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PROPERTY, PLANT AND EQUIPMENT

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CHAPTER 4**PROPERTY, PLANT AND EQUIPMENT**0401 OVERVIEW

This chapter sets forth general principles, standards, policies, and procedures to assure compliance with statutory and regulatory requirements regarding NASA's property, plant and equipment (PP&E). These requirements ensure effective financial control over NASA owned PP&E.

0402 AUTHORITY AND REFERENCES

040201. NASA property accounting policies and procedures have been developed in accordance with:

- A. Federal Property Management Regulations (FPMR)
- B. SFFAS Number 3, "Accounting for Inventory and Related Property"
- C. SFFAS Number 6, "Accounting for Property, Plant and Equipment" (as amended by SFFAS Numbers 14, 16 and 23)
- D. SFFAS Number 8, "Supplementary Stewardship Accounting" (as amended by SFFAS Numbers 16 and 23)
- E. SFFAS Number 10, "Accounting for Internal Use Software"
- F. SFFAS Number 29, "Heritage Assets and Stewardship Land"

0403 ROLES AND RESPONSIBILITIES

040301. Center Chief Financial Officers and Deputy Chief Financial Officers, Finance (DCFO (F)s). Center Chief Financial Officers and Deputy Chief Financial Officers, Finance (DCFO (F)s), are responsible for ensuring that adequate financial controls are in place and financial records and reports accurately reflect the status of PP&E under the cognizance of the Center in accordance with these policies. Their responsibilities also include maintaining close liaison with property management and other personnel concerned with property to provide assurance that values reported are accurate.

040302. DCFO(F)s. DCFO(F)s shall ensure independent control of data in the accounting system; the accounting system data will be reconciled to real property and

equipment records at least quarterly, by the DCFO (F), Real Property Accountable Officer (RPAO) and Supply and Equipment Management Officer (SEMO). Reconciliations shall be documented and workpapers maintained in a file for review by auditors and submission to Headquarters as part of the Quality Assurance Evaluation (QAE) process.

0404 DEFINITIONS

040401. Property, Plant and Equipment. In Statement of Federal Financial Accounting Standards (SFFAS) No. 6, Accounting for Property, Plant and Equipment, the Federal Accounting Standards Advisory Board (FASAB) defines PP&E as follows. "Property, plant and equipment consists of tangible assets, including land, that meets the following criteria:

- A. They have estimated useful lives of 2 years or more,
- B. They are not intended for sale in the ordinary course of operations,
and
- C. They have been acquired or constructed with the intention of being used or being available for use by the entity.

040402. Operating Materials and supplies Held for Use, (Store Stock) (account 1511.0100). Material which is held and repetitively procured, stored and issued on the basis of recurring demand; considered "operating materials and supplies" under SFFAS Number 3, "Accounting for Inventory and Related Property"

040403. Operating Materials and Supplies Held in Reserve for Future Use, (Stand-By Stock) (account 1512.0200). Material held for emergencies; considered "stockpile materials" under SFFAS Number 3.

040404. Operating Materials and Supplies, Program Stock (account 9995.0900). Material acquired by direct purchase or issue from Stores Stock for a specific program and stored until required by the program; may be "operating materials and supplies" under SFFAS Number 3, unless acquired for use in constructing real property or assembling equipment to be used by NASA.

040405. Leased PP&E Subject to Capitalization. PP&E under a lease where the terms of the agreement are essentially equivalent to an installment purchase of PP&E and the criteria outlined below are met (i.e., lease where substantially all the benefits and risk of ownership are transferred to the lessee).

040406. Noncancelable. The term noncancelable means a PP&E lease that is cancelable only by 1) the occurrence of a remote contingency, 2) the permission of the lessor, 3) a new lease by the lessee with same lessor, or 4) payment by the lessee of a

penalty in an amount such that continuation of the lease appears, at inception, reasonably assured.

040407. Bargain Price. Price (less than fair market value) at which NASA has the option to purchase leased PP&E that makes exercise of the option almost certain.

040408. 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.

040409. Minimum Lease Payments. Payments NASA is obligated to make or can be required to make in connection with lease PP&E.

040410. Fair Value. Price for which leased PP&E could be sold in an arm's-length transaction between unrelated parties.

040411. 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.

0405 POLICIES AND PROCEDURES

NASA records all accounting transactions in its integrated accounting system, IEMP/SAP. The general ledger account entries that are generated by each accounting transaction, applicable for NASA accounts can be viewed at:

http://fms.treas.gov/ussgl/tfm_releases/effective05/ussgljune2004.pdf

040501. General Ledger Control. Accounting transactions affecting NASA-owned PP&E, whether NASA or contractor-held, shall be recorded in general ledger asset accounts using fund HSFP01995D in accordance with procedures contained in this chapter. SFFAS' provide for two types of PP&E: general and stewardship. PP&E used in providing goods and services are general. Stewardship PP&E consists of items whose physical properties resemble those of general PP&E, but their nature differs in that their values may be indeterminable or have little meaning, or that allocating the cost of such assets (depreciation) to accounting periods is meaningless. The only type of stewardship PP&E currently owned by NASA are heritage assets, which are unique because of their historical or natural significance, cultural, educational or artistic importance, or significant architectural characteristics.

040502. Depreciation. In accordance with SFFAS Number 6 and the OMB Bulletin on the "Form and Content of Agency Financial Statements," NASA's financial statements reflect depreciation for its capital assets. Information is collected from NASA databases and contractors and analyzed to calculate depreciation, using the straight-line

depreciation method. Depreciation expense is recognized on capitalized general PP&E, except land and land rights of unlimited duration. Depreciation expense for NASA's statements is calculated and accounted for by Headquarters, Office of the CFO, Property Branch.

040503. Capitalization.

A. Capitalization Criteria.

1. NASA will capitalize individual items of PP&E which:
 - a. Have a unit acquisition cost of \$100,000 or more for all assets other than internal use software which has a capitalization threshold of \$1,000,000;
 - b. Have an estimated useful life of two years or more;
 - c. Are not intended for sale in the ordinary course of operations, and;
 - d. Have been acquired or constructed with the intention of being used, or being available for use by the Agency.

2. These criteria apply to all PP&E, including modifications, improvements, etc. for financial accountability. Policy regarding physical accountability for real property (land, buildings, other structures and facilities, and leasehold improvements), equipment, and contractor-held property, including dollar thresholds, is contained in the Real Estate Management Program Implementation Manual (NPR 8800.15_), Policy for Real Property Management (NPD 8800.14), NASA Equipment Management Manual (NPR 4200.1_), and Federal Acquisition Regulation (FAR), Part 45, respectively.

3. If an item, as originally installed, is an aggregate of components which could stand alone (as opposed to parts) and are severable, those components should be individually subjected to the capitalization criteria and only those components which meet the criteria shall be originally capitalized. If an item, as originally installed, is an aggregate of components which could not stand alone and are not severable (see collateral and non-collateral equipment at FMR Volume 6, 040504, those components shall be subjected to the capitalization criteria in aggregate.

B. Values.

1. Capitalized values shall 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, as appropriate for the type of PP&E capitalized:

- fees
- a. Amounts paid to vendors or contractors, including
 - b. Transportation charges to the point of initial
 - c. Handling and storage charges
 - d. Labor and other direct or indirect production costs
(for assets produced or constructed
 - e. Engineering, architectural, and other outside
services for designs, plans, specifications, and surveys
 - f. Acquisition and preparation costs of 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. Costs of extended warranties should be expensed at the
time of payment and not be included in the capitalized value. Where capitalized
equipment is traded in for another piece of capitalized equipment, the capitalized value of
the new asset will be acquisition cost including the amount received for the trade-in.
Capitalized value will be net of discounts taken.

040504. Collateral and Non-Collateral Equipment.

A. Collateral equipment includes building-type equipment, built-in
equipment, and large substantially affixed equipment, normally installed as a part of a
facility project, whether it is original facility construction or modification. Such a project
is considered a single event (see FMR Volume 6, 040503.A.2.).

B. Collateral equipment is not severable and is considered part of the facility project through which it is installed. The cost of collateral equipment which is part of such a project, therefore, shall be included in the value of the project in making the determination as to whether the project meets the capitalization criterion in FMR Volume 6, 040503.A.1. If it is a capital project, the value of the collateral equipment will be included in the capitalized value. The cost of replacements of the collateral equipment or collateral equipment added to an existing facility will be treated as either a capital improvement or maintenance, depending on the circumstances (see FMR Volume 6, 040505.C, 040506, and 040507).

C. 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. Each such item shall be considered separately in relation to the capitalization criteria. Non-collateral equipment which meets the criteria is recorded in account 1750.0100, Government Owned Government Held Other Equipment.

040505. Capital Improvements.

A. Capital improvements are modifications to existing PP&E which cost \$100,000 or more and extend its useful life by two years or more or enlarge or improve its capacity or otherwise upgrade it to serve needs different from, or significantly greater than, those originally intended.

B. Capital Improvements are capitalized. Modifications that do not meet the capitalization criteria are expensed.

C. Where a replacement occurs due to a capital improvement, the accounts should be appropriately adjusted to remove the values of items replaced (where those original values are \$100,000 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 should be estimated and the accounts adjusted accordingly. Removal of an item's recorded cost should be treated as separate accounting transaction from the recording of any additions or replacements. Replacements due to maintenance will be expensed.

D. If an item's acquisition value is below \$100,000 when it is first acquired and it is not, therefore, originally capitalized, it will not be capitalized later, regardless of whether the value of accumulated improvements would, if added, result in a cumulative value of \$100,000 or more. If a single subsequent modification meets the capitalization criteria, that modification only will be capitalized at its acquisition cost. Each modification will be considered a single event.

E. If a reduction in the capitalized value as a result of a modification causes the value of the remainder of the item to drop below \$100,000, the item will be removed from capitalized PP&E.

040506. Maintenance. Expenses incurred to maintain an asset in a useable condition do not meet the criteria for capitalization and are thus charged to expense in the accounting period in which the costs were incurred. SFFAS No. 6 states the following: “For purposes of this standard, maintenance is described as the act of keeping fixed assets in acceptable condition. It includes preventive maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve the asset so that it continues to provide acceptable services and achieves its expected life. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, those originally intended.”

040507. Transfers and Donations.

A. SFFAS No. 6 states the following regarding PP&E transferred from other Federal entities: “The cost of general PP&E transferred from other Federal entities shall be the cost recorded by the transferring entity for the PP&E net of accumulated depreciation or amortization. If the receiving entity cannot reasonably ascertain those amounts, the cost of the PP&E shall be its fair value at the time transferred.

B. PP&E transferred from other entities shall be recorded in NASA’s accounts at the amount of reimbursement to the transferor, if it meets the capitalization criteria. When no reimbursement is made, the amount recorded shall be the acquisition cost less accumulated depreciation recorded by the transferor, if the capitalization criteria are met. If the value cannot be reasonably ascertained when no reimbursement is made, the PP&E shall be recorded at its fair value at the time of transfer, if the fair market value is \$100,000 or more. The date the transferor originally acquired the PP&E should be obtained for calculation of depreciation. If the original date of acquisition cannot be obtained, it shall be estimated in coordination with appropriate Center technical and property officials.

C. PP&E transferred to another NASA Center will be recorded as a decrease to the asset accounts of the transferring Center and an increase to the asset accounts of the receiving Center. The amount recorded will be the capitalized cost as previously maintained in the books of the transferring Center. The transfer of capitalized PP&E to other Federal agencies or outside entities will be recorded as a reduction to the asset accounts for the recorded value of the asset(s). The appropriate reduction in the accumulated depreciation will be made by the Headquarters OCFO.

D. With regards to PP&E acquired by donation, SFFAS No. 6 states the following: “The cost of general PP&E acquired through donation, devise, or judicial process excluding forfeiture shall be the estimated fair value at the time acquired by the government.” PP&E acquired by donation which meets the capitalization criteria will be recorded in the appropriate asset account at estimated fair value at the time acquired by NASA.

040508. Recognition.

A. SFFAS No. 6 states that PP&E shall be recognized when title passes to the acquiring entity or when the PP&E is delivered to the entity or to an agent of the entity. In the case of constructed PP&E, the PP&E shall be recorded as construction work in process until placed in service, or beneficial occupancy occurs at which time the balance shall be transferred to general PP&E.

B. PP&E shall be capitalized when title passes to NASA. Title shall be considered to be passed when a cognizant government official accepts the property for the Agency. In the case of real property constructed for NASA, it shall be recorded in the general ledger as construction work in progress until the property is accepted to be placed in service by NASA, at which time the work in process balance will be capitalized as general PP&E. The cognizant government official accepting such property is normally the Contracting Officer, or that Officer's designated representative, who is responsible for notifying the Real Property Accountable Officer of acceptance.

C. Capitalization of construction work in progress will not be delayed pending final acceptance of residual closeout work such as punch lists. At fiscal year-end, special care shall be taken to ensure that any assets meeting capitalization criteria are capitalized regardless of whether there are costs remaining to be paid. However, all appropriate costs including amounts later paid for vouchers and adjustments to vouchers unpaid at the time of acceptance will subsequently be included in the total cost of the asset since construction of real property is treated as a single event.

040509. Internal Use Software.

A. Internal use software is software developed or obtained for internal use. Per SFFAS No. 10, *Accounting for Internal Use Software*, internal use software and the related costs are defined as follows: "Internal use software" means 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."

B. SFFAS No. 10 goes on to say "This statement establishes accounting standards for the cost of software developed or obtained for internal use. These include the cost of:

1. Software used to operate an entity's programs (e.g., financial and administrative software, including that used for project management
2. Software used to produce the entity's goods and to provide services (e.g., air traffic control and loan servicing)
3. Software that is developed or obtained for internal use and subsequently provided to other Federal entities with or without reimbursement

C. In SFFAS No.10, internal use software's life cycle is classified into three separate phases: (1) preliminary design, (2) development, and (3) post-implementation/operations. Concerning the determination of whether or not to capitalize costs related to internal use software, the FASAB states the following in SFFAS No. 10: "The Board believes that the cost of software acquired or developed for internal use that meets the SFFAS No. 6 criterion for general PP&E should be capitalized. Internal use software is specifically identifiable, can have determinate lives of 2 years or more, is not intended for sale in the ordinary course of operations, and has been acquired or constructed with the intention of being used by the entity."

D. SFFAS No. 10 further discusses internal use software costs to be capitalized:

1. "For internally developed software, capitalized cost should include the full cost (direct and indirect cost) incurred during the software development stage. Such cost should 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 2 years or more

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

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

3. For COTS software, capitalized cost should include the amount paid to the vendor for the software. For contractor-developed software, capitalized cost should 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 should be capitalized.

4. In regard to depreciation, SFFAS 10 states: "Software that is capitalized pursuant to this standard should be amortized in a systematic and rational manner over the estimated useful life of the software. The estimated useful life used for amortization should be consistent with that used for planning the software's acquisition". Based on the above, NASA capitalizes software when such software meets the criteria for general PP&E in NFMR Volume 6, 040503.A. Software is amortized over a five year useful life.

5. SFFAS No. 10 states the following regarding integrated software: “Computer software that is integrated into and necessary to operate general PP&E, rather than perform an application, should be considered part of the PP&E of which it is an integral part and capitalized and depreciated accordingly (e.g., airport radar and computer-operated lathes). The aggregate cost of the hardware and software should be used to determine whether to capitalize or expense the costs.”

6. With regard to costs incurred for enhancements to existing internal use software, the FASAB specifies the following in SFFAS No. 10:

a. “The acquisition cost of enhancements to existing internal use software (and modules thereof) should be capitalized when it is more likely than not that they will result in significant additional capabilities”.

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

c. “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 should be expensed”.

7. Per SFFAS No.10, material expenditures that add capability or functionality are capitalized while expenditures that result in extending useful life are expensed.

8. Per SFFAS No 10, costs incurred after final acceptance testing has been successfully completed should 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. SFFAS No. 10 describes data conversion cost as “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”.

040510. PP&E Not In Use. SFFAS No. 6 established the accounting treatment for PP&E that is no longer in use as follows:

A. General PP&E shall be removed from general PP&E accounts along with associated accumulated depreciation/amortization, if prior to disposal, retirement or removal from service, it no longer provides service in the operations of the entity. This could be either because it has suffered damage, becomes obsolete in advance of expectations, or is identified as excess. It shall be recorded in an appropriate asset account at its expected net realizable value. Any difference in the book value of the

PP&E and its expected net realizable value shall be recognized as a gain or a loss in the period of adjustment. The expected net realizable value shall be adjusted at the end of each accounting period and any further adjustments in value recognized as a gain or a loss. However, no additional depreciation/amortization shall be taken once such assets are removed from general PP&E in anticipation of disposal, retirement, or removal from service.

B. For NASA-held equipment, any capital assets identified as not in use shall be promptly removed from the asset accounts. Inactive real property coded in the NASA Real Property Database (NRPDB) as inactive or not in use by NASA, including Reimbursable, Stand-by, Mothballed, Abandoned, and Demolished will also be promptly removed from the capitalized PP&E accounts. If NASA returns such property to active use, it will be returned to capitalized status at the capitalized value in effect when it was removed, plus the value of any modifications of \$100,000 or more made to return it to active status.

C. Contractors are required to provide data on the values of contractor-held PP&E not in use on the annual NASA Form (NF)-1018, Property in the Custody of Contractors and the monthly property reports submitted in NASA's Contractor Held Asset Tracking System (CHATS). These data are used to remove the value of contractor-held PP&E not in use from NASA's asset accounts

040511. Borrowed or Loaned PP&E. PP&E loaned-in from other organizations is not recorded in NASA's financial records. PP&E loaned-out to other organizations without transfer of title no longer provides service in NASA's operations and shall be removed from the accounts. PP&E borrowed from another NASA center is treated as a transfer between centers. The loaning center shall remove the equipment from their NEMS and general ledger account, while the borrowing center shall record the equipment in their NEMS and general ledger account.

040512. Heritage Assets.

A. SFFAS No. 8, Supplementary Stewardship Reporting, defines heritage assets as follows: "Heritage assets are PP&E that are unique for one or more of the following reasons: historical or natural significance; cultural, educational or artistic (e.g., aesthetic) importance; or significant architectural characteristics."

B. Per SFFAS No. 8, heritage assets are accounted for as follows: "Heritage assets shall be quantified in terms of physical units (for example, number of items in collections or the number of national parks). No asset amount shall be shown on the balance sheet of the Federal financial statements for heritage assets. The costs of acquiring, constructing, improving, reconstructing, or renovating heritage assets shall be considered an expense in the period incurred when determining the net cost of operations. The cost shall include all costs incurred to bring the heritage asset to its current condition and location."

C. Heritage assets used to serve both heritage and government operations functions are considered multi-use heritage assets if the predominant use is in general government operations. SFFAS No. 8 explains the accounting treatment for multi-use heritage assets as follows:

1. “The cost of renovating, improving, or reconstructing operating components of heritage assets used in government operations shall be included in general PP&E. The renovation, improvement, or reconstruction costs to facilitate government operations (for example, installation of communication wiring or redesign of office space) would be capitalized and depreciated over its expected useful life. The cost should not be depreciated over an unrealistically long life”.

2. “Costs of renovating or reconstructing the heritage asset that cannot be associated directly with operations shall be considered heritage asset costs and included as expense in calculating net costs”.

D. Per SFFAS No. 8, heritage assets shall be reported as required supplementary stewardship information accompanying the financial statements of the Federal government and the component units of the Federal government responsible for such assets.

E. When capitalized assets are identified as heritage assets by a NASA Center, their values shall be removed from the asset accounts and a copy of the Journal Voucher for the transaction shall be forwarded to NASA Headquarters, Office of the CFO, Property Branch, for retention as documentation for the preparation of the annual required supplementary stewardship information accompanying the financial statements. Removal of real property and/or personal property from the asset accounts as heritage assets shall be coordinated with the Real Property Accountable Officer and/or Property Accountants, to ensure that the NASA Real Property and Personal Property Inventory also reflects the heritage status of the property.

F. Should a heritage asset be acquired or constructed, the cost shall be recognized by NASA as an expense (Cost of Heritage Assets) in the period incurred. NASA Headquarters, Office of the CFO, Property Branch, should be notified of the existence of the asset by memorandum for retention as documentation for the preparation of the annual required supplementary stewardship information. The Real Property Accountable Officer and/or Property Accountant shall be notified of the acquisition of any real property and/or personal property heritage asset to ensure the necessary data is recorded in the NASA Real Property and Personal Property Inventory.

G. Contractors are required to provide information on heritage assets in their possession in their annual NF 1018 submissions. Those contractors required to report monthly in CHATS should also identify the heritage assets in their possession.

0406 NASA HELD REAL PROPERTY

This section prescribes accounting policies and procedures for NASA-owned and held real property. Appendix A describes the quality assurance procedures related to the NASA held real property.

040601. Financial Controls.

A. Each real property acquisition, addition, improvement, alteration, rehabilitation, or replacement that meets the criteria in NFMR Volume 6, 040503. will be treated as a single event and all costs incurred in relation to that event, regardless of when they are paid, will be recorded in general ledger accounts listed in NFMR Volume 6, 040602.A. The total cost of each single event should be used to determine whether it meets the capitalization criteria in NFMR Volume 6, 040503, regardless of when payment was made. For example, if a building is accepted prior to the end of the fiscal year, meets the capitalization criteria, and is capitalized, any related remaining cost paid in the next fiscal year will be included in the capitalized value. Similarly, 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 criterion are met). The total cost of a project, e.g., a building, will be considered a single event regardless of whether the work was performed on multiple contracts.

B. Real property accounts will be maintained at a summary level to simplify reconciliation with amounts recorded in detailed property records. Accounting records should not duplicate detailed property records maintained by Real Property Accountable Officers in accordance with NPR 8800.15. NASA's capitalization criteria (NFMR Volume 6, 040503.) differ from recording thresholds used for real property management. To insure adequate internal control, the Deputy Chief Financial Officer, Finance (DCFO (F)) shall ensure independent control of the data in the accounting system.

C. Reconciliation's will be performed in accordance with NFMR Volume 6, 0403. Resulting adjustments to either set of records should be made after joint review by both the Real Property Accountable Officer and the DCFO (F).

D. The cost of facilities 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.

040602. Real Property Accounts.

A. Accounts. Capitalized real property will be classified under the following accounts, as appropriate:

1. 1711.0000 Land and Land rights,
2. 1712.0000 Improvements to Land,
3. 1719.0000 Accumulated Depreciation on Improvements to Land,
4. 1730.0100 Buildings, Improvements, and Renovations,
5. 1739.0100 Accumulated Depreciation on Buildings, Improvements, and Renovations,
6. 1740.0100 Other Structures and Facilities,
7. 1749.0100 Accumulated Depreciation on Other Structures and Facilities,
8. 1820.0100 Leasehold Improvements,
9. 1829.01000 Accumulated Amortization on Leasehold Improvements

B. Classification.

1. Land and Land Rights - Includes 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.

2. Improvements to land. - Includes 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 (definite life), and it is 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.

3. Buildings, Improvements, and Renovations. - includes costs of buildings, improvements and renovations to buildings, and fixed equipment required for the operation of a building which 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 and lighting equipment, elevators, central air conditioning systems and built-in safes and vaults.

4. Other Structures and Facilities. - includes costs of acquisitions and improvements of 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.

5. Leasehold Improvements. - includes 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.

6. The cost of NASA-owned buildings and other structures and facilities and related improvements located on land not owned by NASA will be included in Buildings, Improvements, and Renovations (1730.0100) or Other Structures and Facilities (1740.0100) as appropriate.

7. Modifications to Real Property. All modifications that meet the capitalization threshold for real property and 1) extend the useful life of the existing real property, or (2) enlarge, improve, or enhance its capacity will be capitalized and depreciated as follows:

a. Modifications to Real Property that is not fully depreciated will be added to the capitalization value of the existing real property and will be depreciated over the remaining useful life of the original asset.

b. Modifications to Real Property that is fully depreciated will be capitalized individually and depreciated over $\frac{1}{2}$ of the useful life of the original assets useful life. Therefore, modifications to buildings that are fully depreciated will be depreciated over 20 years, which is equal to $\frac{1}{2}$ of the useful life of Buildings – 40 years; and modifications to Other Structures and Facilities that are fully depreciated will be depreciated over 7.5 years, which is equal to $\frac{1}{2}$ of the useful life of Other Structures and Facilities – 15 years.

040603. Construction work in progress. DCFO (F)s are responsible for identifying costs to be capitalized and maintaining financial records for each capital facility project in progress. These records are the source for entries to the general ledger work in progress accounts.

A. Costs will be recorded in accordance with NFMR Volume 7, Cost. Facility projects meeting the requirements for work in progress should be separately

identified in the accounting system through job orders, contract numbers or a work order system.

B. The Contracting Officer or his/or her Technical Representative, in consultation with the Real Property Accountable Officer, is responsible for furnishing information to identify costs applicable to construction work in progress.

C. Procedures should be established to ensure that a collective decision is made by the Center real property and financial management offices, at the outset of work, as to the nature of the work and its proper accounting treatment, i.e., costs of repairs and maintenance are expensed and not included in work in progress (WIP), while costs of items to be capitalized are accumulated in work in progress until the asset is completed. This analysis should extend to individual tasks where necessary, since some work under a particular contract or work order may be of a capital nature and other work may not.

D. Procedures shall ensure that the costs of facilities projects are capitalized in accordance with NFMR Volume 6, 040503.F.2. and the related amounts removed from work in progress. A review of the physical completion status of individual facilities projects shall be conducted with cognizant Center real property officials sufficiently in advance of the end of each quarter of the fiscal year; so that necessary entries can be made to properly reflect their current status.

040604. Property not in use. As required by SFFAS Number 6, real property not in use by NASA will be removed from the asset accounts NFMR Volume 6, 04503.H. The Center Real Property Accountable Officer, in consultation with the Center Facility Utilization Officer or Facility Utilization Board, shall notify the DCFO (F) when real property for which the Center is accountable (including contractor-held real property) is no longer being used for NASA purposes, including property becoming reclassified as Reimbursable, Stand-by, Mothballed, Abandoned, or Demolished. Based upon this notice, the DCFO (F) shall remove the capitalized cost of the real property from the accounting records. The Real Property Accountable Officer shall also notify the DCFO (F) if such property is returned to active NASA use so it can be returned to capitalized status in the accounting records.

040605. Disposal. When real property has been declared excess (excluding property in foreign countries) and accountability transferred to another Federal agency or title has been transferred to a non-governmental entity, reimbursements related to the transfer will be deposited to Special Fund Account 805005.2 (Land and Water Conservation Fund), through September 30, 2015. Proceeds from sales of surplus real property in foreign countries will be deposited to account 803220, General Fund Proprietary Receipts, Not Otherwise Classified.

0407 NASA-OWNED AND HELD MATERIALS

This section prescribes accounting policies and procedures for NASA-owned and held materials. Appendix A describes the quality assurance procedures related to the NASA-owned and held materials.

040701. Recording Materials.

A. Materials will be recorded at acquisition cost using one of the valuation methods (i.e., specified in SFFAS No. 3 which include first-in, first-out (FIFO); weighted average; moving average cost flow or another valuation method which approximates one of those methods. Acquisition costs shall include all appropriate purchase and production costs incurred to bring the items to their current condition and location. Cash discounts, when taken, are credited to the appropriate cost account 6100.9997. Donated materials shall be valued at their fair value at the time of donation.

B. Materials acquired through exchange of nonmonetary assets (e.g., barter) shall be valued at the fair value of the asset received at the time of exchange. Each replenishment of stock through procurement or transfer will require a redetermination of the stock unit price when the weighted moving average is used.

040702. Timing of Recording. General ledger accounts should be updated on a monthly basis. Adjustments to the general ledger based on reconciliation's with the materials records should be recorded to coincide with month-end closeouts and the annual reporting of materials.

040703. Financial Controls.

A. Operating Materials and Supplies, Government-Owned/Held accounts will be maintained in each Center's general ledger for recording of materials. Entries to the general ledger will be made on the basis of data provided by the Center Supply and Equipment Management Officer (SEMO). The Operating Materials and Supplies, Government-Owned/Held accounts will be supported by subsidiary ledgers for each type of account.

B. Entries will be recorded in general ledger accounts:

1. 1511.0100, Operating Materials and Supplies Held For Use, Store Stock, Government-Owned/Held,

3. 1512.0100, Operating Materials and Supplies Held in Reserve for Future Use, Stand-by Stock, Government- Owned/Held

2. 9995.0900, Operating Materials and Supplies, Program Stock, Government-Owned/Held. These are materials acquired by direct purchase or issued from Store Stock for a specific program and stored until required by the program;

may be “operating materials and supplies” under SFFAS Number 3, unless acquired for use in constructing real property or assembling equipment to be used by NASA.

C. Detailed records maintained by the Center SEMO and the general ledger maintained by the DCFO (F) will be reconciled annually.

040704. Accounts and Federal Supply Classification (FSC) Groups.
The total of the subsidiary accounts must equal the general ledger control account 1511.0100, 1512.0100, or 9995.0900. New accounts shall not be established unless approved by the Director, Financial Management Directorate, and Director, Logistics Management Office, NASA Headquarters. Each subsidiary account is related to specific Federal Supply Classification (FSC) groups as shown in, Object Class 26XX, Supplies and Materials.

040705. Acquisitions, Issues, Adjustments, and Returns.

A. Acquisition of Material Stocks. Additions to stock acquired by purchase will be recorded in general ledger accounts 1511.0100, 1512.0100, or 9995.0900, in accordance with FMR Volume 6, 04801 and coded in the Center accounting system with the appropriate 26XX object class. Additions to stock by transfer from other NASA Centers or Federal agencies will be recorded in general ledger accounts 1511.0100, 1512.0100, or 9995.0900.

B. Issues. Items requisitioned from stock will be costed based upon data supplied by the Center SEMO.

C. Adjustments.

1. Changes in material balances caused by or resulting from physical differences, errors, losses, damage and destruction, etc., will be recorded in accounts 1511.0100, 1512.0100, or 9995.0900 with offsetting entries to account 9995.0901 when Program Stock, or 7210.0100, 7190.0000 or 7290.0000 as appropriate when Stores Stock or Stand-by Stock. Headquarters, Office of the CFO, Property Branch may reverse this entry and process these losses as a debit to 6790.0000 if deemed immaterial. If the entry is reversed, the Center shall be notified. Adjustments to Stores Stock and Stand-by Stock should be reflected in appropriated fund accounts as an expense or a refund, as appropriate.

2. Financial records will be adjusted based on data provided by the Center SEMO, to reflect adjustments to the property records approved by designated officials in accordance with the NASA Materials Inventory Management Manual (NPR 4100.1_).

D. Return to Stock. Items returned to stock for credit or without credit will be recorded in accounts 1511.0100, 1512.0100, or 9995.0900 at the lower of original or current issue price.

1. The return of items issued from Stores or Stand-by Stock will be recorded as a debit to 1511.0100, or 1512.0100 and a credit to 6100.8600 when a refund is given to the returning activity's appropriated fund accounts.

2. The return of items issued from Program Stock will be recorded as a debit to 9995.0900 with a credit to 9995.0901; no refund to the returning activity's appropriated funds will be recorded.

3. Credits to appropriated fund accounts for Stores or Stand-by Stock returns will not be processed when the initial activity charged cannot be determined. Returns will be recorded at a zero unit cost and the weighted moving average recalculated.

040706. Disposal.

A. Exchange/Sale. When items are traded in, the value of the item traded in will be removed from the 1511.0100, 1512.0100, or 9995.0900 accounts with an offset to account 6100.8600, or 9995.0901 as appropriate. Items purchased will be recorded in the 1511.0100, 1512.0100, or 9995.0900 accounts in accordance with NFMR Volume 6, 040807.A. at acquisition cost, including the amount received for the trade-in. Additional guidance is provided in Volume 6, 041002

B. Disposal. Disposal of materials will be recorded as a reduction to the appropriate accounts with offsetting entries to Account 9995.0901 for Program Stock or 7210.0100 or 7290.0000 as appropriate for Stores and Stand-by Stock. NASA Headquarters, Office of the CFO, Property Branch may reverse this entry and process these losses as a debit to 6790.0000 if deemed immaterial. If the entry is reversed, the Center shall be notified.

0408 NASA-OWNED AND HELD EQUIPMENT

This section prescribes accounting policies and procedures for NASA-owned and held equipment. Appendix A describes the quality assurance procedures related to the NASA-owned and held equipment.

040801. Financial Controls.

A. Capitalized equipment costs will be recorded in general ledger control account 1750.0100, Government Owned Government Held Other Equipment.

B. The purchase of capitalized equipment will be recorded with the appropriate 31XX object class codes in the Center's accounts (FMM 9100)

C. Financial management records will not duplicate detailed property records maintained in the NASA Equipment Management System (NEMS) by the Center SEMO in accordance with NPR 4200.1. However, supporting documentation should be provided which includes property description, property number, FSC, WBS, original acquisition date, original acquisition cost, placed in service date, and contract number.

D. NASA's capitalization criteria (NFMR Volume 6, 040503) differ from thresholds used for equipment management. Reconciliation's will be performed in accordance with (NFMR Volume 6, 040302).

E. The Center Chief Financial Officer (CFO) and Deputy CFO of Finance (DCFO(F)) are responsible for capturing and capitalizing the actual costs of NASA-Owned and Held Equipment in the accounting system for financial reporting purposes. Specifically, property accountants post the journal vouchers relating to equipment at the Centers. The Property Accountants also prepare and submit monthly reports to the NASA Headquarters, Office of the CFO, Property Branch. As part of the monthly reporting process, the property accountants reconcile transactions in the Logistics System with those recorded in the general ledger for the equipment account(s). The NASA Headquarters, Office of the CFO Property Branch validates totals for equipment on Center spreadsheets to the general ledger and calculates and reports depreciation expense for equipment. The NASA Headquarters Office of the CFO Financial Management Directorate posts depreciation expense for equipment in the accounting system and prepares the financial statements and related footnotes.

040802. Exchange/Sale.

A. Items may be sold and the proceeds applied in whole or partial payment for similar item replacements. FPMR 101-46.302 states that proceeds from sales of equipment disposed of in accordance with the exchange/sale authority in FPMR Part 101-46 must be accounted for in accordance with the General Accounting Office Policy and Procedures Manual for Guidance of Federal Agencies, Title 7, Fiscal Procedures, Section 5.5D. The guidance provides that all proceeds from the sale of equipment and materials will be available during the fiscal year in which the property was sold and for one fiscal year thereafter for obligation for the purchase of replacement property.

B. The disposition of funds collected from the sale of equipment shall be as follows:

1. If it is determined at time of collection that the funds will not be used to purchase a replacement item, the funds shall be deposited to account 803220, General Fund Proprietary Receipts, Not Otherwise Classified.

2. If it is determined at time of collection that the funds will be used to fund the replaced item, the funds shall be deposited in 80F3875 (Budget Clearing Account) and reimbursable procedures will be used.

C. In this case, a reimbursable agreement will be established for the amount of the funds collected from sale of the equipment. The agreement funds a portion of the replacement purchase up to the amount collected from the sale of the old equipment. After payment is made for the equipment, the collection deposited in account 80F3875 is transferred for reimbursement to the procuring appropriation. The portion of the deposit account applicable to replacement purchases should be reviewed on a quarterly basis by the DCFO(F) office; funds exceeding time parameters in NFMR Volume 6, 041002.A, or otherwise identified as not being used for replacement purchases shall be transferred to account 803220, General Fund Proprietary Receipts, Not Otherwise Classified.

0409 NASA PROPERTY IN THE CUSTODY OF CONTRACTORS AND UNDER GRANTS AND COOPERATIVE AGREEMENTS

040901. Purpose. This section sets forth accounting policies and procedures for NASA property, plant and equipment (PP&E) and Operating Materials and Supplies (OMAS) in the custody of contractors as well as PP&E and OMAS acquired or furnished under NASA grants and cooperative agreements with educational institutions and nonprofit organizations and describes how data from contractors' records are reported and entered in NASA's accounts. NASA-owned, contractor-held PP&E and OMAS used in the performance of a contract may be NASA-furnished or contractor-acquired. The instructions below apply only to contractors except where they are specifically identified as applicable to grants and non-commercial cooperative agreements, i.e., "recipients. Appendix A describes the quality assurance procedures related to the NASA PP&E in the custody of contractors and under grants and cooperative agreements.

040902. Authority and References. This policy is consistent with the requirements established in:

- A. SFFAS No. 3, Accounting for Inventory and Related Property
- B. SFFAS No. 6, Accounting for Property, Plant and Equipment
- C. NASA FAR Supplement Part 1845 Government Property; Subpart 1845.7101-1 Property Classification
- D. NASA Procurement Information Circular 04-12, Contract Modifications for Monthly Property Financial Reporting
- E. NASA Procurement Information Circular 03-14, Contract Modifications for Interim Property Information

1. Federal Acquisition Regulation (FAR), part 45, subpart 1845.71 of the NASA FAR Supplement (NFS) provides a definition of property, plant and equipment. In addition, this section also details the contractor's reporting requirements for property in their possession, including those associated with cooperative agreements with commercial firms.

2. Property Management standards for educational institutions and nonprofit organizations are set forth in OMB Circular A-110 and the NASA Grant and Cooperative Agreement Handbook, NPR 5800.1 (14 CFR 1260 and 1274). Other information is available on the internet at http://ifmp.nasa.gov/codeb/library/contractor_info.htm.

040903. Accounting Authoritative Guidance.

A. Operating Materials and Supplies.

1. SFFAS No. 3 defines operating materials and supplies as follows: "operating materials and supplies consist of tangible personal property to be consumed in normal operations. The cost of goods shall be removed from operating materials and supplies (i.e., the asset account) and reported as an operating expense in the period they are issued to an end user for consumption in normal operations. Excluded are (1) goods that have been acquired for use in constructing real property or in assembling equipment to be used by the entity, (2) stockpile materials, (3) goods held under price stabilization programs, (4) foreclosed property, and (5) seized and forfeited property".

B. Property, Plant, and Equipment.

1. SFFAS No. 6 "Accounting for Property, Plant, and Equipment", defines asset as follows:

a. Property, plant, and Equipment consist of tangible assets, including land that meets the following criteria:

b. They have an estimated useful life of two years or more;

c. They are not intended for sale in the ordinary course of operations;

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

2. SFFAS No 6 Paragraph 26 states, "Cost shall include all costs incurred to bring the PP&E to a form and location suitable for its intended use." For example, the cost of acquiring property, plant, and equipment may include:

- a. Amounts paid to vendors
- b. Transportation charges to the point of initial use
- c. Handling and storage costs
- d. Labor and other direct or indirect productions costs
(for asset produced or constructed)
- e. Engineering, architectural, and other outside services for designs, plans, specification, and surveys
- f. An appropriate share of the cost of the equipment and facilities used in construction work (the amount of overhead charged to NASA by their contractors includes these costs)
- g. Fixed equipment and related installation costs required for activities in a building or facility (the amount of overhead charged to NASA by their contractors includes these costs)
- h. Acquisitions and preparation cost of buildings and other facilities;
- i. Direct costs of inspection, supervision, and administration of construction contracts and construction work;
- j. Legal and recording fees and damage claims; and
- k. Material amounts of interest costs paid.

C. Depreciation.

1. SFFAS No. 6, Paragraph 35 states, "Depreciation expense is calculated through 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 shall be recognized on all general PP&E, except land and land rights of unlimited duration."
2. Depreciation for all NASA assets is calculated at NASA Headquarters.
3. Most Federal government assets are not typically scheduled to be disposed of at the end of their lives for any (or any significant) salvage or residual value.

D. Improvements and Extension of Useful Life. SFFAS No. 6, Paragraph 37 provides guidance on how to account for improvements, repairs, and maintenance cost. Costs which either extend the useful life of existing PP&E, or enlarge or improve its capacity shall be capitalized and depreciated or amortized over the remaining useful life of the associated general PP&E.

040904. Responsibilities.

A. NASA is responsible for having an adequate internal control system in place for validating the accuracy, reliability, existence and completeness of data received from contractors to ensure it is accurate and reliable for financial statement reporting.

B. NASA Contracting Officer or Delegate

1. The contracting officer is responsible for including property reporting requirements in each contract that involves contractor held property and enforcing these requirements. These instructions will include the reporting period (monthly or annually) and the due dates of the reports.

2. Ultimately, administration of all contracting functions is the responsibility of the contracting officer. However property administration should be delegated to the cognizant Property Administrator. The Contracting Officer or delegate is responsible for evaluating a contractor's management and control of government property and determining whether the contractor is effectively complying with contract provisions.

3. The role of Contracting Officer or delegate includes evaluating the 15 functions in the Property System Analysis (PSA), as outlined in the DoD Manual for the Performance of Contract Property Administration, DoD 4161.2-M.

4. The Contracting Officer or delegate is also responsible for reviewing, indicating system status and signing the NF 1018 submitted annually by all NASA contractors.

C. NASA Contractors.

1. Contractors are responsible for ensuring they accurately and effectively maintain and report all NASA-owned, contractor-held property to NASA Headquarters on a timely basis, in accordance with monthly and annual reporting requirements.

2. Contractors shall retain documentation that supports the property reported on the NF 1018 in accordance with FAR subpart 4.7, Contractor Records Retention. The monthly CHATS reports and the annual NF 1018 provide critical information for NASA financial statements and property management.

3. Contractors holding for the highest dollar value of NASA-owned, contractor-held property, as determined by NASA, are required to report monthly in NASA's CHATS to NASA Headquarters, Office of the CFO, Property Branch, reporting all NASA-owned, contractor-held property to assist NASA in complying with OMB Circular A-136 Financial Reporting Requirements. All other contractors are required to submit the NF 1018 on an annual basis.

4. Contractors shall submit to the Center DCFO documentation that supports the transfer of property with value of one million dollars or more.

D. NASA Center CFO and DCFO(F).

1. Centers are responsible for review and validation of all NF 1018 property reports received.

2. Centers will review the Contractor Monthly Submissions in CHATS and perform their validation checklist prior to submittal of month end journal vouchers to HQ within 5 business days after the close of CHATS.

E. NASA Headquarters, Office of the CFO, Property Branch.

1. The NASA Headquarters, Office of the CFO, Property Branch, along with the assistance of the Centers, is responsible for capturing all contractor-held property costs from the contractor's submissions and appropriately classifying data for financial reporting purposes. These contractors must submit these reports for month end by the 21st of the following month. The NASA Headquarters, Office of the CFO, Property Branch with the assistance of the Centers, is responsible for reviewing data received to reasonably assure that PP&E and OMAS are presented fairly in NASA's financial statements.

2. To ensure data submitted by the contractors appears reasonable and complete, the NASA Headquarters, Office of the CFO, Property Branch must validate all monthly reports received.

3. To ensure data submitted by the Centers appears reasonable and complete, the NASA Headquarters, Office of the CFO, Property Branch must validate all journal vouchers and supporting documentation received. Headquarters then provides approval to the Center Property Accountant to post the journal voucher in SAP.

040905 Definitions

A. Acquisition Cost. Acquisition cost is the original purchase, construction or development cost, and includes all costs incurred to bring the property to a form and location suitable for its intended use, net of (less) any purchase discounts.

B. Contractor-Held Property. Contractor-Held Property is NASA-owned property in the possession of a contractor, and includes NASA furnished property, contractor-acquired property or contractor-fabricated property.

C. PP&E. Property, Plant and Equipment is composed of tangible assets that

1. Have an estimated useful life of 2 or more years;
2. Not intended for sale in the ordinary course of business;
3. Intended to be used or available for use by the entity.

D. Operating Materials and Supplies (OMAS). Operating Materials and Supplies is composed of tangible personal property to be consumed in normal business operations.

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.

F. Fabrication. Fabrication is the process of building or constructing a part or end item (i.e., satellites, space shuttle, space station, etc.). Multiple materials and supplies can be used and incorporated in a fabrication.

G. Work In Process (WIP). Work-In- Process consists of the full costs, direct and indirect, (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.

H. Special Tooling Equipment. Equipment and manufacturing aids (and their components and replacements) of such a specialized nature, that, without substantial modification or alteration, their use is limited to development or production of particular supplies or parts, or performance of particular services. Examples include specialized jigs, dies, fixtures, molds, patterns, taps and gauges.

I. Special Test Equipment. Equipment used to accomplish special purpose testing in performing a contract, fabrication, or maintenance of items or assemblies of equipments.

J. Agency-Peculiar Equipment. Completed items, systems and subsystems, spare parts and components unique to NASA aeronautical and space

programs. Examples include research aircraft, reusable space vehicles, ground support equipment, prototypes, and mock-ups.

K. NASA Form (NF) 1018. The NF 1018 is the official document for contractor reporting of all NASA PP&E in their possession. NASA's financial statement account balances are updated based upon NF 1018 data for the non-CHATS reportable contractors. All contractors who have NASA property in their custody are required to submit an NF 1018 annually. The NF 1018 reports data as of September 30 and is due on October 15 for the non-CHATS reportable contractors. The NF 1018 is due on November 30 for the contractors who report monthly in CHATS. Negative reports are required. This reporting shall be completed in accordance with the NASA FAR Supplement (NSF) Subpart 1845.7101 and any supplemental guidance provided by the Contracting Officer.

L. CHATS Report – Designated contractors (those holding the highest dollar value of NASA-owned, contractor-held PP&E) are required to report monthly on all NASA-owned property, in U.S. dollars, including real and personal property, special test equipment, special tooling, and agency peculiar property, greater than or equal to \$100,000, as well as materials and contract work in process of any value, in their possession (including subcontractors). This monthly report provides detailed transaction financial data on Government-furnished and contractor acquired property to which NASA has title. Negative reports are required. The reports shall be electronically submitted using NASA's Contractor-Held Asset Tracking System to NASA Headquarters, Office of the CFO, Property Branch.

040906. Policies and Procedures.

A. Classification of Assets – PP&E vs. OMAS.

1. NASA shall classify all tangible personal property to be consumed in normal business operations as OMAS. Materials, which are consumable, are reported as operating materials and supplies and expensed as consumed. Consumables would include items less than \$100,000 or items greater than \$100,000 that do not have an estimated useful life of 2 years or more. However, materials, including spare parts, which meet the capitalization criteria (i.e., cost is \$100,000 or more and useful life is 2 years or more) are classified as re-usable and should be reported as PP&E, capitalized, and depreciated over the remaining useful life of the end asset they support (i.e., shuttle, space station, other programs, etc.).

2. When OMAS is issued to an end user for consumption in normal operations, the recorded value shall be removed from OMAS (i.e., the asset account) and reported as an operating expense in the same reporting period they were issued. Tangible personal property for use in constructing real property or assembling equipment, with a useful life of two years or more, and with a value of \$100,000 or more should not be reported as OMAS.

3. If the property will be consumed or otherwise lose its individual identity during the construction or fabrication of an item, the property will be recorded as part of the item's WIP. If the property will retain its separate identity following construction or assembly of the associated item, it will be recorded as PP&E upon receipt.

4. NASA shall classify all tangible personal property as PP&E that (1) has an estimated useful life of 2 or more years, (2) is not intended for sale in the ordinary course of business, (3) has a value equal to or greater than \$100,000, and (4) is intended to be used or available for use by the entity. NASA capitalizes internal use software when the software projects meet the criteria for internal use software as defined in SFFAS No. 10 (see Section 0412 Internal Use Software for criteria) and it is depreciated over a five year useful life.

B. Valuation of Assets.

1. Work- in-Process.

a. NASA shall classify all tangible personal property under construction (i.e., not complete) as WIP. All costs (i.e., direct and indirect) are accumulated in a WIP account relating to the acquisition of constructed PP&E. All costs incurred to acquire and bring the PP&E to a form and location suitable for its intended use should be accumulated in the WIP account. See the "unit acquisition cost" methodology discussion in paragraph 040906.B.2 below.

b. When an individual PP&E item is completed the total cost of the item will be transferred from the WIP account to the general PP&E account. Piece parts that are completed prior to the end asset being complete will remain in WIP until the end asset is placed in service, or beneficial occupancy occurs, at which time all piece parts will be transferred out of WIP to general PP&E. The individual end item should be recorded at "unit acquisition cost".

2. Property Plant & Equipment. NASA shall record all PP&E at "unit acquisition cost" as defined by the *NASA FAR Supplement Part 1845 Government Property; Subpart 1845.7101-3*, which includes all costs incurred to acquire and bring the PP&E to a form and location suitable for its intended use. These costs include, but are not limited to, any amounts paid to vendors that represent the cost of delivered and accepted end items, transportation charges, handling and storage costs, etc. These costing principles apply to all end items, such as items acquired on a fixed price basis, including fixed price commercial, off-the shelf items. Where contractors earn fees related to building or acquiring NASA PP&E, the acquisition cost to NASA of such PP&E includes a pro-rata portion of fees earned.

3. Modifications. NASA shall capitalize and depreciate all modifications that meet the capitalization threshold for tangible personal property and (1) extend the useful life of existing PP&E, or (2) enlarge, improve, or enhance its capacity.

a. All modifications that meet the capitalization criteria will be linked to the end item (parent-child relationship) in the contractor's property accounting system. Modifications that meet the capitalization threshold of \$100,000, but do not extend the useful life of the asset, or expand the capability of the end-item should be considered repairs and maintenance and expensed as costs are incurred. This could include an overhaul, rehab or refurbishment.

b. Modifications under the capitalization threshold of \$100,000 that do not significantly extend the useful life of the asset or expand the capability of the end-item should be considered repairs and maintenance and expensed as costs are incurred.

4. Depreciation. NASA will capitalize and depreciate PP&E with a unit cost of \$100,000 or more and an estimated useful life of two years or more using the straight-line method. Useful lives are 40 years for buildings; 15 years for other structures and facilities; 15 years for leasehold improvements, 15 years for Agency-peculiar equipment, 7 years for special test equipment and tooling; and 5 to 20 years for other equipment depending on its nature. For example, space vehicles have a useful life of 15 years and would be classified under other equipment. Useful lives for the Space Shuttle fleet are through 2010.

C. System Controls. In accordance with the FAR, contractors' records are the official PP&E records of the government. NASA contractor monthly property reports and NF 1018, "NASA Property in the Custody of Contractors", are the official documents for contractor reporting of NASA's PP&E in their possession. Annually, a listing ("Inventory Report") of equipment held under a grant or cooperative agreement will be submitted to the Center financial management office. NASA's financial statement account balances are updated based upon monthly property reports, NF 1018 data, and Inventory Reports. NASA does not prescribe a system of property accounting for contractors; any system employed by a contractor, however, requires written approval by the cognizant property administrator (FAR Part 45). This process assures adequate contractor control, accuracy, and consistency in reported information.

D. Review of NF 1018s.

1. The Center IPO must maintain files of contractor property systems analyses for all contractors holding NASA property.

2. The Center CFO, through the DCFO (F), is responsible for ensuring that NF 1018s and Inventory Reports are submitted by contractors and recipients materially accurate. Such steps may include reviews of systems that generate NF 1018 data, interviews, questionnaires, meetings and training. The DCFO (F) shall ensure that a financial management office staff member independently reviews the Center IPO's file of contractor property system analyses, sufficiently in advance of fiscal year-end, to identify

and work with contractors to correct any reported system deficiencies which might affect the timeliness or accuracy of NF 1018s or Inventory Reports.

3. Where contractors earn fees related to building or acquiring NASA PP&E, the acquisition cost to NASA of such PP&E includes a pro-rata portion of fees earned. The NF 1018 reporting instructions in the NFS require inclusion of appropriate fees in reported asset values. Where the reported values for Special Tooling, Special Test Equipment, Agency-Peculiar Property or Contract Work in Process is \$10,000,000 or more, the DCFO (F) shall verify that these NF 1018 values include fees. If they do not, the contractor shall be instructed to submit a corrected NF 1018. If necessary, the DCFO (F) shall calculate the pro-rata fee and submit a Journal Voucher and supporting documentation, with other NF 1018 data, to NASA Headquarters, Office of the CFO, Financial Management Directorate (see NFMR, Volume 6, 041106.G. below). NF 1018s and Inventory Reports are due from contractors and recipients on October 15. While negative responses are required for NF1018s, negative Inventory Reports for grants and cooperative agreements are not required. The DCFO (F) should work with the Contracting Officer (CO) to withhold payment from contractors who fail to submit timely NF 1018s in accordance with NFS 1852.245-73(c).

E. NF 1018 and Inventory Report Validation. The Center DCFO (F) shall validate NF 1018s and Inventory Reports in the NF 1018 Electronic Submission System (NESS) using the checklist contained in NFMR, Volume 6, Chapter 4, Appendix B. Monthly contractor property reports are validated at NASA Headquarters, Office of the CFO, Property Branch.

F. NASA Records. The NASA general ledger control accounts for all NASA-owned, contractor-held PP&E shall be maintained by the financial management office of the cognizant contracting Center, whether or not property administration is delegated to a different NASA Center, the Department of Defense or another government agency.

G. Reporting NF 1018 and Inventory Report Data to Headquarters.

1. Since the NF 1018 and Inventory Reports, which report data as of September 30, are not due from contractors until October 15, general ledger balances will be included in general ledger after period 12 (13 – 16). Contra entries must be reconciled in accordance with instructions from NASA Headquarters, Office of the CFO, Financial Management Directorate. Estimates will be used for the month of September. These estimates will be reversed and actuals will be recorded in October. Contractors should correct errors in previously reported ending balances by using the Balance Beginning of Period, Adjustment column (a.(2)) and explain the error in the Comments section on the NF 1018. Where a contractor reports an error in a “\$100,000 & Over” category, the explanation given will be reviewed and discussed with the contractor, if necessary, to determine if an error was made to previously reported data which would affect the general ledger. If the DCFO (F) agrees an error was made and the balances reported in the general ledger were impacted, the Center will identify and report the

necessary corrections as prior period adjustments to NASA Headquarters, Office of the CFO, Property Branch.

2. Where a contractor identifies NASA PP&E in its custody on the NF 1018 as heritage assets, the contractor's rationale will be reviewed and discussed as necessary to confirm or reject the recommendation. If the DCFO (F) agrees with the contractor's recommendation, the items will be removed from NASA's asset accounts and individual identification of those assets ("name," type of PP&E, rationale, etc.) will be provided to NASA Headquarters, Office of the CFO, Property Branch with the NF 1018 information so that these assets may be included in the required supplementary stewardship information on heritage assets accompanying the annual financial statements. If the DCFO (F) concludes that the items are not heritage assets, the contractor will be instructed not to identify the items as such on future NF 1018s.

3. Where a contractor identifies NASA PP&E in its custody on the NF 1018 as being in the plant clearance process, the items will be removed from NASA's asset accounts.

H. Corrections to NF 1018s. Contractors are required to contact the Center Industrial Property Officer (IPO) when a NF 1018 has been submitted and an error is subsequently discovered. The IPO and DCFO (F) shall jointly determine the appropriate corrective action based on the specifics and materiality of each error. Any questions should be directed to the Office of the CFO.

I. Review of Monthly CHATS Reports.

1. The Center CFO, through the DCFO (F), is responsible for ensuring that CHATS reports submitted by Contractors are materially accurate. Such steps include correspondence, meetings, and training. The DCFO (F) shall ensure that a financial management office staff member review contractors submissions to identify and resolve any outstanding reporting issues which might affect the year-end financial statements.

2. Where contractors earn fees related to building or acquiring NASA PP&E, the acquisition cost to NASA of such PP&E includes a pro-rata portion of fees earned. The CHATS reporting instructions require inclusion of appropriate fees in reported asset values. When the reported values for Equipment, Special Tooling, Special Test Equipment, Agency Peculiar Property is \$100,000 or more or Contract Work in Process of any value, the DCFO (F) shall verify that the CHATS Property values include fees. If they do not include the fees, the contractor shall be instructed to submit a corrected CHATS report.

J. CHATS Report Validation. The Center DCFO (F) shall validate monthly CHATS reports using the Checklist contained in NFMR Volume 6, Chapter 4, Appendix C.

K. NASA Records. The NASA general ledger accounts for all NASA-Owned, contractor-held PP&E shall be maintained by the financial management office of the cognizant contracting Center, whether or not property administration is delegated to a different NASA Center, the Department of Defense or another government agency.

L. Reporting CHATS Report data to Headquarters.

1. Monthly, any contractors having, or anticipating to have, property in excess of \$10 million should electronically submit property data through use of CHATS. Contractors shall submit detailed Addition, Deletion, Transfer (To/From Other Government Agencies, NASA Centers, Contractors), and Adjustment transactions for all real and personal property in their possession including subcontractors with values greater than or equal to \$100,000, as well as materials and contract work in process of any value.

2. Since the CHATS reports, which report data as of September 30, are not due from contractors until October 21st, general ledger balances will be included in general ledger after period 12 (13-16). Contra entries must be reconciled in accordance with instructions from NASA Headquarters, Office of the CFO, Financial Management Directorate. Estimates are prepared and recorded in the general ledger by OCFO HQ Property Branch for the month of September. In October, the OCFO HQ Property Branch reverses the estimates and the Center Property Accountants record the actuals based upon contractor submissions.

3. PP&E that is considered obsolete, in the plant clearance cycle, or heritage assets must be separately identified on the CHATS report. These items are considered inactive property and their balances will be removed from NASA's asset accounts. Obsolete property is property for which there are no current plans for use in their intended purpose. Examples of obsolete property are items in configurations which are no longer required or used by NASA or items held for engineering evaluation purposes only. NASA may have approved the retention of these items for programmatic reasons even though they have no current plans to be used.

M. Correction to the CHATS Reports. Contractors should correct errors in previously reported ending balances by using an "Adjustment" transaction, and thoroughly explain the error in the Comments section of CHATS. For all Adjustments reported over \$10 million, the contractors must provide a "white paper" which adequately addresses the following:

1. The fiscal year the data was first reported incorrectly, if applicable
2. The reason for the occurrence of the error
3. How the error was discovered

4. The contractor's plan of action to ensure that this error will not occur again

N. Disposal. NASA owned PP&E in the custody of contractors determined to be surplus to the needs of NASA and other governmental agencies, may be disposed of in accordance with the provision of the FAR and NFS. The proceeds of any such sale will be credited to miscellaneous receipts, unless the contract or any subcontract there under authorizes credit of the proceeds to the cost or price of the work (40 U.S.C. 485(a)).

040907. Reporting Requirements.

A. NASA must account for and report assets in accordance with 31 U.S.C. 3512 and 31 U.S.C. 3515, Federal Accounting Standards, and Office of Management and Budget (OMB) instructions. In addition, NASA must prepare and submit unaudited financial statements, including contractor-held property on a quarterly as required by OMB Circular No. A-136, *Financial Reporting Requirements*.

B. Contractors are required to maintain NASA's official records for its assets in their possession: therefore, NASA must obtain data from those records to meet these requirements. NASA receives annual data from all contractors and monthly data from its designated contractors holding the highest dollar value of NASA property as determined by NASA. Changes in Federal Accounting Standards and OMB reporting requirements may occur from year to year, requiring changes to the requirements for contractor reporting.

0410 LEASED PROPERTY

This section prescribes accounting policies and procedures for property, plant, and equipment (PP&E) leased by NASA and subject to capitalization. Appendix A describes the quality assurance procedures related to the Leased Property.

041001. Definitions.

A. Leased PP&E Subject to Capitalization. PP&E under a lease where the terms of the agreement are essentially equivalent to an installment purchase of PP&E and the criteria outlined in NFMR, Volume 6, Chapter 4.09.3 are met (i.e., lease where substantially all the benefits and risk of ownership are transferred to NASA (the lessee)). Capitalized leases should be fully funded. In accordance with OMB Circular A-11, "Preparing and Submitting Budget Estimates, Section 33 and Appendix B", 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.

B. Noncancelable. PP&E lease cancelable 1) only upon occurrence of a remote contingency, 2) only with the permission of the lessor, 3) only if the lessee enters into a new lease with the same lessor, or 4) only if the lessee incurs a penalty in such amount that continuation of the lease appears, at inception, reasonably assured.

C. 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.

D. 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.

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

F. Fair Value. Price for which leased PP&E could be sold in an arm's-length transaction between unrelated parties.

G. 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.

041002. Policies and Procedures - Capitalization Criteria.

A. Leased PP&E is subject to capitalization if its fair value is \$100,000 or more, its useful life is 2 years or more, and the terms of the agreement are equivalent to an installment purchase by meeting **any one** of the following criteria.

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

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

3. The noncancelable length of the lease is equal to or greater than 75 percent of the estimated economic life of the PP&E.

4. 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: Criteria (1) and (2) do not apply 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.

B. Centers shall compute the present value of the minimum lease payments using the Treasury Average Interest Rate for Marketable Interest-Bearing Debt unless:

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

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

C. The Center SEMO is responsible for determining fair value and useful life of leased PP&E and notifying the DCFO if the results of the determinations indicate leased PP&E meets the capitalization criteria. The DCFO is responsible for evaluating the terms of the lease agreement and notifying the SEMO if the terms indicate leased PP&E is subject to capitalization.

041003. Recording Requirements.

A. Leased PP&E that meets the above criteria will be recorded as an asset in account 1810.000, Assets Under Capital Lease, with an offsetting liability in account 2940.0000, Capital Lease Liability. The amount recorded shall 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 will be the fair value). Centers will amortize the fair value over the life of the lease.

B. The difference between the capitalized value and the total amount of lease payments will be recorded as interest expense in account 6330.2000, applicable appropriations cost account, (i.e., 6100.8500.) Interest expenses will 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. NFMR, Volume 6, Chapter 4, Appendix A. provides an example of a lease that is capitalized.

041004. Reporting Requirements. Leased PP&E subject to capitalization are reported in the Capital Leases Report., submitted in accordance with NFMR Volume 8, Chapter 8. All other PP&E leased for periods in excess of one year including capitalized leases less than \$100,000, and those agreements where NASA is the lessor shall be reported in the Operating Leases Report.

0411 PROPERTY TRANSFERS

This section prescribes policies and procedures for documenting and recording transfers of capitalized PP&E between a NASA Center and (1) other Centers, (2) contractors, (3) other Federal agencies and non-federal entities, on a reimbursable or non-reimbursable basis. It also covers transfers between contractors of the same Center and between a Center and the contractor of another Center.

041101. Authority and References. This policy is consistent with the requirements established in SFFAS No. 6, “Accounting for Property, Plant, and Equipment.”

041102. Financial Controls

A. The transfer of capitalized PP&E to another entity should be recorded as a reduction to the fixed asset account for the recorded value of the asset. The receipt of capital PP&E from another entity should be recorded in the appropriate asset account at (1) the acquisition cost of the transferor for nonreimbursed transfers or (2) the amount paid to the transferor for reimbursed transfers. Offsetting entries for transfers will be affected by the nature of the transfer (e. g. reimbursable or nonreimbursable) and the parties involved (i.e. NASA, NASA contractors and other Federal agencies).

B. The offsetting entries should include one of the following accounts:

Reimbursement	1.	5720.0000	Financing Resources Transferred in Without
Without Reimbursement	2.	5730.0000	Financing Resources Transferred out
Government Held	3.	6100.8100	Personal Property-Government Owned,
Contractor Held	4.	6100.8200	Personal Property-Government Owned,
Government Held	5.	6100.8300	Real Property-Government Owned,
Contractor Held	6.	6100.8400	Real Property-Government Owned,

C. Offsetting entries for intra-NASA transfers will be to account 6100.8100. Accounts 6100.XXXX, Current Year Costs and 1010.XXXX, Fund Balance with US Treasury, will also be affected when the transfer involves a reimbursement to the transferor. NASA Headquarters, Office of the CFO, Property Branch, maintains data on all intra-NASA transfers (account 6100.8100) to ensure the total amounts on an Agency-wide basis net to zero. NASA Centers involved in intra-NASA transfers are required to record entries on a timely basis and process corrective actions when requested to resolve differences.

D. Transfers of PP&E between a NASA Center and its contractors shall be documented using shipping documents such as a DD Form 1149 or a DD Form 250. The documents shall contain contract numbers, shipping references, property classifications in which the items are recorded (including the Federal Supply Classification group (FSC) codes for equipment), unit acquisition costs, original acquisition dates and any other appropriate identifying or descriptive data. Where the DD 250, Material Inspection and Receiving Report, is used, the FSC code will be part of the national stock number (NSN) entered in Block 16 or, if the NSN is not provided, the FSC alone shall be shown in Block 16. The original acquisition date shall be shown in Block 23, by item. Other formats shall be clearly annotated with the required information. Transfers of PP&E between contractors within a NASA Center shall be noted on shipping documents and a copy should be furnished to the DCFO (F) to effect the transfer. Transfers of PP&E between a NASA Center and the contractor of another NASA Center must first be recorded as a transfer between Centers and supported by the applicable transfer documentation.

041103. Personal Property Transfer Voucher.

A. The financial management office of a transferring Center will prepare the applicable documentation to support property transfers to another NASA Center (or it's Contractor).

B. This documentation to support property transfers will be based upon an approved copy of a shipping document such as a SF 122, DD Form 250 or DD Form 1149, which evidences the movement of PP&E.

C. The transferring Center shall forward a Transfer Voucher to the receiving Center in the month in which the PP&E is shipped or by no later than the end of the month following the month in which the PP&E was shipped. Centers will establish procedures to allow sufficient time to prepare and forward Transfer Vouchers by the 25th of the month.

D. Incoming and outgoing Transfer Vouchers must be recorded in the same fiscal year, therefore, the transactions should be recorded timely. The receiving Center is responsible for requesting the transferring Center to furnish the Voucher or information to correct an incomplete submission. The financial management office of the transferring Center will complete the NF 1322.

0412 INTERNAL USE SOFTWARE

041201. Purpose. This section prescribes accounting policies and procedures for NASA internal use software. When accounting treatment for specific circumstances is not discussed in this chapter, reference should be made to Statements of Federal Financial Accounting Standards (SFFAS) Number 10, "Accounting for Internal

Use Software”, for guidance. Appendix A describes the quality assurance procedures related to internal use software.

041202. Authority and References. This policy is consistent with the requirements established in:

A. SFFAS No. 6, “Accounting for Property, Plant and Equipment”
[[SFFAS 6](#)]

B. SFFAS No. 10, “Accounting for Internal use Software”. [[SFFAS 10](#)]

041203. Accounting Authoritative Guidance.

A. Internal use software is classified as PP&E and reported in the financial statements under the provisions of the Statement of Federal Financial Accounting Standards (SFFAS) No. 10, “Accounting for Internal Use Software” which states in part “Entities should capitalize the cost of software when such software meets the criteria for general property, plant and equipment (PP&E).”

B. SFFAS No. 6, “Accounting for Property, Plant and Equipment” in paragraph 17, defines an asset as follows:

1. “Property, plant and equipment consists of tangible assets, including land that meets the following criteria:

- a. They have estimated useful lives of 2 years or more;
- b. They are not intended for sale in the ordinary course of operations; and
- c. They have been acquired or constructed with the intention of being used, or being available for use by the entity.”

C. Free software that is either internally or contractor developed does not meet the third criteria of paragraph 17 above and should be expensed as incurred.

D. The standard establishes the following principles for capitalizing internal use software:

1. Capitalized cost includes the full cost (direct and indirect cost) incurred during the software development stage. (Paragraph 16)

2. Full costs include salaries of programmers, systems analysts, project managers, and administrative personnel; associated employee benefits; outside consultants’ fees; rent; and supplies, and documentation manuals. (Paragraph 17)

3. For COTS and contractor-developed software, capitalized cost includes the amount paid to the vendor for the software. For contractor-developed software, capitalized cost includes the amount paid to the contractor to design, program, install, and implement COTS or contractor-developed software and otherwise make it ready for use. (Paragraph 18)

4. Software integrated into and necessary to operate an asset is to be capitalized as part of the asset in which it is integrated. (Paragraph 22)

5. 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. (Paragraph 33)

6. The acquisition cost of enhancements to existing internal use software (and modules thereof) is capitalized when it is more likely than not that the enhancements will result in significant additional capabilities. (Paragraph 25)

7. For software bundled products and services the capitalizable and non-capitalizable costs of the package are allocated among individual elements on the basis of a reasonable estimate of their relative fair values. (Paragraph 23)

E. The standard establishes the following principles for expensing costs of internal use software:

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. (Paragraph 19)

2. Training Costs. Training costs incurred for internally developed, contractor-developed, or COTS software are expensed as incurred.

3. Minor Enhancements. The cost of minor enhancements resulting from ongoing systems maintenance and costs incurred solely to repair a design flaw are expensed. (Paragraph 26)

4. Minor Upgrades. The costs of minor upgrades that may extend the useful life of the software without adding capabilities are expensed. (Paragraph 27)

F. For the accounting and reporting of software licenses, NASA has adopted the Federal Accounting Standards Advisory Board's suggestion in Paragraph 67 of SSFAS 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:

1. The lease transfers ownership of the software to NASA by the end of the lease term.
2. The lease contains an option to purchase the leased software at a bargain price.
3. 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.

041204. Responsibilities. The Center DCFO(F) is responsible for identifying actual costs to be capitalized for internal use software and maintaining financial records (including supporting documentation) for each software project in progress and operational. In addition, the Center DCFO(F) is responsible for preparing and submitting monthly NASA Software Capitalization Cost Reports (examples shown in NFMR, Volume 6, Chapter 4, Appendix E) to NASA Headquarters, Office of the CFO, Property Branch. Based on the guidance in NFMR, Volume 6, Chapter 4, Appendix E. NASA Headquarters, Office of the CFO, Property Branch is responsible posting the internal use software asset activity journal vouchers, as well as the calculation and reporting of depreciation of internal use software.

041205. Definitions.

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

B. Commercial off-the shelf (COTS) software. Software purchased, leased or licensed from a vendor and ready for use with little or no change.

C. 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.

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

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

F. Internal Use Software. Software that meets the following criteria:

1. Purchased commercially “off-the-shelf,” internally developed, or contractor-developed solely to meet NASA’s internal needs.

2. Operates in a stand-alone mode and is not integrated or necessary to operate hardware or equipment.

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

4. Total projected cost is \$1,000,000 or more, and

5. Expected useful life is 5 years or more.

G. 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.

H. 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.

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

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

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

1. Formulation Phase. Consists of conceptual formulation of alternatives, evaluation and testing of alternatives, determination of existence of needed technology, and final selection of alternatives.

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

3. Operational Phase. Consists of data conversion, application maintenance, training, and deployment.

Software life Cycle Phases		
Formulation Phase	Implementation Phase	Operational Phase
<ul style="list-style-type: none"> • Conceptual formulation of alternatives • Evaluation and testing of alternatives • Determination of existence of needed technology • Final selection of alternatives 	<ul style="list-style-type: none"> • Design (including configuration and interfaces) • Coding • Installation on hardware • Testing (including parallel processing, if needed) 	<ul style="list-style-type: none"> • Data Conversion • Application maintenance • Training • Deployment

041206. Policies and Procedures – Capitalization. NASA records all accounting transactions in its Enterprise Resource Planning (ERP) System, SAP. The general ledger account entries that are generated by each accounting transaction, applicable for NASA property accounts can be viewed at the Treasury USSGL Web site. [\[USSGL Transactions\]](#)

A. Internal Use Software Phases.

1. NASA will expense all costs incurred during the Formulation Phase of the life cycle for internal use software as research and development (R&D) costs. NASA will also expense all costs during the Operational Phase, which begins when final acceptance testing has been successfully completed.

2. NASA will capitalize full costs (direct and indirect) incurred during the software development (Implementation Phase) phase of the life cycle for internal use software. Internal use software’s capitalized costs are accumulated in work in process 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. Software costs associated with terminated projects and or subprojects shall be expensed.

3. NASA will capitalize costs if the total projected cost is \$1,000,000 or more and the expected useful life of the software is 5 years or more.

B. Costs to Capitalize. The following software costs must be captured for capitalization purposes:

1. Bundled Products and Services. Allocate the capitalizable and noncapitalizable 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 should be expensed; the software package, software implementation, installation and testing elements should be capitalized.

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.

3. Internally Developed Software. The full cost (direct and indirect) incurred through acceptance testing.

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

a. If the modules are implemented and operated independently, the software shall 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.

b. If the modules are inter-dependent, the costs and life cycle shall be the combined cost and life of the modules, which must be implemented together.

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

7. Software Licenses. Multi-year licenses are capitalized if the total projected cost is \$1,000,000 or more, and the expected useful life of the software is 5 years or more.

8. Capital Lease Software. If the license agreement meets one or more of the following criteria stipulated below and meets 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 (i.e., useful life is 4 years and lease term is 3 or more years).

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 various sources could be used to provide the list price for the software package).

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

9. 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 5 years or more. The capitalized cost will include the same types of cost discussed above in NFMR, Volume 6, 041206.B. Costs to Capitalize. Costs incurred solely to repair a design flaw or perform minor upgrades will 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).

10. If software is being capitalized, but becomes unusable (impaired), this shall be brought to the attention of Headquarters, Office of the CFO, Property Branch.

11. NASA will recognize and report monthly all losses from impaired software. NASA will recognize disposals when software is determined to be obsolete or nonfunctional. NASA will not report fully depreciated software projects. Once the project is fully depreciated, Centers will no longer include those projects on the quarterly report.

12. NASA shall not capitalize:

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

b. Software integrated into and necessary to operate a NASA asset. Such software should not be capitalized separately but as part of the asset in which it is integrated.

c. Software NASA does not own outright or for which NASA does not own a lease to operate (such as software provided through the Outsourcing Desktop Initiative for NASA (ODIN) contract).

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.

0413 THEME ASSETS

041301. Purpose.

This section prescribes accounting policies and procedures for NASA’s Theme Assets and describes project processes using NASA Procedural Requirement (NPR) 7120.5D *Program and Project Management Processes and Requirements*.

041302. Authority and References.

A. External Authorities. This policy is consistent with the requirements established in:

1. SFAC No. 5 Recognition and Measurement in Financial Statements of Business Enterprises.

2. SFFAC No. 1 Objectives of Federal Financial Reporting.

3. SFFAC No. 2 Entity and Display.

4. SFFAS No. 6 Accounting for Property, Plant and Equipment.

5. SFAS No. 2 Accounting for Research and Development.

B. NASA Authorities.

1. NASA NPR 7120.5 *Program and Project Management Processes and Requirements*, November 21, 2003 thru November 21, 2007. [[NASA NPR 7120.5D](#)]

2. NASA NPR 9501.2D *NASA Contractor Financial Management Reporting*, May 23, 2001 through May 23, 2006. [[NASA NPR 9501.2D](#)]

3. NASA SP-610S, *NASA Systems Engineering Handbook*, http://ldcm.gsfc.nasa.gov/library/Systems_Engineering_Handbook.pdf

041303. Responsibilities.

A. The NASA Headquarters, Office of the CFO, Property Branch is responsible for reporting the capitalized value of Theme Assets for inclusion in NASA's Financial Statements. This data is captured by extracting actual costs by Work Breakdown Structure (WBS) from the NASA accounting system through Business Warehouse (BW).

B. Each NASA Mission Directorate is responsible for providing the Property Branch with key management documents containing non-financial data used by the Property Branch to properly record and depreciate the Theme Assets.

C. The NASA Centers are responsible for ensuring that a contractor's technical statement of work can be directly related to the WBS, and that contractors report resource requirements and actual expenditures against the categories of the WBS on NF 533, or equivalent. In addition, Centers are responsible for entering costs into the NASA accounting system using the WBS.

041304 Definitions.

A. Theme Assets. PP&E specifically designed for use in a NASA program. Examples may include but are not limited to satellites, space probes and their instruments and components, and airborne observatories.

B. Useful Life. The planned design life, which begins on the date of operation and is the length of time the asset is expected to function, as denoted in the project plan.

C. Date of Operation. Date the asset actually begins operating, after checkout procedures have been performed.

D. Extended Useful Life. The number of years the original design (useful) life is extended as a result of an official update to the project plan. This applies when the original design life has passed or is drawing to a close, but the asset is expected to be operational for some time.

E. Asset Under Construction (AUC). All activities relating to the design and fabrication of an asset to bring it to a form and location for its intended use (including cruise time), until it is considered operational.

F. Project Life Cycle. Consists of a categorization of efforts and tasks required to accomplish a project. The project is divided into distinct phases, which organize the entire process into more manageable pieces and provide points for go/no-go decisions.

G. Work-Breakdown Structure (WBS). NASA organizing structure for: project and technical planning, cost estimation and budget formulation, scope of statements of work and specifications for contract efforts, project status reporting, including schedule, cost, workforce, technical performance and integrated cost/schedule data, and documentation products such as plans, specifications, and drawings. All Theme Assets WBS structure complies with the flight project WBS Level 2 Requirements as outlined in NPR 7120.5D.

041305. Policies and Procedures.

A. Project Formulation. Costs incurred during Project Formulation are research and development (R&D) costs. Therefore, these costs shall not be capitalized as part of a related Theme Assets. R&D costs are expensed as incurred, except in certain circumstances. (Statement of Financial Accounting Standards No. 2, Paragraph 8 and guidelines in Paragraphs 12,39,40 and 45.) Project Formulation activities – exploring and assessing options and analyzing feasible concepts for implementation and technology – are R&D and, therefore, will be expensed. Assets acquired or developed for R&D purposes (i.e., materials, equipment or facilities) that have alternative future uses (in R&D projects or otherwise) shall be capitalized as a separate item (SFAS no.2, Paragraph 11). Theme assets, if known, should be identified on the Alternative Future Use Questionnaire as outlined in NPR 7120.5D.

B. Project Implementation. NASA will capitalize all costs of a given project incurred during Project Implementation that, in total, meet the capitalization criteria for Theme Assets. In addition, costs incurred to bring the asset to a form and location suitable for its intended use (e.g., launch costs) will also be capitalized. These costs will be accumulated in Asset Under Construction (AUC) until the asset is operational. The costs will then be moved from the WIP account to the equipment account and depreciated over the asset's useful life.

C. The following policies shall be followed for Theme Assets with a useful life of less than 2 years.

1. The costs of Theme Assets that take less than one year to construct shall be expensed when incurred.

2. The costs of Theme Assets that take more than one year to construct and will reach their destinations within the same fiscal year should be recorded as and accumulated in AUC and expensed when the assets are launched.

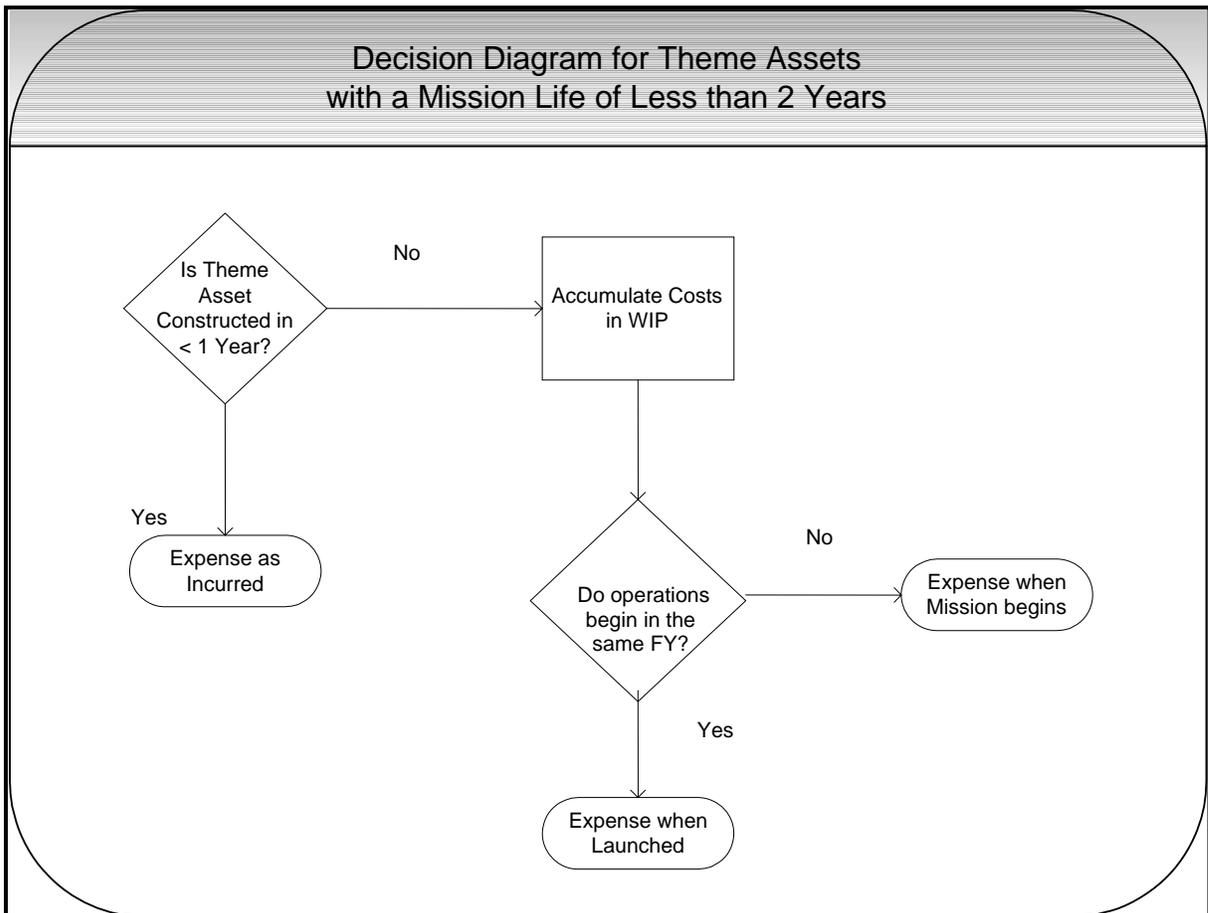
3. The costs of Theme Assets that take more than one year to construct and will reach their destinations in a future fiscal year should be recorded as and accumulated in AUC and expensed when the assets are operational.

4. The costs of Theme Assets that take more than one year to construct and more than two years to reach their destinations and begin their missions should be recorded as and accumulated in AUC and expensed when operations begin.

5. The decision chart below depicts the accounting actions to be taken for Theme Assets with a useful life less than 2 years.

6. For assets with a useful life of 2 years or more, assets should be recorded as and accumulated in WIP and begin being depreciated on the operation date.

D. Project Operations. NASA will expense all costs during incurred Project Operations. These activities consist of system operations, system maintenance, and system disposal.



APPENDIX A

QUALITY ASSURANCE PROCEDURES

A. NASA HELD REAL PROPERTY.

These processes only apply to NASA Held Real Property. See NFMR, Volume 6, Chapter 4, Section 0409 “NASA Property in the Custody of Contractors and Under Grants and Cooperative Agreements” for processes related to Contractor Held Real Property.

1. On a monthly basis, a property accountant shall:

a. Enter a journal voucher for the costs to be recorded in the accounting system (SAP) for the Work Breakdown Structure (WBS) (or contract) for real property projects to be capitalized.

b. Enter a journal voucher for the NF 1045 vouchers (NASA Real Property Transaction Voucher(s)) received from the Real Property Accountable Officer. The accountant shall:

1) Ensure that any transaction to be capitalized is in accordance with NFMR, Volume 6, 040601. If a transaction should not be capitalized, the accountant will inform the matter to the real property office and advice to flag the item as “non capital” in the real property database.

2) Confirm that amounts on the voucher agree with costs recorded in the general ledger for that project WBS. If they do not agree, the accountant shall document and retain an explanation of the variance.

3) Remove amounts previously capitalized as WIP for the capitalized project. (Note: If current year costs plus amounts previously capitalized as WIP are less than the total amount to be capitalized, the accountant will record a prior period adjustment (SGL account 7400.3730), document the reason for the adjustment and provide a written explanation to NASA Headquarters, Office of the CFO, Property Branch.

c. Run the FBL3N or other appropriate SAP Query for G/L accounts 6100.3200 – 6100.3299 for the current month, to determine if any projects have incurred expenses not identified by the project office which should be capitalized. (Note: if any expenses were recorded to the wrong account number, e-mail or hardcopy notification shall be provided to the appropriate Center individual. A copy of these communications shall be retained.)

d. Submit to NASA Headquarters, Office of the CFO, Property Branch, a listing of all real property transactions posted to the general ledger.

e. At the end of each month, the Center DCFO (F) must submit a monthly certification that Quality Assurance processes were performed.

2. At the end of each quarter, a property accountant shall meet with the Real Property Accountable Officer or other responsible individual and document:

a. Which projects will be complete by the end of the quarter, and thus will be capitalized at that time;

b. Any new projects, their Work Breakdown Structure (or Contract Number), estimated value which will be capitalized and estimated completion date;

c. A status update of any on-going projects to identify changes in estimated value and completion date and obtain the Real Property Accountable Officer's validation of amounts recorded as work in progress for these on-going projects.

3. At the end of the quarter, a property accountant shall run the Capitalization Reconciliation Report from the NASA Real Property Database (<http://facility.hq.nasa.gov/NRPDB>) and reconcile the balances to the SAP Trial Balance for Fund HSFP01995D for real property accounts.

4. Additional quality control procedures can be found in the "Periodic Monitoring and Controls Performed by Centers" at the following web page: <http://www.hq.nasa.gov/fmm/docs/pd-03-0006.pdf>.

B. NASA-OWNED AND HELD MATERIALS

1. Monthly, a property accountant shall reconcile data in the general ledger materials and supplies accounts with that in the Logistics System. If the data do not agree, the accountant shall document a variance explanation. If amounts in the logistics system need to be corrected, email or hardcopy shall be provided to the appropriate Center individual to correct the amounts. These communications shall be retained until correct has been verified.

2. Monthly, the property accountant shall submit, to NASA Headquarters, Office of the CFO, Property Branch, the current monthly reconciliation (with supporting documentation) of the general ledger materials and supplies accounts with the Logistics System. If the data do not agree, a documented variance explanation shall be included in the submission to NASA Headquarters.

3. Each month, a certification, signed by the DCFO (F), shall be submitted to NASA HQ, Office of the CFO, Property Branch, that the quality assurance procedures outlined above in Steps A. and B. were completed.

4. If reconciling items were noted in Step b. above prepare corrective journal vouchers to adjust the appropriate accounts and post the journal vouchers in a timely manner.

5. Additional quality control procedures can be found in the “Periodic Monitoring and Controls Performed by Centers” at the following web page: <http://www.hq.nasa.gov/fmm/docs/pd-03-0006.pdf>.

C. NASA-OWNED AND HELD EQUIPMENT

1. Monthly, a property accountant shall enter a journal voucher in the accounting system (SAP) based on the Monthly NEMS Report of Transactions to Record. The accountant shall analyze the backup documentation from the SEMO to validate NEMS information to be recorded.

a. The amounts shown on the NEMS report for new acquisitions should agree with costs recorded in the general ledger for those transactions. If amounts do not agree, variance explanations shall be documented.

b. If the equipment item is for a capital lease (based on the review of the documentation), the item shall be recorded as specified in NFMR Volume 6, 0412 and e-mail or hardcopy notification shall be provided to the appropriate Center individual to correct NEMS. These communications shall be retained until correction has been verified.

c. Any transactions on the NEMS report which originally occurred in a previous fiscal year (i.e. Found on Station) shall be recorded as prior period adjustments with a debit or credit to 7400.3730. Reasons for adjustment shall be documented and a copy provided to NASA Headquarters, Office of the CFO, Property Branch.

d. A listing of equipment transactions recorded during the month in the general ledger shall be provided to NASA Headquarters, Office of the CFO, Property Branch.

2. A property accountant shall run the FBL3N SAP Query for G/L account 6100.3100 (for transactions over \$100,000) for the current month to determine if any transactions not identified in NEMS should be capitalized. If any expenses were recorded to the wrong account number, e-mail or hardcopy notification shall be provided to the appropriate Center individual. These communications shall be retained until correction has been verified.

3. A property accountant shall review transfer documents received during the month and confirm that they were properly recorded in the general ledger. If any transactions were not properly recorded, e-mail or hardcopy notification shall be provided to, the appropriate Center individual at your center. These communications shall be retained until correction has been verified.

4. At the end of each month a the property accountant shall meet with the Center, Supply and Equipment Management Officer (SEMO) to determine if any items have been received but are not yet tagged in NEMS. The accountant shall ensure that any untagged items, meeting NASA's capitalization criteria, are appropriately recorded in the general ledger.

5. At the end of each month a property accountant shall complete reconciliation between data shown on a NEMS query of items active with that recorded in the general ledger under Fund HSFP01995D for the equipment account 1750.0100.

6. Additional quality control procedures can be found in the "Periodic Monitoring and Controls Performed by Centers" at the following web page: <http://www.hq.nasa.gov/fmm/docs/pd-03-0006.pdf>.

7. At the end of each month the Center must submit a monthly certification that Quality Assurance process were performed.

D. NASA PROPERTY IN THE CUSTODY OF CONTRACTORS AND UNDER GRANTS AND COOPERATIVE AGREEMENTS

1. Monthly a Center Property Accountant will:

a. Review and validate the information submitted by the contractor in CHATS using the validation checklist as prescribed in NFMR, Volume 6, Chapter 4, Appendix C. Any large transfers, fluctuations of 10% or of \$10 million or greater, and anomalies will require follow-up with the reporting contractor.

b. Submit their Monthly contract validations sheet so that Headquarters is aware of any delinquency and errors that may exist in reporting in CHATS.

c. Submit a Center Matrix to the Headquarters OCFO Property Branch detailing all new acquisitions and deletions to facilitate the depreciation process.

d. Submit a Transfer Matrix to the Headquarters OCFO Property Branch detailing items transferred to and from their Center. Headquarters will then follow up to make sure those transfers are recorded in an accurate and timely fashion.

e. Consolidate all transactions that have occurred for both PP&E and Real Property to produce monthly journal vouchers. Once completed, Centers will send Journal Vouchers (JVs) to the Headquarters OCFO Property Branch for review.

f. Upon receiving approval from the Headquarters OCFO Property Branch, post the journal voucher in SAP.

g. Forward the SAP document number to the Headquarters OCFO Property Branch.

2. Monthly a Headquarters OCFO Property Branch Accountant will:

a. Monitor the progress of the Decentralization Plan creating a matrix reflecting the accuracy and timeliness of the Centers reporting which will be updated monthly.

b. Maintain a matrix of delinquent reports and errors in reporting to populate Risk Matrix used to select contracts to be reviewed by Defense Contract Audit Agency (DCAA).

c. Review, validate, and approve the Center-prepared journal voucher and return the JVs to Center for posting.

d. Confirm that the JVs were posted correctly and that general ledger ending balances are reflective of the supporting documentation.

e. Process Monthly Materials Reclassification, reclassifying all Materials over 100K that goes into an end item such Shuttle, ISS, or Hubble. Headquarters will post the Reclass JV before the period closes for previous month.

3. Quarterly, NASA Headquarters, Property Branch will develop a schedule for periodic review of key contractor's NF 1018 data and related critical policies and procedures.

4. Annually, a Headquarters OCFO Property Branch accountant will:

a. Review Centers' validation check lists annually as prescribed in NFMR Volume 6, Chapter 4, appendix XX.

b. Prepare the year-end estimates and submit them to the respective COTRS for their review.

c. Revise estimates based upon information received from COTRS.

d. Post CHATS estimate JV in SAP.

e. Reverse CHATS estimate JV and record actuals based upon contractor-submitted data for the prior fiscal year-end month. ie., September.

5. Additional quality control procedures can be found in the "Periodic Monitoring and Controls Performed by Centers" at the following web page: <http://www.hq.nasa.gov/fmm/docs/pd-03-0006.pdf>.

6. On a quarterly basis, the OCFO Property Branch prepares a journal voucher based on the monthly submissions from all Centers. The information used to prepare the journal vouchers is validated by the Center Property Accountants through monthly discussions with the Project managers prior to submission to HQ.

E. LEASED PROPERTY

1. Monthly a property accountant shall:

a. Prepare and post a journal voucher based on the Monthly NEMS Report of Transactions to Record. The accountant shall analyze backup documentation provided by the SEMO to validate NEMS information to be recorded in the general ledger.

b. Amounts shown for new acquisitions should agree with the costs recorded in the general ledger for those transactions. If the amounts do not agree, a variance explanation shall be documented.

c. If any items recorded in NEMS as acquisitions (not capital leases) should be retagged as capital leases (based on review of the documentation), they shall be recorded as specified in NFMR, Volume 6, 041003, and e-mail or hardcopy notification shall be provided to the appropriate Center individual to correct NEMS. These communications shall be retained until correction has been verified.

d. Any transactions on the NEMS report which originally occurred in a previous fiscal year (i.e., Found on Station) shall be recorded as prior period adjustments with a debit or credit to 7400.3730. The reason(s) for adjustment shall be documented and a copy provided to NASA Headquarters, Office of the CFO, Property Branch.

e. The accountant shall run the FBL3N SAP Query for G/L accounts 6100.2321 and 6100.2330 for the current month to determine if any transactions not identified in NEMS, should be capitalized. If any expenses were recorded to the wrong account number, e-mail or hardcopy notification shall be provided to the appropriate Center individual for action. These communications shall be retained until correction has been verified.

2. Quarterly, a property accountant shall:

a. Meet with the Center, Supply and Equipment Management Officer (SEMO) to determine if there are any items received but are not yet tagged in NEMS. The accountant shall ensure that any untagged items, meeting NASA's capitalization criteria, are appropriately recorded in the general ledger.

b. Complete a reconciliation between the data shown on a NEMS query of items active with the data recorded in the general ledger under Fund HSFP01995D for the account 1810.0000, Assets Under Capital Lease.

c. Verify that the ending balance of 2940.000, Capital Lease Liability, equals the previous quarter's ending balance less payments made, plus new leases entered during the quarter.

d. Distribute a data call to the SEMO and Real Property Accountable Officer to request appropriate information for all leases where NASA is the lessee or the lessor. The accountant shall submit a copy of this listing to the NASA Headquarters, Office of the CFO, Property Branch with copies of any new agreements after validating the information as follows: 1) Compare agreement terms with information provided by the SEMO and Real Property Accountable Officer; 2) Identify any additional leases by running the In/Out Grant Report in the NASA Real Property Database and the FBLN3N (for the reporting quarter) SAP Query outlined above.

3. Additional quality control procedures can be found in the "Periodic Monitoring and Controls Performed by Centers" at the following web page: <http://www.hq.nasa.gov/fmm/docs/pd-03-0006.pdf>.

F. SOFTWARE

1. On a quarterly basis, the OCFO Property Branch prepares journal voucher based on the monthly submissions from all centers. The information used to prepare the journal vouchers is validated by the Center Property Accountants through monthly discussions with the Project Managers prior to submission to HQ.

2. Data received from the CIO and program offices is validated through review of supporting documentation and accounting system queries.

3. Additional quality control procedures can be found in the "Periodic Monitoring and Controls Performed by Centers" at the following web page: <http://www.hq.nasa.gov/fmm/docs/pd-03-0006.pdf>.

G. THEME ASSETS

1. Quality control procedures can be found in the "Periodic Monitoring and Controls Performed by Centers" at the following web page: <http://www.hq.nasa.gov/fmm/docs/pd-03-0006.pdf> and NASA Theme Assets Accounting Capitalization Desk Guide.

APPENDIX B**CHECKLIST FOR VALIDATION OF NF 1018 DATA IN THE NF 1018
ELECTRONIC SUBMISSION SYSTEM (NESS)**

The NF 1018 Electronic Submission System (NESS) is the official system designated by NASA for contractors to electronically submit their annual report on NASA Property in the Custody of Contractors. Contractors using NESS are not required to submit a paper copy of the form. Contractors who choose not to use the NESS must submit the original completed form to the DCFO (F) and a copy to the property administrator. The industrial property officials at the Center will enter the NF 1018 data into the NESS for those contractors.

In accordance with NFMR, Volume 6, Chapter 4, Section 040906. E., the DCFO (F) shall validate NF 1018 data in the NESS promptly after the submission has been approved by IPO and PA. In validating NF 1018s reflecting property in the custody of the contractor valued at \$100,000 or more, the DCFO (F) shall address the following issues:

- A. If the contractor did not submit electronically, do the beginning balances reported on this year's NF 1018 agree with the ending balances from the previous year's NF 1018? Do the amounts reported in NESS match those on the original NF 1018 received by the DCFO (F)?
- B. If the contractor reported adjustments, do they appear valid based upon the description in the "Comments" section (line 21) (see NFMR, Volume 6, Chapter 4, Section 040906.G)?
- C. If the NF 1018 shows Government-Furnished Additions (column b.1), do the values reported agree with the amounts on the supporting documentation? Were the amounts recorded correctly by both the transferor and transferee?
- D. If the contractor reported a balance in Agency-Peculiar property, was a reasonable description provided in line 16?
- E. If the contractor reported balances of \$10 million or more in any of the following property classification accounts: Special Test Equipment, Special Tooling, Agency- Peculiar, Contract Work in Process, and did not specifically state in line 21 that fees were included in the values reported, was the contractor contacted to verify that fees were included as required by NFMR, Volume 6, Chapter 4, Section 040906.D.?
- F. If the contractor reported any deletions (lines 20b, 20c, 20d and 20e) as transfers, do the values reported agree with the pre-closing amount reported on the supporting documentation?

G. If the contractor reported any deletions (line item 20) as “Other,” were they adequately explained in Comments (line 21)?

H. If any ending balances varied by 10% or greater, or \$10 million, contact the contractor for an explanation. Determine whether the variance is reasonable.

I. Did the contractor report any heritage assets (line 21)? If so, were the items the same as those reported on the previous year’s NF 1018? For any new items, is the Contractor’s rationale as to why they are considered to be heritage assets valid? For any heritage assets previously reported which are no longer identified, was there a corresponding deletion? (NFMR, Volume 6, Chapter 4, Section 040906.G.).

J. Is the contractor’s property system approved (line 19a)? Is the property system analysis “satisfactory”? If not, as part of NFMR, Volume VI, Chapter 4.96.6d (checklist item P1), has action been taken to confirm that the NF 1018 was not materially impacted by any system deficiencies?

The DCFO (F) shall reject NF 1018s with values of \$100,000 or more, in NESS, where there are any negative answers to questions 1–7 above or where any of the answers for questions 8 and 9 indicate that the NF 1018 is not accurate.

For validation of NF 1018s, which do not include any values of \$100,000 or more, the DCFO (F) shall ensure the report appears to be complete and accurate. The DCFO (F) shall ensure any reported values of Materials, Construction in Progress, Contract Work in Progress and Heritage Assets (see question 8, above) are included in the amounts reported to NASA Headquarters, Property Branch under the CFO, in accordance with NFMR, Volume 6, Chapter 4, Section 040906.G.

APPENDIX C

VALIDATION OF MONTHLY CHATS REPORT

CONTRACT NUMBER: _____

MONTH ENDING: _____

CONTACT: _____

VALIDATION CRITERIA	RESPONSE	COMMENTS
Real Property recorded in CHATS match the Real Property Database?		
Adjustments Explained and Reasonable?		
Transactions Supportable?		
Previous Period Errors Resolved? Document?		
DCAA Errors Resolved? Document?		
Are line items that have fluctuations of 10% or \$10 million by line item reasonable? Document?		
Are transfers \$1million or more supportable?		
Is WIP in excess of \$15 million supportable?		
Were any anomalies identified?		
Additional Comments		

CONCLUSION: Based upon the results of the validation outlined above, this report was found to be acceptable.

VALIDATED BY:

APPENDIX D

RECORDING OF CAPITALIZED LEASE PAYMENTS

A NASA Center entered into a five year lease agreement beginning October 1, 2003 for a mainframe computer with a fair value of \$900,000 and useful life of seven years.

The lease is noncancelable with payments of \$200,000 a year to be made in advance on October 1 of each year for five years. Title to the property passes to NASA at the end of the lease on September 30, 2008.

The Treasury Average Interest Rate for Marketable Interest Bearing Debt at the time of the lease is 7 percent and the lessor's implicit rate is 5 ½ percent.

The executory costs are paid by the Center and are not part of the lease payments.

This lease must be capitalized because the non cancelable term is greater than 75 percent of the estimated economic life of the property, the title passes to NASA at the end of the lease and the property has a value greater than \$100,000 and a useful life greater than 2 years.

The interest rate used to calculate the portion of the payments identified as interest expense is the implicit rate of the lessor, which is 5 ½ percent, since it is less than the Treasury rate.

The following schedule identifies the interest expense and reduction of the liability by payment.

Date	Payment	Interest Expense Acct. 6330.2000	Liability Reduction	Balance Liability Acct. 2940.0000
10/1/03	\$200,000	0	\$200,000	\$900,000
10/1/04	\$200,000	\$38,500	\$161,500	\$700,000
10/1/05	\$200,000	\$29,618	\$170,382	\$538,500
10/1/06	\$200,000	\$20,246	\$179,754	\$368,118
10/1/07	\$200,000	\$11,636	\$188,364	\$188,364
TOTAL	\$1,000,000	\$100,000	\$900,000	0

Amounts reported on the schedule were rounded, to accurately liquidate the liability balance.

APPENDIX E

EXAMPLES OF NASA SOFTWARE CAPITALIZATION COST REPORTS

NASA Software Capitalization Cost Report A
Projects in Development (WIP)

For Month/Quarter Ending: 12/31/2003
 Center Name _____

Report Due Date: 1/16/2004
 Beginning of Period (BOP): 10/1/2003
 End of Period (EOP): 12/31/2003

1	2	3	4	5	6	7	8	10	11	12
Software Name	Contract Number	Projected/Actual Acceptance Date (mm/dd/yy)	Prior Period Cumulative Costs Incurred	Actual Costs Incurred this Period	Less: Costs Transferred to PP&E	Disposals	Actual Total Costs at EOP (WIP)	Comments	Estimated Useful Life	Work Breakdown Structure (WBS)

NASA Software Capitalization Cost Report B

Project Completed (PP&E)

For Quarter Ending: **12/31/2003**

Center Name _____

Report Due Date: **1/16/2004**

Beginning of Period (BOP): **10/1/2003**

End of Period (EOP): **12/31/2004**

1	2	3	4	5	7	8	9					10	12
Software Name	Contract Number	Projected or Actual Acceptance Date (mm/dd/yy)	Prior Period Cumulative Costs Incurred	Actual Costs Incurred this Period	Disposals	Actual Total Costs at EOP (Capitalized)	License Lease Term (years)	Accumulated Depreciation at BOP (\$K)	Depreciation Expense (\$K)	Depreciation related to Disposals	Accumulated Depreciation EOP (\$K)	Comments	Work Breakdown Structure (WBS)

GUIDANCE FOR NASA SOFTWARE CAPITALIZATION COST REPORT

NASA Software Capitalization Report Guidance:

On a monthly basis, each Center must submit to NASA Headquarters, Office of the CFO, Property Branch, the cumulative *NASA Software Capitalization Cost Reports A and B* (examples shown in NFMR, Volume 6, Chapter 4.14 Appendix A). Supporting documentation (e.g., vouchers, contracts, etc.) for the data reported must be retained at the Center and submitted to the Property Branch, if requested.

The monthly report due date along with the beginning of period (BOP) date and end of period (EOP) dates will appear on the Report forms. Centers will report software costs on Report A for internal use software which was under development (i.e., WIP) during the month. Centers will report software costs on Report B for internal use software that was completed during the month when final acceptance testing was successfully completed.

The following instructions are for populating each numbered field (at the top of each column) on the *NASA Software Capitalization Report* forms A and B. The Property Branch will complete the fields associated with columns that are shaded and unnumbered (i.e., depreciation). Expert information about software development projects supporting NASA missions or NASA administrative functions should be obtained from project managers, software development managers, software development team leaders, or equally knowledgeable persons.

Field 1. Software Name

List internal use software that meets all of the following criteria:

- Either purchased commercially “off-the-shelf,” internally-developed, or contractor-developed solely to meet NASA’s internal needs.
- Operates in a stand-alone mode and is not integrated or necessary to operate hardware or equipment.
- Used to operate NASA’s programs (e.g., financial and administrative software including that used for project management); or to support NASA’s mission’s (e.g., communication software designed to support multiple missions).
- Software developed independently of a mission (i.e., it is not a part of the mission).
- Total projected cost is \$1,000,000 or more, and
- Expected useful life is 5 years or more.

An example of internal use software used on multiple missions is the MODIS Adaptive Processing System (MODAPS) that: generates and distributes data products from a variety of earth observing instruments (MODIS, AVHRR and Landsat); supports several missions (EOS Terra and EOS Aqua); has been re-used in research activities that involve global or continental-scale production of science data products and runs on several computing hardware platforms and under both Unix and Linux operating systems.

Do not list the following software:

- Software developed as part of a research effort.
- Software integrated into and is necessary to operate property, plant and equipment.
- Software that solely supports a single mission (i.e., shuttle, space station, satellites, space probes, etc.) or a single instrument (i.e., James Web Space telescope, Hubble Space telescope, etc.) where current plans are for the software not to be used after the mission ends.
- Software that NASA does not own outright, or for which NASA does not own a lease to operate, such as software provided through the *Outsourcing Desktop Initiative for NASA* (ODIN) contract.

Field 2. Contract Number

List the contract number under which the software was acquired or developed.

Field 3. Acceptance Date

Projected or actual date final acceptance testing will be/was successfully completed and software will be/became operational.

Fields 4 and 5. Full Cost

Full costs (direct and indirect) should be recorded for internal use software implementation¹. No costs should be recorded for software formulation² or operations³. Full costs are defined as: salaries of programmers, systems analysts, project managers, and administrative personnel; associated employee benefits; outside consultants' fees; rent; and supplies, and documentation manuals. Record costs as specified in the following categories:

¹ Software implementation consists of activities such as: design (including configuration and interfaces), coding, installation on hardware, and testing (including parallel processing, if needed).

² Formulation activities consist of: conceptual formulation of alternatives, evaluation and testing of alternatives, determination of existence of needed technology, and final selection of alternatives.

³ Operations activities consist of: data conversion, application maintenance, training, and deployment.

- (a) Commercial off-the-shelf Software (COTS): the amount paid to the vendor for the software and material internal costs incurred by NASA to implement the software and make it ready for use, through acceptance testing.
- (b) Support Contractor Developed Specific NASA Application Software (SCAS): the amount paid to a contractor during software implementation only, and material internal costs incurred by NASA to implement the software and otherwise make the software ready for use, through acceptance testing.
- (c) Civil Servant Developed Specific NASA Application Software (CSAS): full cost (direct and indirect) incurred during software implementation, through acceptance testing.
- (d) Enhancements made by a Support Contractor (ESCAS) or by Civil Servants (ECSAS) to Specific NASA Application Software: record the full costs if the enhancement (i.e., could be new version or release) results in a significant additional capability beyond that for which the software was originally intended. A significant additional capability is one not included in the original software specifications and which costs \$1,000,000 or more to develop (exclusive of all other updates to the software).
- (e) Software Modules (including pilots): list and record each software module and cost separately, if modules are implemented and operated independently. Otherwise list combined modules and record combined costs, if modules are interdependent.
- (f) Software Acquired through Separate Contracts: software and costs should be listed separately if the same software package is purchased under separate contracts. The \$1,000,000 threshold should be applied separately. For bulk purchases of the same software acquired under the same contract, the \$1,000,000 threshold should be applied to the group.
- (g) Bundled Products and Services: allocate the cost of the package among the individual elements on the basis of a reasonable estimate of their relative fair values. Record the costs for the software package, software implementation, installation and testing; do not record costs for training, maintenance or data conversion elements included in the package.
- (h) Software licenses: costs for a multi-year license should be listed in which the total projected cost is \$1,000,000 or more, and the expected useful life of the software is 5 years or more. The following capital lease criteria should be applied:

If the license agreement meets one or more of the following criteria and meets NASA's software capitalization threshold, it is a capital lease:

1. The lease transfers ownership of software to NASA by the end of the lease term.
2. The lease contains an option to purchase the software at a bargain price.
3. The lease term is equal to or greater than 75 percent of the estimated economic life of the leased software (e.g., if useful life is 5 years and lease term is 3 or more years).

4. 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 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 various sources could be used to provide the list price for the software package).

Field 4. Prior Period Cumulative Costs Incurred

Costs as specified for each software category above from beginning of project (or 9/30/00, whichever is later) through BOP. Report this cost for projects not previously reported.

Field 5. Actual Costs Incurred this Period

Costs as specified for each software category above from beginning of the period through the end of the period to record current month/quarter activity.

Field 6. Less Costs Transferred to PP&E

Report the negative sum of fields 4 and 5 that is entered when the software project is completed during the quarter and costs are transferred to PP&E.

Field 7. Disposals

Report costs of software no longer expected to provide substantive service potential which will be removed from service, or software has incurred a significant reduction in capability, functions, or use (i.e., become impaired).

Field 8. Actual Total Costs to EOP (Capitalized or WIP)

Report the sum of fields 4, 5, 6 and 7 for a cumulative total cost.

Field 9. License Lease Term

The length (in years) of the multiple year license or capital lease, if applicable.

Field 10. Comments

Provide any pertinent comments about the software and its related information.

Field 11. Estimated Useful Life

Provide an estimate of the useful life for the software once it is operational.

Field 12. Work Breakdown Structure (WBS)

Provide the WBS for the software project being reported.

APPENDIX F

CHECKLIST FOR SOFTWARE PROJECTS IDENTIFIED AS INTERNAL USE SOFTWARE

Perform the activities on this checklist for each Internal Use Software Project identified through discussions with Project Managers, Software development managers, etc. These projects should be reported on the *NASA Software Capitalization Cost Report*.

VALIDATION OF INTERNAL USE SOFTWARE

PROJECT NAME:

USEFUL LIFE:

WBS:

QUARTER ENDING:

VALIDATION CRITERIA	<i>RESPONSE</i>	COMMENTS
Obtain the Projects WBS Structure		
Are there separate WBS' for Life Cycle Phases?		
What is the project start date?		
Has the project moved from implementation to operation? If so, these costs should be moved from WIP to PP&E		
If the project has moved from implementation phase to operation has final acceptance testing occurred and is it supported with documentation?		
Is the software still being used? Is it impaired? Disposed of?		
Were any significant modifications made to the software?		

CONCLUSION: Based upon the results of the validation outlined above, the internal use software appears to be reported accurately.

VALIDATED BY:

APPROVED BY: