

DoD Investment Budget Search: Search Tips

(formerly Research and Development Descriptive Summaries (RDDS))

- This database furnishes the Department of Defense (DoD) investment budgetary/narrative information from the President's Budget (PB) Submissions or Justification Books.
- Investment budgets include both Research, Development, Test and Evaluation (RDT&E) and Procurement.
- RDT&E programs are described on R-2s and identified by Program Elements (PE Numbers).
- Procurement programs are described on P-40s and are identified by Line Item Numbers.

This **Search Tips** document introduces basic search concepts, and describes advanced techniques that produce more efficient search results.

Getting Started with DoD Investment Budget Search

- Spelling
- <u>Capitalization</u>
- <u>Common Words</u>
- <u>Automatic "AND" Operator</u>
- <u>Using the "OR" Operator</u>
- Snippets
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Getting Started

To enter a query, type in a few descriptive words and press the **Enter** key or click the **Search** button for a list of relevant results. A page of results appears with a list of documents that are related to your search terms. The most relevant search results appear at the top of the page. By default, only pages that include all of your search terms are returned. To broaden or restrict the search, include fewer or more terms. You do not need to include "and" between the terms. For example, to search for TRADOC non-standard aviation documents, enter:

TRADOC non-standard aviation

Spelling

A single spelling suggestion is returned with the results for queries where the spell checker has detected a possible spelling mistake. The spell checker feature is context sensitive.

Capitalization

Search terms are **not** case sensitive. All letters, regardless of how you enter them, are handled as lower case. For example, these searches return the same results:

"Tactical Unmanned Ground Vehicle"

"tactical unmanned ground vehicle"

"Tactical unmanned ground vehicle"

Common Words

The search engine ignores common words and characters also known as stop words. These include most pronouns and articles. The search engine automatically disregards such terms as "where" and "how," as well as certain single digits and single letters. These terms rarely help to narrow a search and can significantly slow searching. The search engine indicates that a common word has been excluded by not highlighting the term on the results page.

If a common word is essential to getting the results you want, you can include it by putting a plus ("+") sign in front of it. Include a space before the "+" sign, but not after it. For example, to search for Mark XII, enter:

Mark +XII

Automatic "AND" Operator

By default, the search engine only returns results that include all of your search terms. There is no need to include "and" between terms. For example, to search for the Chemical and Biological Joint Bio Defense Program, enter:

Chemical Biological Joint Bio Defense Program

To broaden or restrict the search, include fewer or more terms.

Using "OR" Operator

You can expand your search by using the OR operator. To retrieve pages that include either word A or word B, use an uppercase OR between terms. For example, to search for the terms chemical or biological, enter: chemical OR biological

Snippets

Every search result lists one or more snippets, or excerpts from the document, to display the search terms in context. In the snippet, your search terms are displayed in bold text so that you can quickly determine if that result is from a page or document you want to visit.

Stemming

The search engine finds plurals and other forms of the query term entered. For example, searching for "park" yields "parks" or "parking." The search engine does not support "wildcard" or truncation searches.

Exclusion Words

You can exclude a word from your search by putting a minus sign ("-") immediately in front of the term you want to exclude. Make sure you include a space before the minus sign. For example, to search for Combat Feeding, Clothing, and Equipment excluding MRE from the search results, type the following query:

Combat Feeding Clothing Equipment -MRE

Phrase Searches

Surround your phrase with quotes to find an exact match e.g. "armored tank." Words enclosed in double quotes appear together in all returned documents. Phrase searches using quotation marks are useful when searching for specific names or words.

You can search for an exact phrase or name in the following ways:

- By enclosing the phrase in quotation marks.
- By using phrase connectors such as hyphens or periods in between every word of your search query.

Phrase connectors and quotation marks join your search words as a single unit. For example, the search engine treats the following queries as a phrase search even though the search words are not enclosed in quotation marks.

Air-Force-Electronic-Warfare

also treated as a phrase:

airborne.electronic.attack

Refining Your Search

Since the search engine returns only documents that contain all of the words in your query, refining or narrowing your search is as simple as adding more words to the search terms you have already entered.

The refined query returns a subset of the pages that were returned by your original broad query. If that does not get the results that you want, you can try to exclude words or search for exact phrases. It is also important to note that changing the order of your search terms can deliver different results.

Budget Terms

The search engine enables you to search RDT&E and Procurement collections by all of the following data elements as well as document content: *Budget, Program Element Title, Line Item Title, Program Element Number, Line Item Number, Appropriation Number, Budget Activity, Budget Sub Activity, Fiscal Year, and Agency.*

Budget: RDT&E or Procurement. RDT&E is based on procuring a period of performance. All other investment funds are procurement appropriations for specific end-items.

Program Element Title (PE Title): Name that represents a specific military capability or support activity.

Line Item Title: Name of a further sub-division, below the Program Element Title, that represents a particular expenditure, such as program, subprogram, or object.

Program Element Number (PE Number): Code that represents a specific military capability or support activity. Research, Development, Test, and Evaluation (RDT&E) programs are described on R-2s and identified by Program Elements (PE Numbers).

Line Item Number: Code for a further sub-division, below the Program Element Number, that represents a particular expenditure, such as program, subprogram, or object. Procurement programs are described on P-40s and are identified by Line Item Numbers.

Appropriation Number: Code for a further sub-division, below the Line Item Number, that represents the amount that an agency may obligate during the period of time specified in the respective appropriation act.

Budget Activity (BA): A specific and distinguishable line of work performed by a governmental unit to discharge a function for which the governmental unit is responsible. Activities within most accounts identify the purposes, projects, or types of activities financed.

Budget Sub Activity: A specific and distinguishable line of work performed by a governmental unit to discharge a sub-function for which the governmental unit is responsible.

Fiscal Year (FY): Period that the appropriation covers: October 1 through September 30.

Agency: A major organizational unit or command.

Budget Approval Metrics Display Tips

The Budget Approval Metrics page shows the budget amount that was requested versus the budget amount that was appropriated per agency for each year starting in 2011 and up to the last fiscal year. The budget amount that was requested is shown in blue. The budget amount that was approved, or appropriated, is displayed in yellow.

Since there are too many Program Elements per agency to display each one individually, they are rolled up for each agency. This provides some insight as to the individual Program Element (PE) budget approval rate.

This information is parsed from XML documents that have been generated since 2011.

Budget Activity Definitions (2000 – 2004)

DoD Financial Management Regulation Volume 2B, Chapter 5

0502 UNIFORM BUDGET AND FISCAL ACCOUNTING CLASSIFICATION

050201 RDT& E Budget Activities:

The RDT&E budget activities are broad categories reflecting different types of RDT&E efforts. The definitions are provided below.

Budget Activity 1, Basic Research. Basic research is systematic 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. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress. Basic research may lead to: (a) subsequent applied research and advanced technology developments in Defense-related technologies, and (b) new and improved military functional capabilities in areas such as communications, detection, tracking, surveillance, propulsion, mobility, guidance and control, navigation, energy conversion, materials and structures, and personnel support. *Program elements in this category involve pre-Milestone A efforts*

Budget Activity 2, Applied Research. Applied research is systematic study to understand the means to meet a recognized and specific national security requirement. It is a systematic application of knowledge to develop useful materials, devices, and systems or methods. It may include design, development, and improvement of prototypes and new processes to meet general mission area requirements. Applied research translates promising basic research into solutions for broadly defined military needs, short of system development. This type of effort may vary from systematic mission-directed research beyond that in Budget Activity 1 to sophisticated breadboard hardware, study, programming and planning efforts that establish the initial feasibility and practicality of proposed solutions to technological challenges. It includes studies, investigations, and non-system specific technology efforts. The dominant characteristic is that applied research is directed toward general military needs with a view toward developing and evaluating the feasibility and practicality of proposed solutions and determining their parameters. Applied Research precedes system specific research. Program control of the Applied Research program element is normally exercised by general level of effort. *Program elements in this category involve pre-Milestone B efforts, also known as Concept and Technology Development phase tasks, such as concept exploration efforts and paper studies of alternative concepts for meeting a mission need.*

Budget Activity 3, Advanced Technology Development (ATD). This budget activity includes 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. ATD includes concept and technology demonstrations of components and subsystems or system models. The models may be form, fit and function prototypes or scaled models that serve the same demonstration purpose. The results of this type of effort are proof of technological feasibility and assessment of subsystem and component operability and producibility rather than the development of hardware for service use. Projects in this category have a direct relevance to identified military needs. Advanced Technology Development demonstrates the general military utility or cost reduction potential of technology when applied to different types of military equipment or techniques. *Program elements in this category involve pre-Milestone B* efforts, such as system concept demonstration, joint and Service-specific experiments or Technology

Demonstrations. Projects in this category do not necessarily lead to subsequent development or procurement phases.

Budget Activity 4, Advanced Component Development and Prototypes (ACD&P). Efforts necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment are funded in this budget activity. The ACD&P phase includes system specific efforts that help expedite technology transition from the laboratory to operational use. Emphasis is on proving component and subsystem maturity prior to integration in major and complex systems and may involve risk reduction initiatives. *Program elements in this category involve efforts prior to Milestone B and are referred to as advanced component development activities and include technology demonstrations. Completion of Technology Readiness Levels 6 and 7 should be achieved for major programs.* Program control is exercised at the program and project level. A logical progression of program phases and development and/or production funding must be evident in the FYDP.

Budget Activity 5, System Development and Demonstration (SDD). SDD programs have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production. This budget activity is characterized by major line item projects and program control is exercised by review of individual programs and projects. Prototype performance is near or at planned operational system levels. Characteristics of this budget activity involve mature system development, integration and demonstration to support Milestone C decisions, and conducting live fire test and evaluation (LFT&E) and initial operational test and evaluation (IOT&E) of production representative articles. A logical progression of program phases and development and production funding must be evident in the FYDP consistent with the Department's full funding policy.

Budget Activity 6, RDT&E Management Support. This budget activity 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. Test ranges, military construction, maintenance support of laboratories, operation and maintenance of test aircraft and ships, and studies and analyses in support of the RDT&E program are funded in this budget activity. Costs of laboratory personnel, either inhouse or contractor operated, would be assigned to appropriate projects or as a line item in the Basic Research, Applied Research, or Advanced Technology Development program areas, as appropriate. Military construction costs directly related to major development programs are included.

Budget Activity 7, Operational System Development. This budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year. All items are major line item projects that appear as RDT&E Costs of Weapon System Elements in other programs. *Program control is exercised by review of individual projects. Programs in this category involve systems that have received Milestone C approval.* A logical progression of program phases and development and production funding must be evident in the FYDP, consistent with the Department's full funding policy.

Budget Activity Definitions (2005 – 2016)

Budget Activity 1, Basic Research.

Basic research is systematic 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. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress. Basic research may lead to: (a) subsequent applied research and advanced technology developments in Defense-related technologies, and (b) new and improved military functional capabilities in areas such as communications, detection, tracking,

surveillance, propulsion, mobility, guidance and control, navigation, energy conversion, materials and structures, and personnel support. Program elements in this category involve pre-Milestone A efforts.

Budget Activity 2, Applied Research.

Applied research is systematic study to understand the means to meet a recognized and specific need. It is a systematic expansion and application of knowledge to develop useful materials, devices, and systems or methods. It may be oriented, ultimately, toward the design, development, and improvement of prototypes and new processes to meet general mission area requirements. Applied research may translate promising basic research into solutions for broadly defined military needs, short of system development. This type of effort may vary from systematic mission-directed research beyond that in Budget Activity 1 to sophisticated breadboard hardware, study, programming and planning efforts that establish the initial feasibility and practicality of proposed solutions to technological challenges. It includes studies, investigations, and non-system specific technology efforts. The dominant characteristic is that applied research is directed toward general military needs with a view toward developing and evaluating the feasibility and practicality of proposed solutions and determining their parameters. Applied Research precedes system specific technology investigations or development. Program control of the Applied Research program element is normally exercised by general level of effort. Program elements in this category involve pre-Milestone B efforts, also known as Concept and Technology Development phase tasks, such as concept exploration efforts and paper studies of alternative concepts for meeting a mission need.

Budget Activity 3, Advanced Technology Development (ATD).

This budget activity includes 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. ATD includes concept and technology demonstrations of components and subsystems or system models. The models may be form, fit and function prototypes or scaled models that serve the same demonstration purpose. The results of this type of effort are proof of technological feasibility and assessment of subsystem and component operability and producibility rather than the development of hardware for service use. Projects in this category have a direct relevance to identified military needs. Advanced Technology Development demonstrates the general military utility or cost reduction potential of technology when applied to different types of military equipment or techniques. Program elements in this category involve pre-Milestone B efforts, such as system concept demonstration, joint and Service-specific experiments or Technology Demonstrations and generally have Technology Readiness Levels of 4, 5, or 6. Projects in this category do not necessarily lead to subsequent development or procurement phases, but should have the goal of moving out of Science and Technology (S&T) and into the acquisition process within the future years defense program (FYDP). Upon successful completion of projects that have military utility, the technology should be available for transition.

Budget Activity 4, Advanced Component Development and Prototypes (ACD&P).

Efforts necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment are funded in this budget activity. The ACD&P phase includes system specific efforts that help expedite technology transition from the laboratory to operational use. Emphasis is on proving component and subsystem maturity prior to integration in major and complex systems and may involve risk reduction initiatives. Program elements in this category involve efforts prior to Milestone B and are referred to as advanced component development activities and include technology demonstrations. Completion of Technology Readiness Levels 6 and 7 should be achieved for major programs. Program control is exercised at the program and project level. A logical progression of program phases and development and/or production funding must be evident in the FYDP.

Budget Activity 5, System Development and Demonstration (SDD).

SDD programs have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full-rate production. This budget activity is characterized by major line item projects and program control is exercised by review of individual programs and projects. Prototype performance is near or at planned operational system levels. Characteristics of this budget activity involve mature system development, integration and demonstration to support Milestone C decisions, and conducting live fire test and evaluation and initial operational test

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Budget Activity 6, RDT&E Management Support.

This budget activity 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. Test ranges, military construction, maintenance support of laboratories, operation and maintenance of test aircraft and ships, and studies and analyses in support of the RDT&E program are funded in this budget activity. Costs of laboratory personnel, either in-house or contractor operated, would be assigned to appropriate projects or as a line item in the Basic Research, Applied Research, or ATD program areas, as appropriate. Military construction costs directly related to major development programs are included.

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Additional Budget Related Items

Exhibit P-40 - http://comptroller.defense.gov/BudgetMaterials/fy2015budgetjustification.aspx

Congressional Justification of Appropriations Books - <u>http://www.treasury.gov/about/budget-</u>performance/Pages/cj-index.aspx

Defense Budget Materials - FY2016 - http://comptroller.defense.gov/budgetmaterials/budget2016.aspx

Defense Budget Materials - FY2015 - http://comptroller.defense.gov/budgetmaterials/budget2015.aspx

DoD Congressional Budget Data - http://www.dtic.mil/congressional_budget/

Procurement - http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2015/fy2015_p1.pdf

Under Secretary of Defense (Comptroller) - http://comptroller.defense.gov/

Provides all of the information you need to understand the budget and financial management policy of the Department of Defense. In addition to budget numbers, justification materials, and performance measures, you will also find information about the Department's ongoing effort to improve efficiency and accountability.