Objective


Baseline Valuation Methodology

- Expense RDT&E costs, which are considered synonymous with research and development costs, when incurred, with the following exceptions:
  - Capitalize costs associated with the production of functional end items that will be placed in service.
  - Capitalize costs for equipment, such as special tooling and special test equipment acquired or constructed for research and development, which may have alternative future uses.

Mid-Term Methodology

- Same as Baseline.
Military Equipment Valuation Project

Position Paper: Research, Development, Test, and Evaluation Costs

Description of Issue

Statement of Federal Financial Accounting Standards (SFFAS) No. 4, Managerial Cost Accounting, requires the reporting of the “full cost” of outputs in the Entity’s general purpose financial reports. SFFAS No. 6, Accounting for Property, Plant, and Equipment, provides guidance on the components to be included in measuring the full cost of property, plant, and equipment outputs.

The Department of Defense (DoD) incurs substantial costs for research, development, test, and evaluation (RDT&E) as part of many programs, the objective of which is the acquisition of property and equipment. DoD accounts for these costs generally in the following budget activities, although such costs may be funded by non-RDT&E appropriations.

1. Budget Activity 1- Basic Research. Study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind.

2. Budget Activity 2- Applied Research. Systematic study to understand the means to meet a recognized and specific national security requirement.

3. Budget Activity 3 - Advanced Technology Development (ATD). Development of subsystems and components and efforts to integrate subsystems and components into system prototypes for field experiments and/or tests in a simulated environment.

4. Budget Activity 4 – Advanced Component Development and Prototypes (ACD&P). Efforts to evaluate integrated technologies and representative modes or prototype systems in a high fidelity and realistic operating environment are funded in this budget activity.

5. Budget Activity 5 - System Development and Demonstration (SDD). Engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production.
6. **Budget Activity 6 - RDT&E Management Support.** Includes research, development, test and evaluation efforts and funds to sustain and/or modernize the installations or operations required for general research, development, test and evaluation.

7. **Budget Activity 7, Operational System Development.** Includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and that anticipate production funding in the current or subsequent fiscal year.

The Federal Accounting Standards Advisory Board issued a standard on accounting and reporting of research and development costs, which requires the expensing of research and development costs. However, that standard does not explicitly address circumstances unique to the research and development programs at the Department of Defense. Examples of special circumstances are those in which research and development activities result in the production of fully functional military equipment and the acquisition of PP&E or other assets that have an alternative future use in research and development or other programs or activities. The Financial Accounting Standards Board (FASB) in its Statement on research and development costs addresses special circumstances.

AU Section 411, “Meaning of Presented Fairly in Accordance with Generally Accepted Accounting Principles,” of the *AICPA Professional Standards*, paragraph .14, provides guidance on where to turn in the absence of a pronouncement covered by rule 203 of the AICPA Code of Professional Ethics [ET section 203.01] or another source of established accounting principles. This Section provides that the auditor of financial statements of a federal governmental entity may consider other accounting literature, depending on its relevance in the circumstances. Other accounting literature includes, for example, FASAB Concepts Statements; the pronouncements referred to in categories (a) through (d) of paragraph .10 of AU Section 411 when not specifically made applicable to federal governmental entities by the FASAB; FASB Concepts Statements; GASB Statements, Interpretations, Technical Bulletins, and Concepts Statements; AICPA Issues Papers; International Accounting Standards of the International Accounting Standards Committee; pronouncements of other professional associations or regulatory agencies; Technical Information Service Inquiries and Replies included in AICPA Technical Practice Aids; and accounting textbooks, handbooks, and articles. The appropriateness of other accounting literature depends on its relevance to particular circumstances, the specificity of the guidance, and the general recognition of the issuer or author as an authority.
FASB Statement No.2, *Accounting for Research and Development Costs*, a pronouncement referred to in categories (a) through (d) of paragraph .10 of AU Section 411 not specifically made applicable to federal government entities by the FASAB, requires that all research and development costs encompassed by this Statement be charged to expense when incurred. The Statement also requires that materials and equipment or facilities that are acquired or constructed for research and development activities and that have alternative future uses (in research and development projects or otherwise) be capitalized as tangible assets when acquired or constructed. The provisions of this Statement are summarized in the Authoritative Guidance section, which follows the proposed policy section below.

It is important to distinguish between the nature of costs incurred and the source of funding. It is the nature of the costs incurred that determines the accounting treatment. In basic terms, research and development costs are to be expensed, but production costs are to be capitalized.

**Proposed Policy**

DoD should expense RDT&E costs (which are considered synonymous with research and development costs discussed above) when incurred with the following exceptions.

- Capitalize costs associated with the production of an end-item or end item component ¹(as defined in the paper on componentization)² that is produced for service.

- Capitalize the cost of equipment, such as special tooling and special test equipment, acquired or constructed for research and development, which may have alternative future uses (in research and development projects or otherwise).

DoD should disclose the total research and development costs charged to expense in each period for which a statement of net cost is presented.

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¹ Future functional end items or end item components do not include prototypes.
² This provision applies to circumstances in which at acquisition program commencement, Congress authorizes DoD to use RDT&E funding to produce end items that will be placed-in-service.
Authoritative Guidance

Statement of Federal Financial Accounting Standards No. 8 Supplementary Stewardship Reporting

Paragraph 96 provides the following: “Investment in research and development” refers to those expenses (emphasis added) incurred to support the search for new or refined knowledge and ideas and for the application or use of such knowledge and ideas for the development of new or improved products and processes with the expectation of maintaining or increasing national economic productive capacity or yielding other future benefits. Research and development is composed of:

- Basic research: systematic study to gain knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications toward processes or products in mind;

- Applied research: systematic study to gain knowledge or understanding necessary for determining the means by which a recognized and specific need may be met; and

- Development: systematic use of the knowledge and understanding gained from research for the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes.

Financial Accounting Standards Board Statement No. 2, Accounting for Research and Development Costs

Paragraph 8 defines research and development as follows:

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

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

Paragraph 9 provides the following as examples of activities that typically would be included in research and development, which are similar to the DoD RDT&E budget activities discussed above:

1. Laboratory research aimed at discovery of new knowledge;
2. Searching for applications of new research findings or other knowledge;
3. Conceptual formulation and design of possible product or process alternatives;
4. Testing in search for or evaluation of product or process alternatives;
5. Modification of the formulation or design of a product or process;
6. Design, construction, and testing of pre-production prototypes and models;
7. Design of tools, jigs, molds, and dies involving new technology;
8. Design, construction, and operation of a pilot plant that is not of a scale economically feasible to the enterprise for commercial production;
9. Engineering activity required for advancing the design of a product to the point that it meets specific functional and economic requirements and is ready for manufacture.

Paragraph 11 defines the following cost elements that should be identified with research and development activities:

a) Materials, equipment, and facilities. The costs of materials (whether from the enterprise’s normal inventory or acquired specifically for research and development activities) and equipment or facilities that are acquired or constructed for research and development activities and that have alternative future uses (in research and development projects or otherwise) shall be capitalized as tangible assets when acquired or constructed. The cost of such materials consumed in research and development activities and the depreciation of such equipment or facilities used in those activities are research and development costs. However, the costs of materials, equipment, or facilities that are acquired or constructed for a particular
research and development project and that have no alternative future uses (in other research and development projects or otherwise) and therefore no separate economic values are research and development costs at the time the costs are incurred.

b) Personnel. Salaries, wages, and other related costs of personnel engaged in research and development activities should be included in research and development costs.

c) Intangibles purchased from others. The costs of intangibles that are purchased from others for use in research and development activities and that have alternative future uses (in research and development projects or otherwise) shall be capitalized and amortized as intangible assets in accordance with APB Opinion No. 17. The amortization of those intangible assets used in research and development activities is a research and development cost. However, the costs of intangibles that are purchased from others for a particular research and development project and that have no alternative future uses (in other research and development projects or otherwise) and therefore no separate economic values are research and development costs at the time the costs are incurred.

d) Contract services. The costs of services performed by others in connection with the research and development activities of an enterprise, including research and development conducted by others in behalf of the enterprise.

e) Indirect costs. Research and development costs shall include a reasonable allocation of indirect costs. However, general and administrative costs that are not clearly related to research and development activities shall not be included as research and development costs.

Paragraph 12 requires that all research and development costs encompassed by this Statement be charged to expense when incurred.

However, paragraph 11 requires that materials and equipment or facilities that are acquired or constructed for research and development activities and that have alternative future uses (in research and development projects or otherwise) be capitalized as tangible assets when acquired or constructed.
Paragraph 13 states that disclosure should be made in the financial statements of the total research and development costs charged to expense in each period for which an income statement is presented.