Summary of Business Rules for Accounting for and Reporting of Military Equipment

Modifications, Modernizations, Upgrades, and Improvements

Objective

- Provide guidance on accounting for and reporting of the cost of modifications that (1) extend the useful life of an end item or (2) enlarge or improve the capacity of an end item in accordance with Statement of Federal Financial Accounting Standards No. 6, *Accounting for Property, Plant, and Equipment.*

Baseline Valuation Methodology

- When modifications can be linked to individual end items:
    - The full cost of modifications that extend the useful life of an end item should be added to its net book value and depreciated over the end item's new useful life.
    - The cost of modifications that enlarge or improve the capacity of an item but do not extend its useful life should be capitalized by:
        - Adding the modification cost to the end item's net book value and depreciating the resulting cost over the remaining useful life of the end item, or
        - Capitalizing the modification as a separate item and depreciating the modification over the lesser of the life of the modification or the remaining useful life of the end item.
- In instances where modifications cannot be specifically identified with individual end items, the modification costs incurred during a given fiscal year should be aggregated, capitalized, and depreciated as a separate item. In addition, wherever possible, an estimate of the portion of these modification costs that is allocable to each item to which the modifications relate will be developed.
- Program managers will be asked to provide reasonable estimates of the useful lives of modifications, based on engineering estimates, prior experience, or other factors.
- When an end item is disposed of, both its remaining Net Book Value and the remaining Net Book Value of the related modifications will be written off.
- At times, modifications cross different acquisition programs, e.g., the same modifications may be applied to multiple types of aircraft. If it is impractical to specifically allocate the

modifications to the programs or parent end items to which they apply, there will be no attempt to associate the modification cost with individual end items. In these situations, no adjustment will be made to the cost of modifications when the parent end item is disposed of, unless extraordinary losses of the related end items occur.

.

Mid-Term Valuation Methodology

- The full cost of modifications that extend the useful life of an end item should be added to its net book value and depreciated over the end item's new useful life.

- The cost of modifications that enlarge or improve the capacity of an item but do not extend its useful life should be capitalized by:

    - Adding the modification cost to the end item's net book value and depreciating the resulting cost over the remaining useful life of the end item, or

    - Capitalizing the modification as a separate item and depreciating the modification over the lesser of the life of the modification or the remaining useful life of the end item.

Military Equipment Valuation Project

Position Paper: Modifications, Modernizations, Upgrades, and Improvements

Description of Issue

Statement of Federal Financial Accounting Standards (SFFAS) No. 6, *Accounting for Property, Plant, and Equipment,* provides guidance concerning modifications, modernizations, upgrades, and improvements to general property, plant, and equipment (PP&E).

The Department of Defense incurs substantial costs to maintain and enhance military equipment. Items of military equipment require routine maintenance in order to perform as intended. Unscheduled repairs may be needed to correct breakdowns or other unanticipated performance problems. Further, military equipment often is modified to enhance performance and/or extend the useful life. Performance-enhancing modifications frequently are not anticipated in advance, but rather are made as result of new or improved technologies, changes in mission requirements, or in response to new or modified threats. Modifications that affect the useful life of military equipment may, or may not, be a planned element of the equipment's life cycle. To illustrate, an item of military equipment, such as a ship, may be determined to have a useful life of 35 years. However, it is anticipated that if the ship is overhauled after approximately 35 years of service, its useful life can be extended by 15 years. To illustrate further, an item of military equipment may be determined to have a useful life of 20 years, provided that an overhaul is performed after the item has been in service for half of its useful life, or 10 years. In this case, the useful life is not actually extended, but rather the overhaul is necessary in order to achieve the intended useful life.

Paragraph 37 of SFFAS No. 6 states that, "Costs which either extend the useful life of existing general PP&E, or enlarge or improve its capacity shall be capitalized and depreciated/amortized over the remaining useful life of the associated general PP&E."

Proposed Policy

A distinction is to be made between the treatment of a modification that extends the useful life of an item and a modification that enhances the performance of an item, but does not extend its useful life.

A modification that extends the useful life of an item should be added to the net book value of the end item and depreciated over the end item's new useful life.

A modification that enlarges or improves the capacity of an item of equipment, but does not extend its useful life, should be capitalized by:

- Adding the cost of the modification to the net book value of the modified item and depreciating the resulting adjusted total cost over the remaining useful life of the end item, <u>or</u>

- Capitalizing the modification as a separate item and:

    - If the useful life of the modification **equals** or is **greater** than the remaining useful life of the end item, depreciating the modification cost over the remaining useful life of the end item;

    - If the useful life of the modification is **less** than the remaining useful life of the end item or the end item is fully depreciated, depreciating the modification cost over its useful life.

When a modification is capitalized separately from an end item, the modification should be linked to the end item (parent-child relationship) in the property accounting or accountability system.

Authoritative Guidance

Statement of Federal Financial Accounting Standards No. 6, *Accounting for Property, Plant, and Equipment.*

Baseline Valuation Methodology Position Paper: Modifications, Modernizations, Upgrades, and Improvements

Background

This paper describes the baseline methodology for accounting for the costs of modifications, modernizations, upgrades, and improvements (hereinafter referred to as modifications).[1]

Proposed Policy [2]

The proposed policy for baseline valuations addresses the following three scenarios: (1) Modifications can be linked to specific end items; (2) Modifications can be linked to a specific program or programs but not specific end items; and (3) Modifications relate to a type of assets (such as ships), but the information is not available to link the cost of the modifications to affected programs or specific end items.

Scenario (1) – Modifications can be linked to specific end items.

- Capitalize the cost of modifications that extend the useful life of an end item, notwithstanding the cost of the modification or the net book value of the end item, as part of the cost of the end item and depreciate over the end item's new useful life.
- Capitalize the cost of modifications that enlarge or improve the capacity of an end item, but do not extend its useful life, notwithstanding the cost of the modification or the net book value of the end item, as part of the cost of the end item and depreciate over the end item's remaining useful life.
- Write off (recognize as a loss) the net book value of the end at the time of end item disposition.

Scenario (2) – Modifications can be linked to a specific program or programs but not specific end items.

- Capitalize the modification costs incurred during a given fiscal year as a separate item and depreciate over the estimated useful life of the modification, notwithstanding the value of the modification or the net book value of the end items referred to below.
- Develop an estimate of the portion of these modification costs allocable to end items in service at the end of the fiscal year in which the modification costs were incurred. For example, if modification costs of $100,000,000 were incurred in FY 1998 and the number

---

[1] Statements of Federal Financial Accounting Standards provide that they need not be applied to immaterial items. Accordingly, this Policy Position Paper does not apply to immaterial modification costs.
[2] This Policy Position Paper addresses modifications to Military Equipment end items. It does not address modifications to items classified as Inventory and Related Property.

of in end items in service at the end of the 1998 was 1000, the estimate modification cost per end item would be $100,000.

- Associate the capitalized modification costs with the end items in service at the end of the year in which the modification costs were incurred through a parent-child relationship.
- Write off (recognize as a loss) the net book value of the end item and associated estimated modification cost at the time of end item disposition.[3]

Scenario (3) – Modifications relate to a type of assets, but the information is not available to link the cost of the modifications to affected programs or specific end items.

- Capitalize the modification costs incurred during a given fiscal year as a separate item and depreciate over the estimated useful life of the modification.
- For baseline valuation, because under this scenario modification costs cannot be associated with a program or programs or specific end items, no provision is made for the write off of a portion of this account balance upon disposal of the related but unknown end item.

[3] To illustrate, assume the following: (1) the entity incurred modifications costs of $100,000,000 in 1998; (2) modifications had a useful life of 10 years; (3) the entity uses straight line depreciation; (4) the modifications affected 1000 end items in service; and (5) the destruction of 100 end items in 2001. At the end of 2001 the net book value of the modifications related to end destroyed end items was $7,000,000 ($100,000,000 book value less $30,000,000 accumulated depreciation equals $70,000,000 net book value. Destroyed end items equal 10% of total end items or 10% of net book value - $7,000,000)