs were incurred. Per SFFAS No. 42, maintenance and repairs are activities directed toward keeping fixed assets in an acceptable condition.[4] Activities include preventive maintenance; replacement of parts, systems, or components; and other activities needed to preserve or maintain the asset. Maintenance and repairs, as distinguished from capital improvements, exclude activities directed towards expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, its current use.

2.1.7 Incremental Launch Service Costs.

2.1.7.1 NASA shall capitalize incremental launch service costs associated with delivery of International Space Station components owned by the United States.

2.1.8 Costs and Benefits Associated with Barter Agreements.

2.1.8.1 NASA shall not capitalize any costs and/or benefits associated with barter agreements.

## 2.2 Valuation

2.2.1 Capitalized values will include all costs incurred to bring PP&E to a form and location suitable for its intended use, (i.e., the total cost to NASA). For example, the cost may include the following:

a. Labor and other direct or indirect production costs.

b. Amounts paid to vendors or contractors, including fees.

c. Transportation charges to the point of initial use.

d. Handling and storage charges (for assets produced or constructed).

e. Engineering, architectural, and other outside services for designs, plans, specifications, surveys, and as-built drawings.

f. Costs to acquire and prepare buildings and other facilities.

g. An appropriate share of the cost of the equipment and facilities used in construction work.

h. Fixed equipment and related installation costs required for activities in a building or facility.

i. Direct costs of inspection, supervision, and administration of construction contracts and construction work.

j. Legal and recording fees and damage claims.

k. Fair values of facilities and equipment donated to the Government.

l. Material amounts of interest costs paid.

2.2.2 Costs of extended warranties will be expensed at the time of payment and not be included in the capitalized value.

2.2.3 Where capitalized equipment is traded in for another piece of capitalized equipment, the capitalized value of the new asset should be the price paid for the new item, plus the amount received for the trade-in as well as any other costs incurred to bring the equipment to a form and location suitable for its intended use.

2.2.4 NASA's General PP&E assets are presumed to have no residual/salvage value. As a result, residual/salvage value is set at zero when determining Net Realizable Value.

2.2.5 Transfers and Donations.

2.2.5.1 When PP&E is transferred from one NASA Center to another, the receiving Center shall record both the capitalized amount and accumulated depreciation previously reported by the sending Center.

2.2.5.2 Transfers of assets from other Government agencies with reimbursement that meet the capitalization criteria will be recorded at the amount NASA is reimbursing the other Government agency. The date the item is acquired by NASA will be used as the start date for asset's useful life.

2.2.5.3 Transfers of assets from other Government agencies without reimbursement that meet the capitalization criteria will be recorded based on the net book value recorded by the transferring agency. If the value cannot be obtained, the item will be recorded at its fair market value at the time of the transfer, provided it meets the capitalization criteria. The manufactured date or original acquisition date provided by the other Government agency will be used as the PP&E's acquisition date.

2.2.5.4 Donations of PP&E should be valued at the estimated fair market value at the time acquired, provided it meets the capitalization criteria. If the estimated fair market value cannot be determined, other reasonable methods to identify the estimated value of the asset may be used. NASA shall recognize and record donations of PP&E when title to the asset passes to NASA. Title passage will occur either at the time of delivery and acceptance by a Government official or at an earlier contractually specified time.

2.2.5.5 In some cases, new PP&E or capital improvements to existing NASA PP&E are needed in order to perform the work required under a reimbursable agreement. The customer may request that NASA acquire the PP&E or make the capital improvements and include the cost in the total price of the reimbursable agreement. When NASA incurs the cost to acquire such PP&E or capital improvement, the cost is recorded as an expense and becomes part of the cost billed to the reimbursable customer. If, at the end of the reimbursable agreement, the Center CFO, in consultation with the Center Office of Chief Counsel, determines that NASA may appropriately retain such PP&E or capital improvement, the transaction to record the PP&E or capital improvement as a NASA asset is a separate transaction that has no effect on the amounts previously recorded for the reimbursable agreement. The asset(s) is to be recorded as follows:

a. If the reimbursable customer is a Federal agency, the PP&E item(s) or capital improvement(s) will be valued at the depreciated value at the end of the reimbursable agreement. The transaction will be treated as a transfer, and the offset to the applicable asset account will be USSGL Account 5720, Financing Sources Transferred In Without Reimbursement.

b. If the reimbursable customer is a non-Federal entity, the PP&E item(s) or capital improvement(s) will be valued at the cost NASA paid to acquire it and bring it to a form and location suitable for its intended use under the reimbursable agreement. The transaction will be treated as an unconditional donation, and the offset to the appropriate asset account will be USSGL Account 5610, Donated Revenue - Nonfinancial Resources. (Accounting treatment as "donated" does not provide separate authority to accept such assets, which instead must be determined on a case-by-case basis.)

2.2.5.6 Borrowed or Loaned PP&E. PP&E loaned-in, including in-grants, from non-NASA organizations is not recorded in NASA's financial records. However, PP&E borrowed from another NASA Center shall be treated in accordance with the supporting documentation.

2.2.6 PP&E that is identified during inspections or inventories that has not been recorded will be valued at its estimated value based on similar items, engineering estimates, or other reasonably supportable methodologies, if the original supporting documentation is not available. The capitalization threshold in effect on the date the item is discovered will be applied to determine whether to capitalize the item.

2.2.7 Work-in-Process (WIP).

2.2.7.1 NASA shall classify PP&E under construction (i.e., not complete) that meet the capitalization criteria as WIP. The WIP amount includes the direct and indirect costs incurred to acquire, fabricate or modify the item as well as the costs incurred to bring the capital PP&E to a form and location suitable for its intended use.

2.2.7.2 PP&E meeting the capitalization criteria will be segregated for tracking by unique WBS elements with capital asset indicators. The costs accrued against the unique WBS element(s) will be recorded as WIP. Costs are accrued based on the methods used to acquire the item and include a variety of costing methodologies in accordance with NPR 9060.1, Accrual Accounting – Revenues, Expenses, and Program Costs, and NPR 9501.2.

2.2.7.3 When PP&E being recorded in WIP is complete, beneficially occupied, or received, delivered, and accepted, the total capital cost recorded as WIP will be transferred to capital PP&E. Individual components or parts of the PP&E that are complete will remain in WIP until the entire PP&E is ready to be transferred from the WIP account to an asset. The capital balances transferred from WIP must be supported by sufficient supporting documentation, and any variances between the amount transferred and the supporting documentation must be reviewed and approved by NASA-Agency OCFO, Director of Financial Management, prior to processing any manual adjustments.

## 2.3 NASA Property in the Custody of Others

2.3.1 Contractors may hold NASA-owned PP&E under the terms of a contract (Government-furnished equipment). Government-furnished PP&E might also be in the possession of contractors when fabricated, modified, or acquired for NASA pursuant to contractual requirements.

a. Contractors and commercial firms that have received contracts, grants or cooperative agreements are required to report all NASA-owned PP&E on an annual basis utilizing the NF 1018, NASA Property in the Custody of Contractors (NF1018). In addition, contractors with $10 million or more in NASA-owned PP&E are required to report on a monthly basis through NASA's Contractor Held Asset Tracking System (CHATS) as contractually required. Contractors shall report the accumulated cost of identified capital PP&E as a separate line item on their cost reports in accordance with NPD 9501.1 for all contracts awarded after October 1, 2007, that contain applicable contract clauses.

2.3.2 NASA-owned PP&E under grants and cooperative agreements provide out-grants of General PP&E in which NASA does not transfer the title of the property to the grantee. The grantee obtains the rights to use the PP&E during the period of the grant in accordance with the terms of the agreement. NASA will continue to own the General PP&E during the term of the grant and continue to account for the General PP&E in NASA's accounting system. For more details about the out-grant of NASA-owned real property, please refer to NASA Grant and Cooperative Agreement Manual, 2 CFR pts. 200 and 1800.

2.3.3 NASA-owned PP&E leased to non-NASA customers does not transfer title of the property to the lessee; the lessee obtains the rights to use the PP&E in accordance with the lease agreement. NASA will continue to own the PP&E during the term of the lease and continue to recognize and depreciate the PP&E in NASA's accounting system. For more details about Host-Tenant agreements between NASA and another organization that provide for the use of NASA facilities, institutional services, or for support services to the non-NASA customer Enhanced Use Lease Agreements (EUL), and policy on billing and collections under reimbursable agreements, please refer to NPR 9090.1, Partnership Agreements-Financial Requirements and Administration.

2.3.4 Per NPR 4200.1, NASA Equipment Management Procedural Requirements, NASA owned PP&E loaned to other Federal agencies remains NASA property. NASA will continue to own the PP&E during the term of the loan and continue to recognize and depreciate the PP&E in NASA's accounting system.

## 2.4 Recognition

2.4.1 Receipt of General PP&E.

2.4.1.1 In general, NASA shall recognize general PP&E when title to the asset passes to NASA. Title passage will occur either at the time of delivery and acceptance by a Government official or at an earlier contractually specified time.

2.4.1.2 In the case of fabricated or constructed PP&E, the PP&E will be recorded as WIP until placed in service, or when beneficial occupancy occurs, or in the case of in-orbit assets, at the date of launch; at which time, the balance will be transferred to capital PP&E.

2.4.1.3 Capitalization of WIP should not be delayed pending final acceptance of residual closeout work, such as punch lists.

2.4.1.4 For purchased equipment, the recognition date should be based on the shipping terms of the contract or purchase order. This will be the date shown on the receiving and inspection report or equivalent source document evidencing the receipt, passage of inspection, and acceptance by the Government unless the contract or purchase order provides other specific terms of title passage, such as after vendor installation and testing.

2.4.1.5 For construction or capital improvements of real property, capitalization shall begin on the date the PP&E are placed in service. This event is defined as the date on which the facility or capital improvement to a facility is available for use by NASA. The date the facility is accepted for use is known as the beneficial occupancy date.

2.4.1.6 For General PP&E assets acquired by a contractor on behalf of NASA, the recognition date will be based upon delivery or constructive delivery either to the contractor performing the service or to a NASA facility. Delivery or constructive delivery must be based on the terms of the contract regarding delivery, receipt, and acceptance.

2.4.2 Disposal of General PP&E.

2.4.2.1 General.

(i) Disposals of NASA PP&E may occur due to several reasons. The various methods of disposition will be executed in accordance with the applicable Federal regulations and NASA policy requirements outlined in NPR 4300.1, NASA Personal Property Disposal Procedural Requirements and should be accounted for according to the Federal accounting standards.

(ii) Excess PP&E. When NASA determines that the General PP&E is no longer required for NASA's needs and decides to permanently remove, retire, or dispose of the asset, the asset will be treated as excess property.

(iii) At the time the General PP&E is identified as excess to NASA, it will be reclassified from General PP&E accounts to other appropriate asset accounts (Other Assets), along with associated accumulated depreciation, and recorded in an appropriate asset account at its expected net realizable value. NASA PP&E is presumed to have no residual/salvage value. However, no additional depreciation/amortization will be taken once such assets are removed from General PP&E in anticipation of disposal, retirement, or removal from service. General PP&E could also be deemed no longer in service when it has suffered damage or becomes obsolete and could be reclassified to other appropriate asset accounts (Other Assets) similar to excess PP&E.

2.4.2.2 Donation. Excess PP&E determined to be surplus to the needs of NASA are available for donation to other entities. NASA shall use the General Services Administration (GSA) and/or other approved transfer process and documents to accomplish the donation to other entities. General PP&E will be removed from NASA's books, along with the accumulated depreciation at the time the item is identified as excess, and will be recorded in the Other Assets account. Once the excess property is donated, the property will be removed from the Other Assets account and any loss incurred at the time of transfer will be recognized.

2.4.2.3 Sale of Surplus PP&E. Excess PP&E determined to be surplus to the needs of NASA and available for sale to the public are identified as surplus PP&E available for sale. At the time of the sale of the surplus PP&E, the transaction is recorded by removing the asset from the Other Asset account and recognizing any gains or losses on the disposition of the PP&E.

2.4.2.4 NASA-owned PP&E in the custody of contractors, grantees, and cooperative agreement partners determined to be surplus to the needs of NASA and other Governmental agencies shall be disposed of in accordance with the provision of the FAR, NFS, 2 CFR Parts 200 and 1800, and 14 CFR Part 1274.

2.4.2.5 Abandonment. Abandonment is the method of disposition of PP&E with no commercial value as determined by an authorized NASA official. The timing of the abandonment (after or before the determination was made that the PP&E is excess) will determine when the disposal of the asset is recognized. If the capital PP&E is abandoned after management's documented decision it is excess, it should be removed from the Other Assets account, and any loss on disposition of asset will be recognized. If the abandonment occurs prior to management's documented decision it is excess, NASA will continue to carry the asset on its books and depreciate the asset until management documents that it has decided to permanently retire/dispose of the asset.

2.4.2.6 General PP&E assets that have been identified for permanent removal from service will no longer be depreciated/amortized once it has been determined that the asset no longer contributes to the operations of NASA. The triggering event for disposal is the date the asset no longer provides service to the operations of NASA. The disposal date will represent the date on which the General PP&E asset and its accumulated depreciation/amortization are no longer reported under the General PP&E account on the financial statements.

2.4.2.7 The disposal start date is defined as the calendar date of a legally enforceable and recognizable obligation to complete the disposal action or the date the operation has ceased, whichever comes later. On this date, the PP&E's net book value is removed from the financial records and the corresponding gain/loss from disposition is recorded. For demolitions, this represents the contract's demolition start date. For transfers and sales, this represents the date on which the instrument is endorsed or operation is ceased, whichever comes later. For natural disasters, this represents the actual date of the incident.

2.4.3 PP&E Temporarily Not In Use. When General PP&E is temporarily removed from service or use due to its current inactive status with the expectation that the asset eventually will be returned to service or use, the PP&E's value will not be removed from General PP&E accounts. It will remain in the General PP&E accounts and continue to be depreciated during the period of non-use. Standby status and mothballed status are two classifications of temporary inactivity;

therefore, assets placed in either of these classifications will not be removed from the General PP&E account and will continue to be depreciated during the period of non-use.

## 2.5 Depreciation

2.5.1 General. NASA General PP&E assets are those assets that have a recorded cost that meet NASA capitalization criteria--often called "capital assets" or "fixed assets." NASA PP&E will be capitalized and, with the exception of land and land rights of unlimited duration, will be depreciated/amortized. Such capitalized amounts, as well as associated amounts of accumulated depreciation and depreciation expense, will be reflected in NASA financial statements.

2.5.2 Method of Depreciation. NASA policy is that the straight-line method of depreciation be used for all assets.

2.5.3 Depreciable Basis. NASA's PP&E is presumed to have no residual/salvage value and, therefore, residual/salvage value does not affect the depreciable basis in determining depreciation. Land is not subject to depreciation. Land rights that are for a specified period shall be amortized over the specified time period. When land and a building are purchased together, the depreciable basis for the building is the total purchase cost less the actual cost or estimated value of the land.

2.5.4 Commencement of Depreciation. The event that triggers the calculation of depreciation is the date of receipt shown on the asset receiving document or the date the asset is installed and placed in service (regardless of whether it is actually used). For real property assets, depreciation will commence when the facility is capitalized and placed in service, regardless of whether the facility is fully occupied or in use.

2.5.5 Excess of Useful Life. If an asset remains in use longer than its estimated useful life, it should be retained in the property accountability or management system, as well as the accounting records. The accounting records will reflect both its recorded cost and accumulated depreciation until disposition of the asset.

2.5.6 Changes to Useful Life. Factors such as financial and operational conditions, physical wear and tear, or technological changes can affect the useful life of specific PP&E items. Changes in estimated useful life will be treated prospectively and accounted for in the period of the change and future periods. No adjustments will be made to previously recorded depreciation or amortization.

2.5.7 Calculation of Depreciation. Depreciation expenses should be calculated based on the recorded capitalized cost and divided equally among accounting periods during the asset's remaining useful life based on recovery periods in Table 2-1 of this chapter.

2.5.8 Recovery Periods. Table 2-1 (below) prescribes the recovery periods (useful lives) that will be used for depreciable General PP&E assets.

**Table 2-1, NASA Recovery Periods for Depreciable General PP&E Assets**

| NASA RECOVERY PERIODS FOR DEPRECIABLE GENERAL PP&E ASSETS (Excludes Heritage Assets) | | |
|---|---|---|
| **Description of General PP&E Assets** | **Recovery Period** | |
| | *Initial Capitalization* | Modification/Improvement |
| Agency Peculiar Equipment. | 15 Years. | 5 Years |
| Equipment (Personal Property). | 5, 7, 10, 15, or 20 Years depending on the FSC Classification of the asset. | Remainder of the useful life of the asset being modified. |
| Buildings, Hangers, Warehouses, Fuel Storage Buildings, Air Traffic Control Towers, and Other Real Property Buildings | 40 Years. | 20 Years. |
| Other Structures and Facilities. | 15 Years. | 5 Years. |
| Improvements to Leased Buildings and Other Real Property (Leasehold Improvements). | Remainder of Lease Period or 20 Years, whichever is less. | Remainder of Lease Period or 20 Years, whichever is less. |
| Land Rights of Limited Duration. | Over the Specified Duration. | |
| Internal Use Software. | 5 Years. | |

## 2.6 Impairment Loss

2.6.1 Permanent impairment losses to General PP&E remaining in use will be recognized and reported in accordance with SFFAS 44, Accounting for Impairment of General Property, Plant, and Equipment Remaining in Use. General PP&E is considered impaired when there is a significant and permanent decline in the service utility of general PP&E or expected service utility of WIP.  Total and complete impairments of PP&E are addressed in the Disposal Section of this NID  (see Section 2.4.2).

2.6.2 Impairment Indicators.  NASA may identify impairment indicators during the course of regular operations, routine assessments of operational and functional capacity of General PP&E, impacts of significant events, and deferred maintenance and repairs. Some common indicators of potential impairments include:

a. Evidence of physical damage.

b. Enactment or approval of laws or regulations which limit or restrict General PP&E usage.

c. Changes in environmental or economic factors.

d. Technological changes or evidence of obsolescence.

e. Changes in the manner or duration of use of General PP&E.

f. Construction stoppage or contract termination.

g. General PP&E idled or unserviceable for excessively long periods.

2.6.3 Recognition. Each case of impairment loss that meets the criteria will be treated as a single event and recorded in the general ledger as a loss, with a corresponding reduction to the original cost of the item.  The amount recorded should be net of any recoveries, if applicable.

2.6.4 The Center OCFO office shall review the assessment of impairment losses of General PP&E provided by their respective Logistics and Facilities offices and submit to the Agency OCFO, Property Branch for concurrence in determining if the decline in service of the asset meets NASA criteria for impairment loss recognition.

2.6.5 If a reduction in the capitalized value of an asset occurs because of an impairment loss and causes the value of the asset to drop below the applicable threshold, it shall be removed from the general ledger accounts for capitalized PP&E.

2.6.6 Recoveries. NASA shall account for recoveries, such as insurance and donation proceeds, as revenues or other financing sources.  Revenues should be recognized when an identifiable and legally enforceable claim to resources arises, to the extent that the collection is probable and the amount is reasonably estimable.

2.6.7 Remediation.  Impairments may be subsequently remediated or reduced in future periods. Reversals of previously recognized impairment losses are disallowed.  However, should NASA management later decide to replace or restore the asset's lost service utility, the costs incurred to do so would become part of the asset's new cost basis.

2.6.8 Reporting Requirements.  Impairment losses should be submitted to the Agency OCFO/Headquarters for review and approval.

## 2.7 Deferred Maintenance and Repairs

Deferred maintenance and repairs information related to NASA PP&E will be reported, as required supplementary information in accordance with SFFAS 42, Deferred Maintenance and Repairs: Amending Statement of Federal Financial Accounting Standards 6, 14, 29, and 32.

## 2.8 Documentation

2.8.1 Supporting Documentation. When recording the cost of NASA Capital PP&E, the dollar value assigned to the asset will be supported by appropriate documentation. Entries to record financial transactions in general ledger accounts and/or supporting subsidiary property accountability records must be supported by adequate source documents that reflect transactions affecting NASA's investment in the PP&E. Center CFO offices are responsible for ensuring that supporting documentation exists for capital assets and will maintain records for each capital asset. Newly acquired, fabricated, or modified PP&E will be supported by adequate documentation of the valuation, ownership, and capitalization determinations.

2.8.1.1 Valuation. Prior to recording the total cost of NASA Capital PP&E, the dollar value to be assigned to the asset must be supported by appropriate documentation. PP&E acquired from external sources, such as vendors, must be supported by third-party invoices, cost reports or transfer documents. PP&E constructed or fabricated internally should be supported by civil servant labor reports and/or material reports.

2.8.1.2 Ownership. Prior to recognizing new items/construction as NASA Capital PP&E, supporting documentation, such as receiving reports, must be gathered to verify NASA's rights of ownership to the assets.

2.8.1.3 Capitalization Determination. A completed CDF, NF 1739, should be maintained for all new Capital PP&E that clearly documents the decision to capitalize the asset.

## 2.9 Financial Records Retention

NASA Centers, Component Facilities, and Headquarters offices shall maintain capital asset documentation in accordance with the requirements of NPR 1441.1, NASA Records Management Program Requirements.

## 2.10 Environmental Liabilities Related to PP&E

For environmental/cleanup costs liability associated with removing, containing, and/or disposing of PP&E in accordance with SFFAS 6, refer to NPR 9260.1, Liabilities.

# Chapter 3 Real Property

## 3.1 Overview

3.1.1 This chapter sets forth the accounting standards and policies related to NASA's real property to assure compliance with statutory and regulatory requirements. These requirements ensure financial control over NASA-owned real property, including NASA property in the possession of contractors.

3.1.2 This chapter applies to all NASA-owned real property, including NASA real property in the possession of contractors.

## 3.2 Roles and Responsibilities

3.2.1 Refer to Section 1.6 of this NID document.

## 3.3 Capitalization Criteria and Identification

3.3.1 Real property PP&E consists of buildings, facilities, and other structures. Therefore, NASA shall capitalize new construction or acquired real property PP&E which meet all of the following criteria:

a. Have a unit total cost (see Section 2.2) of $500,000 or more.

b. Have an estimated useful life of two years or more.

c. Have been acquired or constructed with the intention of being used, or being available for use, by NASA.

3.3.1.1 Items not meeting the above criteria will be expensed in the period(s) costs are incurred.

3.3.2 Modifications to existing real property PP&E are considered single events and should be capitalized as capital improvements when the modifications have an individual cost of $500,000 or more and meet one of the following criteria:

a. Extend the useful life of the asset by two years or more.

b. Enlarge or improve its capacity.

c. Otherwise upgrade it to serve needs different from, or significantly greater than, those originally intended.

3.3.2.1 Capital Improvements are capitalized and depreciated. Modifications that do not meet the capitalization criteria are expensed.

3.3.2.2 Costs of acquiring real property and improvements meeting the capitalization criteria will be segregated for identification and tracking through the establishment of unique WBS elements with capital asset indicators.

3.3.2.3 Maintenance costs incurred to maintain an asset in a useable condition do not meet the criteria for capitalization. Therefore, these costs are expensed when incurred.

## 3.4 Recognition

3.4.1 WIP (Assets Under Construction).

3.4.1.1 Costs of new construction or improvement of real property that meet the capitalization criteria outlined above will be captured as WIP through the establishment of unique WBS elements with capital asset indicators until the asset is beneficially occupied or placed in service, whichever occurs first.

3.4.1.2 The status of each new construction or capital improvement real property project recorded in WIP should be monitored on a monthly basis based on the percentage of completion. Once a project has reached 90 percent completion, information must be obtained to determine if the beneficial occupancy has been issued or the PP&E has been placed in service.

3.4.1.3 When PP&E being recorded in WIP is complete or beneficially occupied, the total capital cost recorded as WIP will be transferred to Capital PP&E. The capital balances transferred from WIP must be supported by sufficient supporting documentation, and any variances between the amount transferred and the supporting documentation must be reviewed and approved by NASA - Agency Director of Financial Management prior to processing any manual adjustments.

3.4.1.4 Capitalization will begin on the earlier of the date the PP&E are placed in service or the beneficial occupancy date. This event is defined as the date on which the facility or improvement to a facility is available for use by NASA. The capitalization of WIP will not be delayed pending final acceptance of residual closeout work, such as punch lists.

3.4.1.5 Year End. At fiscal year-end, special care shall be taken to ensure that real property PP&E meeting capitalization criteria, including beneficial occupancy, are capitalized in the amount of the costs incurred up to that time, regardless of whether or not any of those costs remain unpaid.

3.4.2 The cost of Real Property PP&E constructed by or through foreign governments or in foreign countries under NASA contracts will be capitalized in accordance with the title rights contained in formal agreements.

3.4.3 When a party other than NASA constructs a facility that becomes NASA PP&E under the terms of a reimbursable agreement, that property will be capitalized at the estimated fair market value of the facility, if the actual cost is not provided by the party that constructed the facility.

## 3.5 Valuation

3.5.1 Capitalized values will include all costs incurred to bring PP&E to a form and location suitable for its intended use as outlined in Section 2.2 of this NID.

3.5.2 Where a replacement of a component occurs due to a capital improvement, such as utility system in a facility, the accounts will be appropriately adjusted to remove the values of items replaced (where those original values are $500,000 or more). If only a portion of the property is being replaced and that portion is not separately identifiable in the accounting records, the value of the replaced portion must be estimated and the accounts adjusted accordingly. Removal of an item's recorded cost will be treated as a separate accounting transaction from the recording of additions or replacements. Replacements due to maintenance should be expensed.

3.5.3 If a reduction in the capitalized value of an asset occurs because of a modification and causes the value of the asset to drop below $500,000, it should be removed from the general ledger accounts for capitalized PP&E.

3.5.4 Real property that is identified during inspections or inventories that has not been recorded should be valued at its estimated value based on similar items, engineering estimates, or other reasonably supportable methodologies, if supporting documentation for the original item is not available. The capitalization threshold in effect on the date the item is discovered will be applied to determine whether to capitalize the item.

## 3.6 Depreciation

3.6.1 See Section 2.5 for depreciation methods.

3.6.2 The useful life of acquired or constructed real property and capital modifications will be the recovery period as shown in Table 3.1 of this NID.

3.6.3 Real Property PP&E acquired, received through donation or constructed, or modifications that meet the capitalization criteria should be capitalized individually and depreciated over the recovery periods for modifications shown in Table 3.1.

3.6.4 Real Property Not Fully Depreciated. Modifications to real property that is not fully depreciated, that meet the capitalization criteria will be capitalized and depreciated over the recovery periods for modifications shown in Table 3.1.

3.6.5 Real Property Modifications When The Asset Being Modified Is Fully Depreciated. Modifications to real property that is fully depreciated, that meet the capitalization criteria will be capitalized individually and depreciated over the recovery periods for modifications shown in Table 3.1.

**Table 3.1, RECOVERY PERIODS FOR REAL PROPERTY ASSETS**

| NASA RECOVERY PERIODS FOR REAL PROPERTY ASSETS (Excludes Heritage Assets) | | |
|---|---|---|
| Description of General PP&E Assets | Recovery Period | |
| | Initial Capitalization | Modification/ Improvement |
| Buildings, Hangars, Warehouses, Fuel Storage Buildings, Air Traffic Control Towers, and Other Real Property Buildings. | 40 Years. | 20 Years. |
| Other Structures and Facilities. | 15 Years. | 5 Years. |
| Improvements to Leased Buildings and Other Real Property (Leasehold Improvements). | | Remainder of Lease Period or 20 Years, whichever is less. |

## 3.7 Impairment Loss

See Section 2.6.

## 3.8 Deferred Maintenance and Repairs

See Section 2.7.

## 3.9 Real Property not in use

See Section 2.4.3.

## 3.10 Disposal

See Section 2.4.2.

# Chapter 4 Personal Property (General Equipment)

## 4.1 Overview

4.1.1 This chapter sets forth the accounting standards and policies related to NASA's personal property to assure compliance with statutory and regulatory requirements. These requirements ensure financial control over NASA-owned personal property, including NASA personal property in the possession of contractors.

4.1.2 This chapter applies to all NASA-owned personal property, including NASA personal property in the possession of contractors, as well as equipment acquired or furnished under NASA grants and cooperative agreements with educational institutions and non-profit organizations. NASA-owned equipment in the possession of a contractor, grantee, or cooperative agreement partner includes equipment provided by NASA, as well as equipment acquired or fabricated by the contractor, grantee, or cooperative agreement partner. This chapter does not apply to items in which NASA has only a reversionary interest, (see paragraph 1.3.2.a in this NID).

## 4.2 Roles and Responsibilities

4.2.1 Refer to Section 1.6 of this NID document.

## 4.3 Classification and Identification

4.3.1 Personal property can be classified as either collateral or non-collateral equipment, depending on the nature of the attachment of the equipment to and severability from a facility project.

4.3.2 Collateral equipment is not severable and is considered part of a facility in which it is installed. Examples of collateral equipment include building-type equipment, built-in equipment, and large, substantially affixed equipment normally installed as a part of a facility project, such as construction or modification. Collateral equipment will be classified as real property as part of the facility in which it is being installed. Refer to Chapter 3 of this NID document.

4.3.3 Non-collateral equipment, when acquired and used in a facility or test apparatus, can be severed and removed after construction without substantial loss of value or damage to the equipment or the premises where it is installed. Non-collateral equipment will be classified as personal property and capitalized based on the criteria outlined in this chapter.

## 4.4 Capitalization Criteria

4.4.1 The following capitalization criteria apply to acquired and fabricated personal property. NASA shall capitalize individual items acquired by purchase, transfer, donation, or exchange that meet all of the following criteria:

a. Have a total cost (see Section 2.2) of $500,000 or more.

b. Have an estimated useful life of two years or more.

c. Are not intended for sale in the ordinary course of operations.

d. Have been acquired or constructed with the intention of being used, or being available for use, by NASA.

e. If acquired for an R&D project, has an alternative future use. See Section 1.3.2 for the definition of alternative future use.

4.4.1.1 Items not meeting the above criteria are expensed in the period incurred.

4.4.1.2 Personal property PP&E items acquired as part of a bulk purchase that individually meet the capitalization criteria should be capitalized in accordance with the policies established in this NPR. If the cost per item purchased in bulk does not meet the capitalization threshold, the bulk purchase must be expensed in the period acquired.

4.4.2 Modifications to existing personal property are considered single events and should be capitalized when the modifications have an individual cost of $500,000 or more and meet one of the following criteria:

a. Extend the useful life of the asset by two years or more.

b. Enlarge or improve its capacity.

c. Upgrade it to serve needs different from, or significantly greater than, those originally intended.

4.4.2.1 Modifications that do not meet the capitalization criteria are expensed.

4.4.3 Costs of acquiring, fabricating, or modifying personal property meeting the capitalization criteria will be segregated for identification and tracking through the establishment of unique WBS elements with capital asset indicators.

4.4.4 Maintenance costs incurred to maintain an asset in a useable condition do not meet the criteria for capitalization. Therefore, these costs are expensed when incurred.

## 4.5 Recognition

4.5.1 WIP (Assets Under Construction).

4.5.1.1 Costs of new fabrication or improvements of personal property that meet the capitalization criteria outlined above will be captured as WIP through the establishment of unique WBS elements with capital asset indicators of AUC until the asset is placed in service.

4.5.1.2 The status of each new fabrication or capital improvement project recorded as WIP shall be monitored on a monthly basis based on the percentage of completion. Once a project has reached 90 percent completion, information must be obtained to determine if the PP&E has been placed in service so that the PP&E can be recognized on a timely basis.

4.5.1.3 When PP&E being recorded in WIP is complete, the total capital cost recorded as WIP will be transferred to capital PP&E. The capital balances transferred from WIP must be supported by sufficient supporting documentation, and any variances between the amount transferred and the supporting documentation must be reviewed and approved by NASA- - Agency Director of Financial Management prior to processing any manual adjustments.

4.5.2 In general, NASA shall recognize personal property PP&E when title to the asset passes to NASA. Title passage will occur either at the time of delivery and acceptance by a Government official or at an earlier contractually specified time. In the case of fabricated PP&E, the PP&E must be recorded as WIP until placed in service, at which time the balance will be transferred to capital PP&E.

4.5.2.1 For purchased equipment, the recognition date will be based on the shipping terms of the contract or purchase order. This will be the date shown on the receiving and inspection report or equivalent source document evidencing the receipt, passage of inspection, and acceptance by the Government unless the contract or purchase order provides other specific terms of title passage.

4.5.2.2 For General PP&E assets acquired by a contractor on behalf of NASA, the recognition date should be based upon delivery or constructive delivery either to the contractor performing the service or to a NASA facility. Delivery or constructive delivery must be based on the terms of the contract regarding delivery, receipt, and acceptance.

4.5.2.3 When NASA-owned General PP&E assets are acquired by a grantee or cooperative agreement partner, the recognition date should be based upon delivery or constructive delivery to the location where the PP&E will be used in support of the grant or cooperative agreement.

## 4.6 Valuation

4.6.1 Capitalized values will include all costs incurred to bring PP&E to a form and location suitable for its intended use as outlined in Section 2.2 of this NID.

4.6.1.1 If an item, as originally installed, is an aggregate of components that could stand alone (as opposed to parts) and are severable, those components will be individually subjected to the capitalization criteria and only those components that meet the criteria are to be originally capitalized. If an item, as originally installed, is an aggregate of components that could not stand alone and are not severable, those components must be subjected to the capitalization criteria in aggregate.

4.6.1.2 If a personal property item that meets the capitalization criteria is received and accepted by a NASA official prior to the end of the fiscal year and is capitalized, any related remaining cost paid in the next fiscal year will be included in the capitalized value.

4.6.1.3 If an item does not meet the capitalization threshold at the end of the fiscal year, but related remaining costs paid the next fiscal year result in the total cost of the asset meeting the capitalization threshold, the entire cost of the asset should be capitalized in the next fiscal year (assuming the other capitalization criteria are met).

4.6.1.4 Personal property that is identified during inspections or inventories that has not been recorded will be valued at its estimated value based on similar items, engineering estimates, or other reasonably supportable methodologies, if the original supporting documentation is not available. The capitalization threshold in effect on the date the item is discovered should be applied to determine whether to capitalize the item.

## 4.7 Depreciation

See Section 2.5.

## 4.8 Impairment Loss

See Section 2.6.

## 4.9 Deferred Maintenance and Repairs

See Section 2.7.

## 4.10 Personal Property not in use

See Section 2.4.3.

## 4.11 Disposal

See Section 2.4.2.

# Chapter 5 Internal Use Software

## 5.1 Overview

This chapter prescribes accounting policies and procedures for NASA internal use software (IUS). When accounting treatment for specific circumstances is not discussed in this chapter, reference should be made to SFFAS No. 10, Accounting for Internal Use Software, for guidance.

## 5.2 Roles and Responsibilities

Refer to Section 1.6 of this NID document.

## 5.3 Capitalization Criteria

5.3.1 IUS. Software must be capitalized when all of the following conditions are met:

a. Purchased commercially "off-the-shelf," internally developed, or contractor-developed solely to meet NASA's internal needs.

b. Operated in a stand-alone mode and is not integrated or necessary to operate hardware or equipment. If not in stand-alone mode, it is subject to capitalization criteria of the asset in which it is integrated.

c. Used to operate NASA's programs (i.e., financial and administrative software including that used for project management) or to support multiple NASA missions (i.e., communication software designed to support multiple missions). This would be software developed independently of a mission (i.e., not a part of the mission).

d. Total project cost is $1,000,000 or more.

e. Expected useful life is two years or more.

5.3.2 NASA shall not capitalize:

a. Software developed as part of a research effort (i.e. algorithm).

b. Software integrated into and necessary to operate a NASA asset. Such software is subject to capitalization criteria of the asset in which it is integrated.

c. Software that NASA does not own outright or for which NASA does not own a lease to operate.

d. Data conversion, maintenance, and training costs.

e. Costs incurred solely to repair a design flaw in software.

f. Costs incurred to develop "free software" to be released to the public or other Federal agencies for purposes of advancing scientific and technological knowledge.

## 5.4 Valuation

5.4.1 NASA shall expense costs incurred during the Formulation Phase of the life cycle for internal use software as R&D costs. NASA must also expense costs during the Operational Phase, which begins when final acceptance testing has been successfully completed.

5.4.2 NASA shall capitalize costs incurred during the software development (Implementation Phase) phase of the life cycle for IUS. Capitalized costs are accumulated as WIP until final acceptance testing has been successfully completed. Once completed, the costs are transferred to PP&E, with amortization expense recognized on a periodic basis using the straight-line method, beginning in the month the IUS was capitalized. Such cost must be limited to cost incurred after:

a. Management authorizes and commits to a computer software project and believes that it is more likely than not that the project will be completed and the software will be used to perform the intended function with an estimated service life of two years or more..

b. The completion of conceptual formulation, design, and testing of possible software project alternatives (the preliminary design stage).

5.4.3 Capitalized costs include those for new software (i.e., salaries of programmers, systems analysts, project managers, and administrative personnel, associated employee benefits, outside consultants' fees, rent, and supplies) and documentation manuals.

5.4.4 For commercial, off-the-shelf (COTS) software, capitalized cost will include the amount paid to the vendor for the software. For contractor-developed software, capitalized cost will include the amount paid to a contractor to design, program, install, and implement the software. Material internal cost incurred by the Federal entity to implement the COTS or contractor-developed software and otherwise make it ready for use must be capitalized.

5.4.5 For enhancements to existing IUS, the FASAB specifies the following in SFFAS No. 10:

5.4.5.1 The cost of enhancements to existing IUS (and modules thereof) should be capitalized when it is more likely than not that they will result in significant additional capabilities.

5.4.5.2 The cost of minor enhancements resulting from ongoing systems maintenance should be expensed in the period incurred.

5.4.5.3 Costs incurred solely to repair a design flaw or to perform minor upgrades that may extend the useful life of the software without adding capabilities will be expensed.

5.4.6 Material expenditures that add capability or functionality are capitalized while expenditures that result in extending useful life are expensed.

5.4.7 Costs incurred after final acceptance testing has been successfully completed will be expensed. The likely types of costs that can be incurred during the Post-Implementation/Operational phase are associated with the following:

a. Operate the software, undertake preventive maintenance, and provide ongoing training for users.

b. Convert data from the old to the new system.

c. Undertake post-implementation review comparing asset usage with the original plan.

d. Track and accumulate life-cycle costs and compare it with the original plan. All data conversion costs incurred for internally developed or COTS software should be expensed as incurred, including the cost to develop or obtain software that allows for access or conversion of existing data, reconciliation or balancing data, and the creation of new/additional data.

5.4.8 Software integrated into and necessary to operate an asset is to be capitalized as part of the asset in which it is integrated.

5.4.9 Modules of a software project are amortized when the module has been successfully tested. If a module is dependent on the completion of another module, amortization begins when both modules have been successfully tested.

5.4.10 The cost of enhancements to existing IUS (and modules thereof) is capitalized when it is more likely than not that the enhancements will result in significant additional capabilities, costing $1,000,000 or more, and having an expected service life of two years or more.

5.4.11 When software products and services are acquired as a combined package, the capital and non-capital costs of the package are allocated among individual elements on the basis of a reasonable estimate of their relative fair values.

5.4.12 The standard establishes the following principles for expensing costs of IUS:

5.4.12.1 Data Conversion. Data conversion costs incurred for internally developed, contractor-developed, or COTS software are expensed as incurred, including the cost to develop or obtain software that allows for access or conversion of existing data to the new software. Such costs may include the purging or cleansing of existing data, reconciliation or balancing of data, and the creation of new or additional data.

5.4.12.2 Training Costs. Training costs incurred for internally developed, contractor-developed, or COTS software are expensed as incurred, except training costs incurred to make the software initially implementable and ready for use. Training costs incurred to make the software initially implementable and ready for use will be added to the cost of the software and capitalized, if it meets the capitalization criteria.

5.4.12.3 Minor Enhancements. The cost of minor enhancements resulting from ongoing systems maintenance and costs incurred solely to repair a design flaw are expensed.

5.4.12.4 Minor Upgrades. The costs of minor upgrades that may extend the useful life of the software without adding capabilities are expensed.

5.4.13 For the accounting and reporting of software licenses, NASA has adopted the FASAB's suggestion in Paragraph 67 of SFFAS No. 10 that lease accounting concepts and the entity's policy for capitalization thresholds be applied. If the license agreement meets one or more of the following criteria and NASA's software capitalization threshold, it is considered a capital lease:

a. The lease transfers ownership of the software to NASA by the end of the lease term.

b. The lease contains an option to purchase the leased software at a bargain price.

c. The lease term is equal to or greater than 75 percent of the estimated economic life of the leased software. This must be equal to or greater than the present value of the software license payments.

d. The present value of rental and other minimum lease payments, excluding that portion of the payments representing executory cost, equals or exceeds 90 percent of the fair value of the leased software. To evaluate this criterion, determine the purchase price of the software and multiply it by 90 percent. This amount must be equal to or greater than the present value of the software license payments (if it is a standard COTS software, various sources could be used to provide the list price for the software package).

e. Note: The last two criteria (c. and d.) are not applicable if the beginning of the lease term falls within the last 25 percent of the total estimated economic life of the leased PP&E.

f. Note: Annual lease/renewals are not considered capital leases.

5.4.14 The following software costs must be captured for capitalization purposes:

5.4.14.1 Bundled Products and Services. Allocate the capital and non-capital cost of the package among the individual elements on the basis of a reasonable estimate of their relative fair values. For example, training, maintenance, or data conversion elements included in the package will be expensed; the software package, software implementation, installation, and testing elements shall be capitalized.

5.4.14.2 Contractor Developed Software. The amount paid to a contractor during the implementation phase and material internal costs incurred by NASA to implement the software and otherwise, make it ready for use, up through acceptance testing.

5.4.14.3 Internally Developed Software. The cost incurred through acceptance testing.

5.4.14.4 COTS Software. The amount paid to the vendor for the software (purchase or lease) and material internal costs incurred by NASA to implement the software and otherwise make it ready for use through acceptance testing.

5.4.15 Software Developed in Modules. Software developed in modules (including pilots) should be accounted for as follows:

5.4.15.1 If the modules are implemented and operated independently, the software will be accounted for based on the cost and expected useful life of each module. The useful life of independently implemented software starts on the date the software becomes operational.

5.4.15.2 If the modules are interdependent, the costs and life cycle will be the combined cost and life of the modules, which must be implemented together.

5.4.16 Bulk Purchase. Bulk purchases of the same software acquired under the same contract will be accounted for as a group. If the same software package is purchased under two or more contracts, costs must be accounted for and thresholds applied separately. Software acquired through separate contracts must be accounted for separately.

5.4.17 Software Licenses. Multiyear licenses are capitalized if the total projected cost is $1,000,000 or more and the expected useful life of the software is two years or more.

5.4.18 Enhanced Software. Enhancement costs for existing software should be capitalized if the enhancement results in significant additional capability beyond that for which the software was originally intended, the total cost of the enhancement is $1,000,000 or more, and the expected useful life of the enhanced software is two years or more. The capitalized cost will include the same types of cost discussed above in Section 5.4.5. Costs incurred solely to repair a design flaw or perform minor upgrades must not be capitalized. A significant additional capability is considered a capability not included in original software specifications and which costs $1,000,000 or more to develop (excluding all other updates to the software).

5.4.19 If software is being capitalized, but becomes unusable (impaired), this will be brought to the attention of NASA-Agency OCFO, Director for Financial Management. See section 2.6

5.4.20 Software costs associated with terminated projects and/or subprojects will be expensed.

## 5.5 Amortization

IUS that is capitalized pursuant to the SFFAS No. 10, Accounting for Internal Use Software, and requirements established in this chapter should be amortized over the estimated useful life of two years or more. Refer to Table 2-1 for NASA's current recovery period (useful life) that will be used for amortization of IUS.

## 5.6 Disposal

NASA shall recognize disposals when software is determined to be obsolete or nonfunctional. NASA will continue to report fully depreciated software projects until they are removed from service. Refer to Chapter 2, of this NID for more detailed discussion of disposal of capital PP&E.

# Chapter 6 Capital Leases

## 6.1 Overview

This chapter prescribes accounting policies and procedures for PP&E leased by NASA and subject to capitalization.

## 6.2 Roles and Responsibilities

Refer to Section 1.6 of this NID document.

## 6.3 Identification

6.3.1 Proper and timely identification of capital leases of PP&E by the responsible officials are essential for the control, accounting, and reporting of capitalized assets. The Center CFO office shall review and document its assessment of the lease agreement and submit to the NASA-Agency OCFO, Property Branch for concurrence in determining if it is a capital lease and if the asset meets the NASA criteria for capitalization.

6.3.2 Unique WBS elements are not used when PP&E is acquired by capital leasing. The lease agreement is the supporting document. Due to the nature of capital leases, the CDF, NF 1739 does not apply.

## 6.4 Capitalization Criteria

6.4.1 Capital Leases. PP&E under a lease where the terms of the agreement are essentially equivalent to an installment purchase of PP&E and the capitalization criteria outlined below are met should be capitalized. In accordance with OMB Circular No. A-11, Preparation, Submission, and Execution of the Budget (07/10/2020) app. B, and the Budget Enforcement Act of 1990, Pub. L. No. 101-508, 104 Stat. 1388-573 (1990) for all lease-purchases and leases of capital assets, there must be sufficient budgetary resources up front to cover the present value of the lease payments discounted using Treasury interest rates.

6.4.2 Capitalization Criteria.

6.4.2.1 Leased PP&E is subject to capitalization if its fair value is $500,000 or more for personal and real property, and $1,000,000 or more for internal use software and the terms of the agreement are equivalent to an installment purchase by meeting any one of the following criteria.

a. The lease transfers ownership to NASA at the end of the term.

b. The lease contains an option to purchase at a bargain price.

c. The non-cancelable length of the lease is equal to or greater than 75 percent of the estimated economic life of the PP&E.

d. The present value of the rental or other minimum lease payments, excluding that portion of the payments that represents executory costs, such as insurance, maintenance, and taxes to be paid by NASA, equals or exceeds 90 percent of the fair value of the PP&E.

*Note: The last two criteria are not applicable if the beginning of the lease term falls within the last 25 percent of the total estimated economic life of the leased PP&E. The rental of space from General Services Administration (GSA) does not qualify as leased PP&E subject to capitalization.*

## 6.5 Valuation

6.5.1 The present value of the minimum lease payments will be computed using the Treasury Average Interest Rate for Marketable Interest-Bearing Debt, unless it meets the following two conditions:

a. It is practicable for NASA to obtain the interest rate implicit in the lease computed by the lessor.

b. The implicit rate computed by the lessor is less than the Treasury Average Interest Rate for Marketable Interest-Bearing Debt.

## 6.6 Recognition

6.6.1 Each item of leased property that meets the capitalization criteria should be treated as a single event, and all costs incurred in relation to that event, regardless of when they are paid, must be recorded in the general ledger as an asset. The total cost of each leased property item will be considered a single event, regardless of whether or not the work was performed on multiple contracts.

6.6.2 Leased PP&E that meets the above capitalization criteria will be recorded as an asset.

6.6.3 The amount recorded will be equal to the amount recognized as a liability for the capital lease at its inception (the net present value of the lease payments calculated as discussed above, unless the net present value exceeds the fair market value of the PP&E, in which case the liability should be the fair value).

6.6.4 Interest expenses should be recognized as a portion of the lease payments and will be calculated based on the interest rate used to compute the present value of the minimum lease payments.

## 6.7 Amortization

The recorded cost of the leased asset will be amortized over the life of the lease.

## 6.8 Discontinued Use

If NASA management decides to permanently remove an asset under capital lease from use prior to the completion of the capital lease term, the permanent removal decision must be documented. That decision, along with the actual discontinuance of use, is the basis for removing the asset, its associated accumulated depreciation/amortization, and the corresponding capital lease liability from NASA's financial records. The removal will occur when the decision to discontinue use has been documented and the asset has been taken out of service.

6.8.1 Any loss on the removal of the asset under capital lease prior to the completion of the lease term should be recognized and recorded when management has documented its decision to permanently discontinue use of the asset and the asset has been taken out of service.

## 6.9 Reporting

Reporting Requirements. Leased PP&E subject to capitalization are reported in the Capital Leases Report, submitted to the NASA-Agency OCFO. All other PP&E leased for periods in excess of one year, including leases less than $500,000 for personal and real property, and $1,000,000 for internal use software, and those agreements where NASA is the lessor shall be reported in the Operating Leases Report.

# Chapter 7 Heritage Assets

## 7.1 Overview

This chapter establishes the accounting policies for heritage assets.

## 7.2 Roles and Responsibilities

Refer to Section 1.6 of this NID document.

## 7.3 Identification

7.3.1 The identification and accountability of NASA artifacts are governed by NPR 4310.1, Artifact Identification and Disposition, NPR 1387.1, NASA Exhibits Program, NPR 4200.1, and NPR 4300.1.

7.3.2 When capitalized assets are identified as heritage assets and no longer predominately serve NASA operations, their values should be removed from the PP&E accounts and a copy of the SAP Asset Accounting Document for the transaction must be forwarded to NASA Headquarters, OCFO Property Branch for retention and documentation for the preparation of the required annual supplementary reporting. The Center will also notify the NASA-Agency OCFO, Property Branch, when it becomes aware of the existence of a heritage asset.

7.3.3 Contractors and commercial firms that have received grants or cooperative agreements are required to provide information on heritage assets in their possession in their annual NF1018 submissions. Those contractors required to report monthly in CHATS will also identify the heritage assets in their possession.

## 7.4 Capitalization and Valuation

7.4.1 The costs of acquiring, constructing, improving, reconstructing, or renovating heritage assets should be considered an expense in the period incurred when determining the net cost of operations.

7.4.2 Assets that serve both heritage and operational functions are considered multiuse when the predominant use is for Government operations. Multiuse heritage assets are reported in the general ledger asset accounts. Capital renovation, improvement, or reconstruction costs to facilitate Government operations (for example, installation of communication wiring or redesign of office space) are depreciated over its expected useful life as defined in Chapter 2.

7.4.3 For multiuse heritage assets, the cost of acquisition, improvement, reconstruction, or renovation of multi-use heritage assets shall be capitalized as general PP&E and depreciated over its estimated useful life.

7.4.4 Heritage assets shall be quantified in terms of physical units (for example, number of collections or the number of national parks). No asset amount will be shown on the balance sheet of the Federal financial statements for heritage assets.

7.4.5 The costs of acquiring, constructing, improving, reconstructing, or renovating heritage assets must be considered an expense in the period incurred when determining the net cost of operations. The cost will include all costs incurred to bring the heritage asset to its current condition and location.

## 7.5 Reporting

Heritage assets should be reported in a note to the financial statements. The note will provide the number of physical assets by major category, classified as collection or non-collection type, the number by category acquired and withdrawn during the reporting period, and a description of the major methods used to acquire and withdrawal the assets during the reporting period. In addition, NASA will disclose in the footnotes how heritage assets are related to the mission of the entity, a description of the heritage assets, stewardship responsibilities, and their condition. Condition of the heritage assets may be reported with the deferred maintenance information in the required supplementary information.

# Chapter 8 Operating Materials and Supplies

## 8.1 Overview

This chapter prescribes accounting policies for materials and supplies acquired by NASA for use in its R&D projects and other operations. NASA follows the purchases method of accounting for its Operating Materials and Supplies (OM&S). The purchases method provides that OM&S be expensed when purchased.

## 8.2 Roles and Responsibilities

Center CFOs shall ensure that adequate financial controls are in place to ensure that the financial records and reports appropriately account for the cost of OM&S as period expenses.

# APPENDIX A. Definitions

**Abandoned**. A condition in which the facility or other General PP&E asset has been "walked away from" or, no maintenance of any part of the property is being accomplished. There are no plans for future reactivation and plans have been made to demolish or declare the asset item as excess at the earliest practical date.

**Agency Peculiar Equipment**. Completed items, unique to NASA aeronautical and space programs, which are capable of stand-alone operation. Examples include research aircraft, reusable space vehicles, ground support equipment, prototypes, and mock-ups.

**Alternative Future Use**. An item is considered to have an alternative future use if there is a reasonable expectation (e.g., greater than a 50 percent likelihood) that the item will be used on another project(s) that has not yet commenced. Such alternative use will require no significant modification or further development of the asset, but may include minor adaptations of existing capabilities to a particular requirement

**Asset Attribute**. An attribute in MdM (Metadata Manager) to identify capital assets at the individual WBS component level. When enabled, the asset attribute will be used to identify those WBS elements that support one of the four types of capital asset. The four WBS asset attribute types available are:

a. PP&E - Fabricated capital assets.

b. PP&E - Purchased capital assets.

c. Real property.

d. Software (Internal use software $1M and over).

**Bargain Price**. Price (less than fair market value) at which NASA has the option to purchase leased PP&E which makes exercise of the option almost certain. This term is different from and is not synonymous with fair value or fair market value.

**Buildings, Improvements, and Renovations**. Buildings, improvements, and renovations include costs of buildings, improvements and renovations to buildings, and fixed equipment required for the operation of a building that is permanently attached to and a part of the building and cannot be removed without cutting into the walls, ceilings, or floors. Examples of fixed equipment required for functioning of a building include plumbing, heating, lighting equipment, elevators, central air conditioning systems, and built-in safes and vaults.

**Bulk Purchase**. Bulk purchase is when multiple items are purchased under one transaction.

**Bundled Software Products and Services**. A suite of software products or services (i.e. training, maintenance, data conversion, reengineering, site licenses, and rights to future upgrades and enhancements).

**Capital Asset**. An asset that has future economic benefit and whose cost is spread over the useful life of the asset as depreciation or amortization expense. The criteria for determining which assets will be capitalized are stated in this NPR.

**Capital Improvement**:  A capital improvement is an individual improvement or modification to an existing PP&E item that adds to the future economic benefit of the PP&E item and whose cost is spread over the remaining useful life of the PP&E item being improved or modified.  The criteria for determining which modifications or improvements should be capitalized as capital improvements is stated in Section 2.1.5.1 of this NPR.

**Capitalized Internal Use Software**. Internal Use Software (IUS) whose cost is spread over the useful life of the software as amortization expense.  The criteria for determining which IUS should be capitalized are stated in this NPR.

**Capital Lease**.  Property lease that is equivalent to an installment purchase of property and meets the criteria of this NPR.  In accordance with OMB Circular No. A-11, Preparing and Submitting Budget Estimates, app. B (07/10/2020) for all lease purchases and leases of capital assets, there must be sufficient budgetary resources upfront to cover the present value of the lease payments discounted using U.S. Treasury interest rates.

**Collateral Equipment**.  Building-type equipment, built-in equipment, and large, substantially affixed equipment normally acquired and installed as a part of a facility project. The removal of such equipment would impair the usefulness, safety, or environment of the facility and would involve substantial cost because of the special or unique services required for the initial installation.

**Commercial Off-The-Shelf (COTS) Software**.  Software purchased, leased, or licensed from a vendor and ready for use with little or no change.

**Contractor Developed Software**.  Software designed, programmed, installed, and implemented by a NASA contractor, including new software and modifications of existing or purchased software without substantive NASA employee involvement other than contract monitoring.

**Contractor-Acquired Property**.  Property acquired, fabricated, or otherwise provided by the contractor for performing a contract and to which the Government has title.

**Data Conversion**.  Data conversion includes conversion of existing data, reconciliation, or balancing data and the creation of new/additional data.

**Depreciable Basis**.  The depreciable basis of a General PP&E asset is the recorded cost reduced by the asset's salvage value.  NASA's PP&E is presumed to have no residual/salvage value and therefore, residual/salvage value does not affect the depreciable basis in determining depreciation.  Land is not subject to depreciation.  Land rights that are for a specified period of time will be amortized over the specified time period.  When land and a building are purchased together, the depreciable basis for the building is the total purchase cost less the actual cost or estimated value of the land.

**Depreciation**.  Depreciation is the systematic and rational allocation of the cost of General PP&E less its estimated salvage or residual value over the estimated useful life of the General PP&E. Depreciation expense will be recognized on all General PP&E, except for land and land rights of unlimited duration.

**Development**. Development is the translation of research findings or other knowledge into a plan or design for a new product or process or for a significant improvement to an existing product or process whether intended for sale or use. Development includes the conceptual formulation, design, and testing of product alternative, construction of prototypes, and operation of pilot plants. It does not include routine or periodic alterations to existing products, production lines, manufacturing processes, and other ongoing operations, even though those alterations may represent improvement, and it does not include research or market testing activities.

**Estimated Economic Life**. Estimated remaining period during which the PP&E is expected to be economically usable by one or more users, with normal repairs and maintenance, for the purpose for which it was intended at the inception of the lease, without limitation by the lease term.

**Equipment.** A tangible item that is functionally complete for its intended purpose, durable, nonexpendable, and used in operations. Equipment is not intended for sale, and does not ordinarily lose its identity or become a component part of another article when put into use. Equipment does not include material, real property, or special tooling. Note: This definition is consistent with the accounting requirement in FASAB SFFAS 6 and differs from the definition of equipment in FAR 45.101 in two respects. First it includes all items of equipment owned by a Government entity and is not limited to equipment needed for the performance of a contract. Second because of FASAB requirements for capitalization of assets meeting specific criteria, not all special test equipment is excluded as in the FAR definition.

**Excess Property**. Property that is no longer required for an Agency's needs, as determined by the Agency head or designee.

**Fabrication**. Fabrication is the process of building or constructing a part or end item. Multiple materials and supplies can be used and incorporated in a fabrication.

**Facility Project**. Consolidation of applicable specific individual facility work, including related collateral equipment, required to fully reflect all of the needs, generally relating to one facility, which have been or may be generated by the same set of events and are required to be accomplished at one time in order to provide for the planned initial operational use of the facility or a discrete portion thereof.

**Fair Value**. The price for which an asset could be bought or sold in an arm's-length transaction between unrelated parties (e.g., between a willing buyer and a willing seller). In other words, a price that is fair to both parties, considering the agreed-upon conditions, promised quality, and timeliness of performance.

**Federal Accounting Standards Advisory Board (FASAB)**. Board created to consider and recommend the accounting standards and principles for the Federal Government to improve the usefulness of Federal financial reports.

**Formulation Phase**. The assessment of feasibility, technology and concepts, risk assessment, team building, development of operations concepts and acquisition strategies, establishment of high-level requirements and success criteria, the preparation of plans, budgets, and schedules essential to the success of a program or project, and the identification of how the program or project supports NASA's strategic needs, goals, and objectives.

**Free Software**. Software released to the public or other Federal agencies that advances scientific and technological knowledge, but is not used in NASA's operations. The development of such software is consistent with NASA's mission, but is not acquired or constructed with the intention of being used or being available for use by NASA.

**Government-furnished property**. Property in the possession of, or directly acquired by, the Government and subsequently furnished to the contractor for performance of a contract. Government-furnished property includes, but is not limited to, spares and property furnished for repair, maintenance, overhaul, or modification. Government-furnished property also includes contractor-acquired property if the contractor-acquired property is a deliverable under a cost contract when accepted by the Government for continued use under the contract. In addition to the FAR definition above, as used in this NPR the term includes property in the possession of grantees, and cooperative agreement partners.

**Government property**. All property owned or leased by the Government. Government property includes both Government-furnished property and contractor acquired property. Government property includes material, equipment, special tooling, special test equipment, and real property. Government property does not include intellectual property and software. In addition to the FAR definition above, as used in this NPR the term includes property in the possession of grantees, and cooperative agreement partners.

**Heritage Assets**. Heritage assets are PP&E that are unique for one or more of the following reasons:

a. Historical or natural significance.

b. Cultural, educational, or artistic (i.e. aesthetic) importance.

c. Significant architectural characteristics.

**Impaired Software**. Software no longer expected to provide substantive service potential that will be removed from service or software that has incurred a significant reduction in capability, function, or use (or a module thereof).

**Implementation Phase**. Consists of design (including configuration and interfaces), coding, installation of hardware, and testing (including parallel processing, if needed).

**Improvements to Land**. Improvements to land include the cost of nonpermanent, depreciable improvements to land used in general operations. Also includes similar costs to land subject to stewardship reporting, as well as land rights of limited duration that are associated with general operations. The distinction between land and land improvements is that while land has an indefinite life and non-depreciable, land improvements have an estimated useful life (finite life), and are capitalized and depreciated. Examples of land improvements include the cost of parking lots, driveways, fences, lawn, and garden sprinkler systems. The costs of land improvements are capitalized and depreciated.

**In-grant**. An in-grant is an agreement between NASA and another entity, by which NASA is allowed to use the property owned by the other entity.

**Integrated Software**. Computer software integrated into and necessary to operate PP&E, rather than a stand-alone application.

**Interest Rate Implicit in the Lease**. Discount rate that, when applied to the minimum lease payments (less executory costs and unguaranteed residual value), causes the aggregate present value at the beginning of the lease term to be equal to the fair value of the leased PP&E at the inception of the lease.

**Internally Developed Software**. Software developed by NASA employees, including new software and existing or purchased software being modified with or without the assistance of contractors.

**Internal Use Software**. Internal use software is software that is purchased from commercial vendors "off-the-shelf," internally developed or contractor-developed solely to meet the entity's internal or operational needs. It is software that is:

a. Used to operate an entity's programs (i.e., financial and administrative software, including that used for project management).

b. Used to produce the entity's goods and to provide services (i.e., air traffic control and loan servicing).

c. Developed or obtained for internal use and subsequently provided to other Federal entities with or without reimbursement.

**Land and Land Rights**. Land and land rights include the identifiable cost of land and land rights of unlimited duration acquired for or in connection with general property, plant, and equipment used in general operations and permanent improvements. Land and land rights accounts include not only the land, but also the rights to it, such as easements.

**Leasehold Improvements**. Leasehold improvements include NASA-funded costs of long- term capital improvements to leases, rights, interests, and privileges relating to land not owned by NASA, such as easements, right-of-ways, permits, use agreements, air rights, water rights, and mineral rights. Leasehold improvements also include NASA-funded costs of improvements made to buildings, structures, and facilities, as well as easements and right-of-way, where NASA is the lessee or the cost is charged to a NASA contract.

**Maintenance**. The recurring day-to-day work that is required to maintain and preserve PP&E in a condition suitable for it to be utilized for its designated purpose. It is normally worked to correct wear and tear before major repair is required.

**Minimum Lease Payments**. Payments NASA is obligated to make or can be required to make in connection with leased PP&E.

**Modification**. An alteration of an existing piece of property. A modification may or may not increase the useful life of the property being modified. Modifications may extend the useful life, enlarge or improve its capacity, or change or enhance performance or functionality of the item. Only modifications that meet the capitalization criteria are added to the book value of the asset.

**Mothballed**. A condition where a facility or any other General PP&E asset has been deactivated, and appropriate maintenance measures have been taken to prevent deterioration of its vital or essential systems or placed in protective storage. Higher first-year costs would be expected because of preparations for mothballing, but future annual costs should be significantly lower due to reduced maintenance and repair requirements. Total time to deactivate and then to reactivate the facility, including the mothballed period, is expected to exceed 12 months.

**Multi-use Heritage Assets**. Heritage assets used to serve both heritage and Government operations functions are considered multiuse heritage assets if the predominant use is in general Government operations.

**Noncancelable**. A PP&E lease is considered noncancelable if it can only be canceled under one of the following conditions: (1) upon occurrence of a remote contingency, (2) with the permission of the lessor, (3) the lessee enters into a new lease with the same lessor, or (4) the lessee incurs a penalty in such amount that continuation of the lease appears, at inception, reasonably assured.

**Non-Collateral Equipment**. Equipment other than collateral equipment. Such equipment, when acquired and used in a facility or a test apparatus, can be severed and removed after erection without substantial loss of value or damage thereto or to the premises where installed. (See also Collateral Equipment.)

**Operating Materials and Supplies (OM&S)**. OM&S is composed of tangible personal property to be consumed in normal business operations.

**Operational Phase**. Consists of data conversion, application maintenance, training, and deployment. Typically referred to as Phase E of the information technology project, the project deploys and operates the system developed in previous phases. During this phase, the project team that developed the system typically turns over responsibility for operation of the system to an operations team.

**Operating/Program Expenses**. Expenses incurred in conducting ordinary activities of NASA. Expenses result in outflows of assets or occurrences of liabilities. Excludes capital expenditures, unfunded expenses, and cost of goods sold.

**Option**. A unilateral right in a contract by which, for a specified time, the Government may elect to purchase additional supplies or services called for by the contract, or may elect to extend the term of the contract

**Other Structures and Facilities**. Other structures and facilities include costs of acquiring or improving structures and facilities other than buildings; for example, airfield pavements, harbor and port facilities, power production facilities and distribution systems, reclamation and irrigation facilities, flood control and navigation aids, utility systems (heating, sewage, water and electrical) when they serve several buildings or structures, communications systems, traffic aids, roads and bridges, railroads, monuments and memorials, and nonstructural improvements such as, sidewalks, parking areas, and fences.

**Out-grant**. An out-grant is an action by NASA granting certain rights such as leasehold, permits, and easements to a grantee to use NASA-owned property in accordance with the terms and conditions of the grant and/or agreement.

**Property, Plant, and Equipment (PP&E)**. angible assets, including land, that meet all of the following criteria:

a. Have a total capitalized cost of $500,000 or more for personal and real property ($1,000,000 or more for internal use software).

b. Have estimated useful lives of two years or more.

c. Are not intended for sale in the ordinary course of operations.

d. Have been acquired or constructed with the intention of being used or being available for use by the entity.

e. If acquired for an R&D project, have an alternative future use. See Section 1.3.2 for the definition of alternative future use.

**Real Property**. Land, buildings, other structures and facilities, and leasehold improvements.

**Recorded Cost**. The recorded cost is the cost of acquiring an asset plus any ancillary costs required to bring the asset to a form and location for its intended use.

**Repairs**. The restoration or replacement of a deteriorated item of PP&E, such that it may be utilized for its designated purpose.

**Research**. Research is a planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product service, process, or technique or in bringing about a significant improvement to an existing product or process.

**Salvage Value**. The salvage value, also known as the residual or scrap value, is the amount that would be expected to be obtained from selling the asset at the end of its useful life, but only when such proceeds (from recycle, resale, salvage, etc.) are permitted to be retained and used by NASA. Typically, personal property (i.e., vehicles and equipment) will not have a salvage value. If the asset is to be traded in on a new asset, the salvage value is the expected trade-in value. For purposes of computing depreciation, real property assets (i.e., buildings, facilities, and structures) do not have salvage values.

**Software**. Application and operating system programs, procedures, rules, and any associated documentation pertaining to the operation of a computer system or program.

**Software Life-Cycle Phases**. The phases through which a software application or information system passes, typically characterized as formulation, implementation, and operation.

**Special Tooling**. Special tooling means jigs, dies, fixtures, molds, patterns, taps, gauges, and all components of these items, including foundations and similar improvements necessary for installing special test equipment, and 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. Special tooling does not include material, special test equipment, real property, equipment, machine tools, or similar capital items.

**Special Test Equipment**. Special test equipment is "either single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special purpose testing in performing a contract. It consists of items or assemblies of equipment, including foundations and similar improvements necessary for installing special test equipment, and standard or general purpose items or components that are interconnected and interdependent so as to become a new functional entity for special testing purposes. Special test equipment does not include material, special tooling, real property, and equipment items used for general purposes or property that, with relatively minor expense, can be made suitable for general purpose use."

**Standby**. Condition where a facility or any other General PP&E asset that is temporarily not in use and appropriate maintenance measures have been taken to maintain its vital or essential operating systems in a state of readiness or availability for future use. Selective life- cycle cost effective facilities maintenance and repair are required. Total time to deactivate and then to reactivate the facility, including the standby period, is expected to be less than 12 months.

**Total Cost**. The total cost of a PP&E asset is the cost to acquire, fabricate, or modify the asset including all costs incurred to bring the asset to a form and location suitable for its intended use (see Section 2.3 if this NPR.

**Useful Life**. The normal operating life in years, in terms of utility to NASA.

**Work- in-Process (WIP)**. WIP consists of the costs (i.e., procured materials, labor, travel, etc.) related to the design and fabrication of an asset to bring it to a form and location for its intended use, until such time as it is considered operational.

# APPENDIX B. Acronyms

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|---|---|
| ASC | Accounting Standards Codification |
| CFO | Chief Financial Officer |
| CHATS | Contractor Held Asset Tracking System |
| CMP | Continuous Monitoring Program |
| DCFO | Deputy Chief Financial Officer |
| DCFO(F) | Deputy Chief Financial Officer (Finance) |
| FAR | Federal Acquisition Regulation |
| FASAB | Federal Accounting Standards Advisory Board |
| FPMR | Federal Property Management Regulations |
| FSC | Federal Supply Classification |
| GSA | General Services Administration |
| IUS | Internal Use Software |
| MdM | Metadata Manager |
| NFS | NASA FAR Supplement |
| OCFO | Office of the Chief Financial Officer |
| OM&S | Operating Materials and Supplies |
| OMB | Office of Management and Budget |
| PP&E | Property, Plant, and Equipment |
| R&D | Research and Development |
| SFAS | Statement of Financial Accounting Standards |
| SFFAS | Statements of Federal Financial Accounting Standards |
| USSGL | United States Standard General Ledger |
| WBS | Work Breakdown Structure |
| WIP | Work-in-Process |

# APPENDIX C. References

C.1 NPD 1200.1, NASA Internal Control

C.2 NPD 1440.6, NASA Records Management

C.3 NPR 4100.1, NASA Supply Support and Material Management

C.4 NPR 4300.1, NASA Personal Property Disposal Procedural Requirements

C.5 NPR 4500.1, NASA **Administration of Property in the Custody of Contractors**

C.6 NPR 7123.1, NASA Systems Engineering Processes and Requirements

C.7 NPR 7150.2, NASA Software Engineering Requirements