

Summary of Business Rule on Military Equipment Useful Life

Background

Statement of Federal Financial Accounting Standards (SFFAS) No. 6, *Accounting for Property, Plant, and Equipment*, requires that depreciation expense be calculated on property, plant and equipment (PP&E) over the PP&E's estimated useful life. SFFAS No. 6, Footnote 17, defines useful life as the normal operating life in terms of utility to the owner. It also provides that estimates of useful life must consider factors such as physical wear and tear and technological change (e.g., obsolescence).

The Standard also describes depreciation as the method of allocating the cost of tangible capital assets, less salvage value, over the estimated useful life of the asset in a systematic and rational manner. The Department has established military equipment (ME) useful lives for various purposes, such as for budget estimates and must also develop meaningful useful life estimates for meeting ME financial reporting requirements.

Issue

The Department must design a strategy that provides for a sound Military Equipment (ME) useful life policy. A policy based on grouping similar types of ME into asset classes¹ and calculating an average useful life for each class or category was considered, however, the development of such a strategy was inhibited by Department data limitations.

Department data sources for ME valuation include asset acquisition date and asset disposal date data. Normally, this data would be sufficient for deriving useful life estimates since they provide a historical record of actual experience. However, historical records include the extended useful lives resulting from Service Life Extension Programs (SLEPs). The historical record does not provide the visibility necessary for determining the effects of SLEPS on end item useful lives.

Germane to the topic of useful life are the effects of prolonged combat operations on military equipment. The House Committee on Appropriations recently reported that one to two months' worth of operations in Iraq is equivalent to roughly one year's worth of peacetime activity.² In an April 2005 Report to Congress³, the Office of the Secretary of Defense provided information on the repair, replacement, and recapitalization requirements of U.S. ground force equipment employed in Iraq and Afghanistan. The report is based on a review initiated by the Secretary of Defense⁴ to assess the harsh operating conditions and high utilization rates in combat deployed to

¹ For example, cargo aircraft, bomber aircraft, helicopters, ships (by class), ground combat tracked vehicles.

² House Committee on Appropriations, *Department of Defense Appropriations Bill, 2005*, Report 180-553 (June 18, 2004), pp. 107-108.

³ Office of the Secretary of Defense, *Ground Force Equipment Repair, Replacement, and Recapitalization Requirements Resulting From Sustained Combat Operations*, Report to Congress, April 2005, p iii.

⁴ Secretary of Defense Memorandum to Director, Office of Management and Budget (March 26, 2004).

those locales. In Iraq and Afghanistan, equipment usage rates have run two to eight times higher than comparable peacetime rates. Equipment is also employed in harsher environments and in more demanding ways in combat missions.

The Army has hypothesized that, due to high utilization and a harsh operating environment, vehicles are experiencing systemic degradation beyond what normal maintenance and Reset activities can recover. Reset consists of a series of actions to restore units to a desired level of combat capability after returning from contingency operations. For equipment, these actions consist of cleaning, inspecting, and repairing, as well as replacing battle losses, washouts (equipment that is not economical to repair) and obsolete systems. To capture the degradation, the high utilization rates (in miles) are converted to an increased aging rate (in years).

There is difficulty in formalizing the method of accelerated aging. The crux of the problem lies in quantifying exactly how to convert between utilization and age. The RAND Corporation has recently published a study of how M1 tanks age, quantifying how aging affects the readiness of the tank as a whole, as well as characterizing the effects of aging on the tank's various sub-systems. An Army Aging Study is using this methodology as a model for further work on other key military systems: starting with HMMWV, AH-64, and M2/3.

Approach

Given the foregoing, the best data currently available for estimating useful lives of ME are Program Office estimates, which are based on Engineering estimates, and historical information on asset utility/usage.

The Department shall use the PMO estimates of useful life, exclusive of the effects of Service Life Extension Programs (SLEPs).

The Department shall use PMO estimates of changes in useful lives resulting from SLEPs and, after the completion of the SLEP, adjust useful life estimates accordingly.

The Department shall periodically evaluate the effects of excessive use on the estimated useful lives and adjust useful life estimates accordingly.

In addition, as information technology enables Department Managers to factor in the impact of differences in usage such as those described above, the Department will reconsider establishing general category guidelines relative to equipment useful lives.