DEFENSE LOGISTICS AGENCY

FISCAL YEAR (FY) 2004/2005 BIENNIAL BUDGET ESTIMATES FEBRUARY 2003



RESEARCH, DEVELOPMENT, TEST AND EVALUATION

UNCLASSIFIED

DEFENSE LOGISTICS AGENCY RESEARCH AND DEVELOPMENT, DEFENSE-WIDE DESCRIPTIVE SUMMARIES FOR FISCAL YEAR (FY) 2004/2005 PRESIDENT'S BUDGET FEBRUARY 2003

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UNCLASSIFIED FISCAL YEAR (FY) 2004/2005 RDT&E PROGRAM ELEMENT SUMMARY (R-1) (Dollars in Thousands)

| Program Element <u>Number</u> | <u>Title</u> | Budget <u>Activity</u> | FY 2002 Actual | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate |
|-------------------------------------|---|---------------------------|-------------------|---------------------|---------------------|---------------------|
| 0603712S | Logistics R&D Technology Demonstration | 03 | 88,803 | 129,291 | 22,359 | 23,542 |
| 0603805S | Dual Use Application Programs (NCMS/CTMA) | 03 | 6,000 | 0 | 0 | 0 |
| 0305840S | Electronic Commerce | 05 | 0 | 0 | 2,360 | 2,345 |
| 0605798S | Defense Technology Analysis | 06 | 5,626 | 5,017 | 5,209 | 5,279 |
| 0708011S | Industrial Preparedness/ ManTech | 07 | 40,830 | 20,728 | 16,163 | 11,070 |
| 0708012S | Logistics Support Activities | 07 | 0 | 28,182 | 35,781 | 11,457 |
| | TOTAL - DIRECT | | 141,259 | 183,218 | 81,872 | 53,693 |

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| Exhibit | Date: Feb | ruary 2003 | | | | | | |
|--|--|------------|---------|---------|---------|---------|---------|---------|
| Appropriation/Budget Activity RDT&E, Defense-wide BA 3 | R-1 Item Nomenclature: Logistics R&D Technology Demonstration 0603712S | | | | | | | |
| Cost (\$ in millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Total PE Cost | 88.803 | 129.291 | 22.359 | 23.542 | 24.905 | 26.565 | 27.022 | 27.488 |
| Project 1: Material Acquisition: Electronics | 9.232 | 16.537 | 9.673 | 10.160 | 10.267 | 10.326 | 10.494 | 10.678 |
| Project 2: Computer to Computer Negotiations | 2.965 | 3.562 | | | | | | |
| Project 3: Pay per Use Logistics System | 2.372 | 1.747 | | | | | | |
| Project 4: Aging Aircraft Sustainment Technology (AAST) | 4.816 | 5.349 | 5.087 | 5.293 | 5.388 | 5.469 | 5.557 | 5.652 |
| Project 5: Virtual Reality Medical Assembly | 1.231 | 0. 594 | 1.923 | 2.946 | 2.947 | 1.935 | 1.968 | 2.002 |
| Project 6: Diminishing Manufacturing Source Data (DMS) | 1.000 | 0.974 | | | | | | |
| Project 7: Computer Assisted Technology Transfer (CATT) | 2.800 | 2.723 | | | | | | |
| Project 8: Competitive Sustainment (CS) | | 0.965 | 0.986 | 1.196 | 2.356 | 4.893 | 5.546 | 5.402 |
| Project 9: Supply Chain Management | 1.987 | 15.564 | 3.411 | 3.457 | 3.457 | 3.453 | | |
| Project 10: Agent Based Logistics Processes | | | | | | | 2.969 | 3.267 |
| Project 11: eMASS (Completion Project) | | | 1.279 | 0.490 | 0.490 | 0.489 | 0.488 | 0.487 |
| Project 12: Defense Microelectronics Activity (DMEA) | 62.400 | 58.321 | | | | | | |
| Project 13: Other Congressionally Added Programs (OCAs) | | 22.955 | | | | | | |

A. Mission Description and Budget Item Justification:

The DoD logistics vision calls for providing flexible, cost effective and prompt materiel support, logistics information and services, achieving the leanest possible infrastructure and the employment of the best commercial and government sources and practices. The DLA Logistics R&D

| Exhibit R-2, RDT&E Budget Item Justification | Date: February 2003 | |
|--|--|----------|
| Appropriation/Budget Activity | R-1 Item Nomenclature: | |
| RDT&E, Defense-wide BA 3 | Logistics R&D Technology Demonstration | 0603712S |

program will develop and demonstrate high risk, high payoff technology that will provide a significantly higher level of support at lower costs, than would be otherwise attainable. This DLA program is a key part of the DARPA/DLA Advanced Logistics Program. Focused Logistics is one of the five basic tenants of Joint Vision 2020. The DLA Logistics R&D program contributes directly to achieving JV 2020's vision of logistics "support in hours or days versus weeks." The objective of the Advanced Logistics Program is a collaborative environment that will allow the Operations community (J3) and Logistics planning community (J4), TRANSCOM, and DLA to seamlessly interact on operations planning and execution of wartime operations. In addition, DLA will use the same system in peacetime to significantly reduce Logistics Response Time and reduce the cost of DLA operations while maintaining readiness. The following synopses cover the programs under the DLA Log R&D PE:

B. Program Change Summary: (Show total funding, schedule, and technical changes for the program element that have occurred since the previous President's Budget Submission)

| | <u>FY 02</u> | <u>FY 03</u> | <u>FY 04</u> | <u>FY 05</u> |
|---|--------------|--------------|--------------|--------------|
| Previous President's Budget | 84.043 | 25.451 | 27.735 | 28.689 |
| Current President's Budget | 88.803 | 129.291 | 22.359 | 23.542 |
| Total Adjustments | +4.760 | +103.840 | -5.376 | -5.147 |
| Congressional increases | | +107.450 | | |
| Revised inflation rate | -0.228 | -1.092 | -0.382 | -0.552 |
| Congressional program reductions/ rescissions | | -2.518 | | |
| Reprogrammings/transfers | +5.000 | | | |
| Program adjustments | -0.012 | | -4.994 | -4.595 |
| | | | | |

Change Summary Explanation: FY 2002 reflects a reduction due to revised inflation rates (-\$0.228 million), the Log R&D PE's pro-rata share of a DoD Intra-Agency Council bill (-\$0.012 million), and a reprogramming of +\$5.000 million for the Miniaturized Wireless System (DMEA) program. FY 2003 reflects (+\$107.450 million) congressionally added dollars for several electronic/related DMEA projects (+\$59.950 million); Diminishing Manufacturing Warehouse Solution (+\$1.0 million); Microelectronics Testing Technology/Obsolescence Program (+\$7.1 million); Milstar Painting and Coating Pollution Prevention (+\$1.0 million); CATT (+\$2.8 million); several OCAs for Homeland Defense Technology Collaboration Center (+\$1.8 million); Vehicle Fuel Cell Program (+\$7.0 million); Fuel Cell Locomotive (+\$1.0 million); Agile Port Demonstration (+\$4.3 million); New England Manufacturing Supply Chain (+\$6.0 million); and Maintainers Remote Logistics Network (+\$3.5 million). FY 2003 also reflects congressional adjustments per Section 8029 Federally Funded Research and Development Centers (FFRDCs) (-\$0.219 million), Section 8100 Business Process Reform (-\$1.216 million), Section 8109 Reducing Cost Growth in IT development (-\$0.289); Section 8135 Rescission (-\$0.794); and an FY 2003 inflation adjustment (-\$1.092 million). FYs 2004 and 2005 TOA net adjustments (-\$4.994 million in FY 2004, and -\$4.595 million in FY 2005 reflect completion of funding for the Computer to Computer Negotiations (-\$3.809 million in FY 2004 and -\$2.070 million in FY 2005); R&D funding for completion of the IT eMASS system (+\$1.300 million in FY 2004 and +\$0.500 million in FY 2005; and inflation adjustments (-\$0.382 million in FY 2004).

| | Date: Febr | uary 2003 | | | | | | | |
|-------------------------------|------------|-----------|-------|--|-------------------------|--------|--------|--------|--|
| Appropriation/Budget Activity | | | | | Project Name and Number | | | | |
| RDT&E, Defense-wide BA 3 | | | | Material Acquisition: Electronics (MAE), Project 1 | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | |
| Project 1: MAE | 9.232 | 16.537 | 9.673 | 10.160 | 10.267 | 10.326 | 10.494 | 10.678 | |
| RDT&E Articles Quantity - N/A | | | | | | | | | |

A. Mission Description and Budget Item Justification: Develop a capability to emulate most obsolete digital integrated circuits (ICs) in the federal catalog using a single, flexible manufacturing line. DoD has estimated that \$2.9B is spent every five years in redesigning circuit card assemblies. Much of these redesigns are driven by IC obsolescence. The commercial suppliers of ICs typically terminate production lines every 18 months, moving on to the next generation of ICs. Because DoD maintains weapons systems much longer than 3 years, this creates an obsolescence problem that can only be overcome through buying excessive inventories of parts before the production lines close or redesigning the next higher assembly to eliminate the obsolete part. DLA, as the manager of 88% of the IC supply class, must have a capability to manufacture these devices. This project develops this capability and will expand it to succeeding generations of obsolete ICs through the Advanced Microcircuit Emulation program.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|--------|
| Accomplishment/ Effort/Subtotal Cost | 9.232 | 9.629 | 9.673 | 10.160 |
| RDT&E Articles Quantity – N/A | | | | |

The MAE project covers development of IC fabrication technology to continue to expand the capability to emulate succeeding generations of discontinued technology. This will include Low Rate Initial Production of earlier development efforts (e.g., 200K emulation Array) and integration of Advanced Tooling and development of future capabilities (e.g., High Speed/ High Density Emulation Arrays). Technology development will continue to deeper sub-micron (<1.0 um) feature sizes and faster operating speeds. Development of IC design capability and design model library to realize emulation performance and functional requirements outcomes using developed IC fabrication technology. This design capability will address both standard catalog ICs and Application Specific Integrated Circuits (ASICs) and will accommodate both in-house and third-party (principally OEM) design requirements.

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | | 6.908 | | |
| RDT&E Articles Quantity – N/A | | | | |

The congressionally added Microelectronics Testing Technology/Obsolescence Program will test, evaluate, and assess wide range microelectronics components that comprise so many of today's sophisticated military, and commercial systems.

| Exhibit R-2a, RDT&E Project Justification Date: February | | | | | | | | | |
|--|-------|-------|-------|--|-------|-------|-------|-------|--|
| Appropriation/Budget Activity Project Name and Number | | | | | | | | | |
| RDT&E, Defense-wide BA 3 | | | | Computer to Computer Negotiations, Project 2 | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | |
| Project 2: Computer to Computer Negotiations | 2.965 | 3.562 | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | |

A. Mission Description and Budget Item Justification: Current DLA/Service systems are unable to allow accurate visibilities to respond to the rapidly changing requirements. Cross-organizational system interfaces are needed for the supply chain decision-making process. The re-engineering effort under BSM does provide for eventual solution, however there are immediate needs to identify areas of gaps and develop interfaces, such as the integration of Service ERP system to the DLA Depot inventory system (DSS). Approach: The purpose of this activity is to capture supply-chain-wide visibilities and to use knowledge based intelligent workflow technologies to develop system interfaces that support the establishment of automated business processes and transactions between the Services and DLA.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 2.965 | 3.562 | | |
| RDT&E Articles Quantity – N/A | | | | |

Initiated the R&D development towards the expansion of computer software agent to agent negotiation techniques utilizing the ALP architecture in support of DLA application in classes I(Subsistence) and VIII(Medical) supply support plans. US Army Medical Materiel Agency (USAMMA) and Defense Supply Center Philadelphia, Medical (DSCP-M) need to develop a shared systems interface for demand forecasting and achievement of medical set assembly goals in FY02. A prototype will be developed to mitigate the long lead-times and static nature in medical assembly processes and address gaps in the current legacy ERP systems at DLA and USAMMA.

| Exhibit R-2a, RDT&E Project Justification Date: February 200 | | | | | | | | | |
|--|-------|-------|-------|-------------|-----------------|-------|-------|-------|--|
| Appropriation/Budget Activity Project Name and Number | | | | | | | | | |
| RDT&E, Defense-wide BA 3 | | | | Pay per Use | Logistics, Proj | ect 3 | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | |
| Project 3: Pay Per Use Logistics System | 2.372 | 1.747 | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | |

A. Mission Description and Budget Item Justification: The emergence of complex networked computer systems promises to enhance DoD Logistics functions with new sources of information and services. Our vendor communities are developing rich sources of commodity information and information services. Functions that are currently done by government personnel and contractors might be better done on a "pay-per-use" basis by these new sources. For example, in times of conflict, the number of transactions processed by DLA systems do not increase greatly, but the number of items purchased does. The job of finding adequate sources and product equivalents is still labor intensive. Access to web-based information sources would improve procurement efficiency and the readiness of our customers. There are two basic issues that must be solved if we are to make use of these new capabilities. First, there must be a level of trust and assurance established with our commercial partners. This program will develop ways of automating information assurance relationships, especially in an environment that might be under attack. Second, the richness of information that is exchange must be increased. Use of human cognitive engineering will be used to support the functions of our knowledge workers to increase their efficiency while improving the quality of the services provided.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 2.372 | 1.747 | | |
| RDT&E Articles Quantity – N/A | | | | |

- Initial awards for concept studies.
- The concepts were evaluated and prototypes will begin to be developed.
- Explore using the Advanced Logistics Program (ALP) technology to allow for interoperability between existing DLA applications.
- C. Other Program Funding Summary: N/A

| | Exhibit R-2a, RDT&E Project Justification I | | | | | | | |
|-------------------------------|---|-------------------|-------|-------|-------|-------|-------|-------|
| Appropriation/Budget Activity | | | | | | | | |
| RDT&E, Defense-wide BA 3 | | (AAST), Project 4 | | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 4: AAST | 4.816 | 5.349 | 5.087 | 5.293 | 5.388 | 5.469 | 5.557 | 5.652 |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: The primary mission is to improve DLA support to our customers who are operating aging aircraft systems. Focus is on improving visibility of demand generation and DLA's ability to respond once demands are received.

Part of the Aging Aircraft Sustainment Program is the Corrosion Prevention feature. The Virtual Corrosion Control Consortium (V-3C) is a web based information aggregation and collaboration capability designed to improve the productivity of both the public and private sectors of the corrosion community without altering the individual stakeholders' goals, objectives and functional processes. It provides a forum for communication and technical information exchange among all parties interested in corrosion prevention and treatment from basic research through application. An incremental development approach provides the ability to tailor capabilities based on "lessons learned" and evolving community needs. This task is the ongoing support of the Assistant Deputy Under Secretary of Defense, Maintenance Policy, Programs, and Resources (ADUSD/MPPR). Their mission is to provide responsible and cost-effective support to ensure readiness and sustainability for the total force. The vision of the ADUSD/MPPR is by FY2006, the joint logistics process will be a highly efficient, integrated system that ensures required support to the war-fighter. The Virtual Corrosion Control Consortium (V-3C) project provides a corrosion prevention and control information management and distribution center that will be life-cycle oriented and will serve as a leader in corrosion research, industry coordination, and information dissemination to all authorized agencies and components. In FY 2002 the Corrosion Prevention Info Distribution Center (CPIDC) a congressional add was funded under AAST (\$1.0 million). In FY 2003, Milstar Painting and Coating Pollution Prevention, a congressionally added program that will train in sound ways to coat aircraft, ships and vehicles; establish training sites at military bases, and create a MilStar internet database network, is funded under AAST (\$0.973 million).

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|-------------------------------|-------|-------|-------|-------|
| AAST | 4.816 | 4.376 | 5.087 | 5.293 |
| RDT&E Articles Quantity - N/A | | | | |

Investigate and develop methods and tools for improved parts situation awareness in order to employ a more proactive approach to aircraft parts availability and supply. This thrust improves DLA's ability to predict DoD customer needs for increasing fleet maintenance requirements on aging aircraft. It includes efforts such as the development of various data extraction tools and techniques to access a wide variety of customer and supplier data bases, systems, or networks, extract relevant information, and present that information in a tailored fashion for use by program managers, maintainers, item managers, and buyers. Characterization of items of supply unique to the problems associated with the maintenance requirements for aging aircraft and their impact on DoD customer metrics such as fleet readiness levels, depot repair cycle time, cost etc.

| | Exhibit R-2 | 2a, RDT&E Pro | ject Justificati | on | | | Date: Feb | ruary 2003 | |
|-------------------------------|-------------|---------------|------------------|-------------|-------------|----------------------|-----------------|------------|--|
| Appropriation/Budget Activity | | | | Project Nar | ne and Numb | er - Aging A | ircraft Sustain | nment | |
| RDT&E, Defense-wide BA 3 | | | | Technology | (AAST), Pro | oject 4 | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | 06 FY 07 FY 08 FY 09 | | | |
| Project 4: AAST | 4.816 | 5.349 | 5.087 | 5.293 | 5.388 | 5.469 | 5.557 | 5.652 | |
| RDT&E Articles Quantity - N/A | | | | | | | | | |
| | | | | | | | | | |
| | | FY 02 | | 03 | FY 04 | | FY 05 | | |
| Milstar Painting and Coating | | | | 973 | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | |

Identify key functions for utilization of information in decision making relative to aircraft maintenance, parts supply, or sustaining engineering needs. Develop the concept of proactive sharing of information between various field activities, DLA ICP's, and weapons system Program Managers for utilization in planning or decision-making. Characterization of items of supply unique to the problems associated with the maintenance requirements for aging aircraft and their impact on DoD customer metrics such as fleet readiness levels, depot repair cycle time, cost etc.

| | Exhibit R-2a, RDT&E Project Justification | | | | | | | |
|--|---|--------|-------|-------|-------|-------|-------|---------|
| Appropriation/Budget Activity Project Name and Number – Virtual Reality Medical Assembly | | | | | | | | ssembly |
| RDT&E, Defense-wide BA 3 | (VRMA), Project 5 | | | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 5: VRMA | 1.231 | 0. 594 | 1.923 | 2.946 | 2.947 | 1.935 | 1.968 | 2.002 |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: Defense Logistics Agency (DLA) has the responsibility to procure Medical Assemblies for the Services. These Medical Assemblies are complex in nature and change frequently to accommodate new types of form, fit, function, and utility. This program will attempt to utilize technology to reduce lead times, to reduce the logistics footprint, and to reduce overall assembly lifecycle costs.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|--------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 1.231 | 0. 594 | 1.923 | 2.946 |
| RDT&E Articles Quantity – N/A | | | | |

This effort began in FY 2001 with Joint Application Development (JAD) sessions to formalize requirements. Market analysis will be performed to identify the most appropriate virtual reality technology to employ, and detailed system specifications will be created. In FY 2002, a prototype of first-aid kits will be developed. In addition, formal requirements will be developed for a more complex medical assembly. In FY 2003, the first-aid kit assembly will be made ready for a production environment, the more complex medical assembly will be prototyped, and commercial data interfaces will be established. In FY 2004, DLA will prototype an entire field hospital assembly and will look to apply the technology to other processes within DLA. In FY 2005, DLA plans for full-scale production and demonstrations.

| | Exhibit R-2 | a, RDT&E Pro | on | | | Date: Feb | ruary 2003 | | |
|-------------------------------|-------------|--|-------|------------------------------|-------|-----------|------------|-------|--|
| Appropriation/Budget Activity | | Project Name and Number – Diminishing Ma | | | | | | | |
| RDT&E, Defense-wide BA 3 | | | | Source Data (DMS), Project 6 | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | |
| Project 6: DMS | 1.000 | 0.974 | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | |

A. Mission Description and Budget Item Justification: As aircraft, ships, and other vehicles are being expected to operate much longer than originally designed, the supply of parts for these systems has become a significant problem. When systems and components can no longer be obtained they are called diminishing manufacturing source (DMS) problems. Throughout the military, there are literally hundreds of independent operations attempting to solve steadily worsening DMS problems. Because these operations are very "stove-piped" in their existence, they do not share information across weapon systems, even though many of the parts are common. The only method to decrease this ever expanding cost to solve DMS problems would be to have a central repository of part solutions, shared across all weapon systems and all services. In order to create a central repository of military parts, a very large data warehouse will need to be created and populated with solutions to these DMS part problems.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 1.000 | 0.974 | | |
| RDT&E Articles Quantity – N/A | | | | |

Develop a central repository of part solutions, shared across all weapon systems and all services. In order to create a central repository of military parts, a very large data warehouse will need to be created and populated with solutions to these DMS part problems.

| | Exhibit R-2a, RDT&E Project Justification | | | | | | | ruary 2003 | |
|-------------------------------|---|-----------------------------------|-------|----------------------------|-------|-------|-------|------------|--|
| Appropriation/Budget Activity | | Project Name and Number –Computer | | | | | | | |
| RDT&E, Defense-wide BA 3 | | | | Transfer (CATT), Project 7 | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | |
| Project 7: CATT | 2.800 | 2.723 | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | |

A. Mission Description and Budget Item Justification: This initiative is necessary to identify and establish commercial manufacturing capabilities so that DLA Centers can acquire parts as they are needed (on demand) rather than investing in excessive stock, or risking non-availability of essential parts when needed. Contracting relationships will be established to obtain small quantities of military unique items of low demand, with significantly lower costs and greatly improved response time. This is an effort to use private sector manufacturers, in addition to all other measures to obtain parts quickly. CATT establishes a network of companies to produce parts in a very short production lead-time with minimum administration. This is a congressionally added program.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 2.800 | 2.723 | | |
| RDT&E Articles Quantity – N/A | | | | |

Develop forecasting tools for low demand items. Develop corrosion protective compounds to replace paint primer systems. Provide support for Warner Robins ALC maintained aircraft spare parts.

| | Exhibit R-2a, RDT&E Project Justification | | | | | | | ruary 2003 |
|-------------------------------|---|---|-------|-----------|-------|-------|-------|------------|
| Appropriation/Budget Activity | | Project Name and Number – Competitive Sustainment (CS | | | | | | |
| RDT&E, Defense-wide BA 3 | | | | Project 8 | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 8: CS | | 0.965 | 0.986 | 1.196 | 2.356 | 4.893 | 5.546 | 5.402 |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: Competitive Sustainment (CS) was added by Congress in FY 2000 in recognition of the need to make a substantial reduction to the cost of support for aging weapon systems.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | | 0.965 | 0.986 | 1.196 |
| RDT&E Articles Quantity – N/A | | | | |

A competitive source selection process was conducted for a manager of an industry coalition to conduct the work. The project conducts industry/Government pilots in the following five areas: 1) effective supply partnerships; 2) significant improvement in quality and access to technical data; 3) a streamlined maintenance process; 4) upgrade strategies for increased reliability and 5) innovative training. The goals are to reduce total costs of spares/replacements, cut the time from requirement to delivery for supplies and cut repair cycle.

| | Exhibit R-2a, RDT&E Project Justification | | | | | | | |
|-------------------------------|---|-----------------|-------|-------|-------|-------|-------|-------|
| Appropriation/Budget Activity | ctivity Project Name and Number - Supply Chain Management | | | | | | | |
| RDT&E, Defense-wide BA 3 | | (SCM) Project 9 | | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 9: SCM | 1.987 | 15.564 | 3.411 | 3.457 | 3.457 | 3.453 | | |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: The DLA mission is to get the right item, at the right time, to the right place, at the right price, every time, in support of America's warfighter. To accomplish its mission DLA must use an integrated combat logistics solution that is coordinated among the services and across DoD to meet all combat support requirements in peace and war. There is a need for the Agency to stay abreast of the latest supply chain management principals and techniques that will improve the supply availability of DLA managed items by assembling supply chains to shorten lead times and reduce costs. The Agency must ensure that outsourcing strategies are coordinated; performance measures are in place to measure effectiveness, that the organizational structure promotes successful supply chain management and to incorporate the latest electronic commerce initiatives into its supply chain. The congressionally added Defense Supply Chain Technology Program (DSCT) program is funded here in FY 2003 (\$11.791 million).

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|-------------------------------|-------|--------|-------|-------|
| SCM/DSCT | 1.987 | 15.564 | 3.411 | 3.457 |
| RDT&E Articles Quantity - N/A | | | | |

We are managing both the baseline SCM (3.773M) and congressionally added DSCT (11.791) as a single program. Our program will initiate some 20 Supply Chain Management Projects for DLA and the Services, which are in the following areas as they emerge from our current transformation efforts: supplier facing, customer facing, DLA Direct, customer Direct, and process enhancement.

| | Exhibit R-2 | a, RDT&E Pro | ject Justificatio | n | | | Date: Feb | ruary 2003 |
|-------------------------------|-------------|--|-------------------|------------|-------|-------|-----------|------------|
| Appropriation/Budget Activity | | Project Name and Number-Agent Based Logistics Processes, | | | | | | |
| RDT&E, Defense-wide BA 3 | | | | Project 10 | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 10: Agent Based | | | | | | | 2.969 | 3.267 |
| Logistics Processes | | | | | | | 2.909 | 3.207 |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: Project will develop plans and tools for flexible responses to changing supplier and demand data. It will provide the ability to link into war planning systems to address the ability of the industrial base to meet National Emergency Requirements. Nothing funded until FY08.

B. Accomplishments/Planned Program: N/A

| - | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | | | | |
| RDT&E Articles Quantity – N/A | | | | |

| | ject Justificatio | n | | | Date: Feb | ruary 2003 | | |
|-------------------------------|-------------------|-------|-------|---|-----------|------------|-------|-------|
| Appropriation/Budget Activity | | | | Project Name and Number – eMASS, Project 11 | | | | |
| RDT&E, Defense-wide BA 3 | | | | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 11: eMASS | | | 1.279 | 0.490 | 0.490 | 0.489 | 0.488 | 0.487 |
| (Completion Project) | | | 1.279 | 0.490 | 0.490 | 0.489 | 0.466 | 0.467 |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: Enterprise Mission Assurance Support System (eMASS) is a comprehensive, enterprise-wide capability that automates all major information assurance processes including certification and accreditation, vulnerability management, incident response, INFOCON level management and control, IA resource planning and management, circuit connection management, contingency planning, and IA command and control. It has OSD support since it will be used across DoD. eMASS will provide a single information assurance exchange standard across the DoD Global Information Grid (GIG) and will be an implementation of Security Assertion Markup Language (SAML), an XML based exchange standard. eMASS is being developed through a partnership with C3I, and will vet the policy requirements of an emerging family of information assurance policies called the 8500 series. eMass started within the PUL Log R&D. This R&D funding is needed for eMASS project completion.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | | | 1.279 | 0.490 |
| RDT&E Articles Quantity – N/A | | | | |

Complete fully functional eMASS prototype in XML schema and XSLT style sheets. Complete SAML exchange standard for certification and accreditation security assertions. Fully integrate eMASS with the Open Vulnerability Assessment Language (OVAL) standard by developing an exchange standard with the Mitre Corporation Outpost automated toolset.

| | Exhibit R-2 | a, RDT&E Pro | n | | | Date: Feb | ruary 2003 | |
|-------------------------------|-------------|--------------|-------|--|-------|-----------|------------|-------|
| Appropriation/Budget Activity | | | | Project Name and Number – Defense Microelectronics | | | | |
| RDT&E, Defense-wide BA 3 | | | | Activity (DMEA), Project 12 | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 12: DMEA | 62.400 | 58.321 | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: The Defense Microelectronics Activity (DMEA) mission is to leverage advanced technologies to extend the life of weapon systems, to solve operational problems (e.g., reliability and maintainability) and to address diminishing manufacturing sources. The DMEA provides technical and application engineering support for the implementation of advanced microelectronics research technologies from design through assembly and installation. The DMEA manages an organic capability to support these strategically important technologies within the DoD. These advanced technologies are translated into solutions for military needs. DMEA's RDT&E program is comprised of a mix of studies, investigations, planning efforts, developments, fabrications, and the insertions of solutions. This effort applies to all DoD systems using electronics e.g., F-22, B-2, AWACS, F-16, F-15, F-14, GPS, USQ-113, JAST, EA-6B, M-65, AN/TSC-93B, and AN/GSC-49 (V). Funds are required for technical and analytical support, equipment, supplies, travel, and publications.

B. Accomplishments/Planned Program:

| · | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 8.500 | 8.513 | | |
| RDT&E Articles Quantity – N/A | | | | |

Center for Nanosciences Innovation efforts are to systematically clarify the feasibility of applying nanoscience and technology to defense requirements.

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 7.700 | 6.809 | | |
| RDT&E Articles Quantity – N/A | | | | |

Advanced Spray Cooling Technology efforts are to develop standardized advanced spray cooling technology products, demonstrate them in cross-platform migrations, and develop an automated process for integration of spray cooling products into military systems.

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 5.000 | 6.225 | | |
| RDT&E Articles Quantity – N/A | | | | |

Optimizing Electronics for Advanced Controlled Environment Systems (ACES) efforts are to resolve thermal issues regarding electronics densification & advanced electronics packaging in military applications by designing components, chip-scale packaging, stacked structures, and electronic environmental systems that can withstand the demanding military thermal environments.

| | Exhibit R-2 | 2a, RDT&E Pr | oject Justificat | ion | | | Date: Feb | ruary 2003 |
|-------------------------------------|-------------------|------------------|--------------------|-----------------|-----------------|----------------|----------------|------------|
| Appropriation/Budget Activity | | | | Project Nar | ne and Numb | er – Defense | Microelectro | nics |
| RDT&E, Defense-wide BA 3 | | | | Activity (D | MEA), Projec | et 12 | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 12: DMEA | 62.400 | 58.321 | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | |
| B. Accomplishments/Planned P. | rogram: (conti | | | | | | | |
| | | FY 02 | F | 7 03 | FY | 04 | FY | 05 |
| Accomplishment/ Effort/Subtotal | Cost | 27.000 | 24 | .321 | | | | |
| RDT&E Articles Quantity – N/A | | | | | | | | |
| Ultra-low Power Battlefield Senso | r Communication | on System (ULI | BPSCS) efforts a | are to develop | a netted battle | efield sensor | system with a | |
| combination of ultra-sensitive rece | eivers, ultra-low | power miniatur | re sensors, advar | nced manufact | uring process | es, and a real | l-time missior | critical |
| distributed information system. | | | | | | | | |
| | | FY 02 | F | FY 03 | | FY 04 | | 05 |
| Accomplishment/ Effort/Subtotal | Cost | 5.000 | 6. | 809 | | | | |
| RDT&E Articles Quantity – N/A | | | | | | | | |
| Miniaturized Wireless Communic | ations System (| Chameleon) effo | orts are to develo | op a covert sel | f-contained m | icrosensor p | ackage with o | n-board |
| real-time mission critical informat | ion processing a | ınd an ultra-sen | sitive high temp | erature super-c | conducting tra | insceiver. | | |
| | | FY 02 | F | 7 03 | FY | 04 | FY | 05 |
| Accomplishment/ Effort/Subtotal | Cost | | 1. | 947 | | | | |
| RDT&E Articles Quantity – N/A | | | | | | | | |
| Silicon Germanium Technology es | fforts are to dev | elop viable met | hods to replace i | nicrocircuits t | hat are used in | n high perfor | mance digital | and mixed |
| signal applications for DOD weap | on systems. | | | | | | | |
| | | FY 02 | F | 7 03 | FY | 04 | FY | 05 |
| Accomplishment/ Effort/Subtotal | Cost | | 2. | 237 | | | | |
| RDT&E Articles Quantity – N/A | | | | | | | | |
| High Power Microelectronics effo | rts are to develo | p viable method | ds to replace hig | h power micro | circuits in the | e 40-volt to 1 | 00-volt range | that are |
| used in DOD weapon systems. | | | | | | | | |
| | | FY 02 | F | 7 03 | FY | 04 | FY | 05 |
| Accomplishment/ Effort/Subtotal | Cost | | 1. | 460 | | | | |
| RDT&E Articles Quantity – N/A | | | | | | | | |
| Ferrite Diminishing Manufacturin | g Program effor | ts are to assess | the viability of a | Iternative appr | roaches to and | d prospective | technologies | for the |

| | Exhi | bit R-2 | a, RDT&E Pro | ject Justificati | on | | | Date: Feb | ruary 2003 |
|-------------------------------------|------------|-----------|-------------------|--------------------|----------------|-----------------|-----------------|----------------|------------|
| Appropriation/Budget Activity | | | | | Project Nan | ne and Numb | er – Defense | Microelectro | onics |
| RDT&E, Defense-wide BA 3 | | | | | Activity (D | MEA), Proje | ct 12 | | |
| Cost (\$ in millions) | FY (| 02 | FY 03 | FY 04 | FY 05 | FY 06 FY 07 | | FY 08 | FY 09 |
| Project 12: DMEA | 62.4 | 00 | 58.321 | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | |
| B. Accomplishments/Planned P | | | | | | | | | |
| mitigation of ferrite diminishing m | nanufactu | ring so | urce issues in m | icrowave/millin | neter-wave-ba | sed DOD we | apon systems | S | |
| | | | FY 02 | FY | 03 | FY | 04 | FY | Y 05 |
| Accomplishment/ Effort/Subtotal | Cost | | 2.000 | | | | | - | |
| RDT&E Articles Quantity – N/A | | | | | | | | | |
| Silicon-28 program efforts are to c | levelop a | viable | method to depo | sit ultra-pure sil | icon in produc | tion-scale qu | iantities. Si-2 | 28 is 10X fas | ter than |
| conventional silicon, requires sign | ificantly | less po | wer, generates le | ess heat and is f | ally compatibl | e with existin | ng microelect | tronics fabric | ation |
| processing techniques. | | | | | | | | | |
| | | FY 02 | | FY | 03 | FY 04 | | FY 05 | |
| Accomplishment/ Effort/Subtotal | Cost | 2.400 | | | | | | | |
| RDT&E Articles Quantity – N/A | | | | | | | | | |
| Sub-Micron CMOS and CMOS/SO | OS Litho | graphy | efforts are to de | velop methods t | o replace high | ly complex 1 | nicrocircuits | based on the | higher |
| density CMOS processes and impr | ove our a | ability t | to make and sust | tain low volume | source of dev | ices. | | | |
| | | | FY 02 | FY | 03 | FY | 04 | F | Y 05 |
| Accomplishment/ Effort/Subtotal | Cost | | 2.300 | | | | | - | |
| RDT&E Articles Quantity – N/A | | | | | | | | | |
| Strategic Radiation Hardened Mic | roelectro | nics eff | orts are to devel | lop design and p | rototyping cap | oabilities to r | eplace highly | complex rac | diation |
| hardened microcircuits to achieve | form, fit, | and fu | nction replacem | ents. | | | | | |
| | | | FY 02 | FY | 03 | FY | 04 | FY | Y 05 |
| Accomplishment/ Effort/Subtotal | Cost | | 2.500 | | | | | | |
| RDT&E Articles Quantity – N/A | | | | | | | | | |
| Digital Electronic Warfare (EW) e | fforts are | to dev | elop an advance | ed digital techno | logy EW rece | iver to replac | e the existing | g analog tech | nology EV |
| receivers. | | | • | C | | • | • | | <u> </u> |
| | | | | | | | | | |
| C. Other Program Funding Sun | nmarv: | N/A | | | | | | | |

| | Exhibit R-2 | a, RDT&E Pro | ject Justificatio | n | | | Date: Feb | ruary 2003 |
|-------------------------------|-------------|--------------|-------------------|---|-------|-------|-----------|------------|
| Appropriation/Budget Activity | | | | Project Name and Number – Other Congressionally Added | | | | |
| RDT&E, Defense-wide BA 3 | | | | Programs (OCAs), Project 13 | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 13: OCAs | | 22.955 | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: Congressionally added programs that reflect a range of related advanced technologies.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|--------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | | 22.955 | | |
| RDT&E Articles Quantity – N/A | | | | |

- HDTCC (\$1.751) Homeland Defense Technology Collaboration Center. Congressional Add. Program Management TBD. Funding will be used to create a collaborative environment among the Homeland Defense communities and to transition current technology developed for the military to homeland defense activities.
- VFCP (\$6.808) Vehicle Fuel Cell Programs. Congressional Add. US Army TACOM will oversee this add on behalf of DLA.
- FCL (\$0.973) Fuel Cell Locomotives. Congressionally Add. US Army TACOM will oversee this add on behalf of DLA.
- APD (CC DOT) (\$4.184) Agile Port Demonstrator. Congressional Add. OSD (DDR&E)/WHS will oversee this project on behalf of the DLA.
- NEMSC (\$5.835) New England Manufacturing Supply Chain. Congressional Add. DLA will work with the Department of Commerce (NIST) to jointly oversee this add.
- MRLN (\$3.404) Maintainers Remote Logistics Network US Army TACOM will manage this add on behalf of DLA.

| | Exhibit R-2 | 2, RDT&E B | udget Item J | ustification | | | Date: Febru | ary 2003 |
|---|-------------|------------|--------------|--------------|-----------------|--------------|-------------|----------|
| Appropriation/Budget Activity | | | | R-1 Item No | menclature: | | | |
| RDT&E, Defense-wide BA #3 | | | | Dual Use Ap | plications Prog | gram (DUAP), | 0603805S | |
| Cost (\$ in millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Total PE Cost | 6.000 | | | | | | | |
| National Center for Manufacturing Sciences (NCMS)/Commercial Technology & Maintenance Activities (CTMA) | 6.000 | | | | | | | |

A. Mission Description and Budget Item Justification:

The Commercial Technology and Maintenance Activities (CTMA) program is a cooperative agreement between National Center for Manufacturing Sciences (NCMS) and the Deputy Under Secretary of Defense for Logistics and Materiel Readiness to co-sponsor technology development, deployment and validation with DoD organic maintenance activities and NCMS member companies. NCMS is a not-for-profit collaborative research consortium of North American corporations. It is the largest cross-industry consortium in the United States (240 member companies, an annual R&D project portfolio exceeding \$80 million).

The primary goals of the program are to transfer best commercial technologies and best practices to DoD maintenance activities via NCMS member companies. By partnering with NCMS members, the DoD maintenance activities are able to assess the benefits of new manufacturing technologies in their own facilities, working with industry leaders solving manufacturing problems through collaboration.

The Department of Army, Defense Supply Service Washington (DSSW) is the contracting office for the program. The statement of work in the CTMA contract, DASW01-98-0002, remains essentially unchanged since the original contract was issued in FY 1998, and subsequent year funding has been added to the contract by modification.

Program Change Summary

| | <u>FY 02</u> | <u>FY 03</u> | FY 04 | FY 05 |
|-----------------------------|--------------|--------------|-------|-------|
| Previous President's Budget | 0.000 | | | |
| Current President's Budget | 6.000 | | | |
| Total Adjustments | +6.000 | | | |
| Reprogrammings/transfers | +6.000 | | | |

Change Summary Explanation: In FY 2002 the Congress added this funding to the Office of the Secretary of Defense (OSD) O&M, D-W appropriation. Funding was transferred to the DLA RDT&E, D-W appropriation for execution. In FY 2003 the Congress again added this funding to the Office of the Secretary of Defense (OSD) O&M, D-W appropriation.

| Exhibit | t R-2, RDT& | E Budget It | em Justifica | tion | | | Date: Feb | ruary 2003 | | | |
|-------------------------------|-------------|-------------|--------------|--------------|------------------------|---------|-----------|------------|--|--|--|
| Appropriation/Budget Activity | | | | R-1 Item N | R-1 Item Nomenclature: | | | | | | |
| RDT&E, Defense-wide BA 5 | | | | Electronic (| Commerce, 0 | 3058405 | | | | | |
| Cost (\$ in millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | | | |
| Total PE Cost | | | 2.360 | 2.345 | 2.345 | 2.340 | 2.335 | 2.330 | | | |
| EC (eMall Sustainment) | | | 2.360 | 2.345 | 2.345 | 2.340 | 2.335 | 2.330 | | | |

A. Mission Description and Budget Item Justification: A departmental management initiative to optimize available resources and promote the achievement of net-centricity directed realignment of RDT&E funds from the Defense Information Systems Agency (DISA) to the Defense Logistics Agency (DLA) beginning in FY 2004 through FY 2009 to sustain specific tools and applications, subsequent to the termination of the Joint Electronic Commerce Program Office (JECPO). This program supports e-Mall operation, maintenance and enhancement. The program is one of a variety of key information technology tools and is an IT enterprise initiative to improve operational capability and transform business processes, while promoting interoperability, as part of the President's Management Agenda eGovernment initiative for Integrated Acquisition.

B. Program Change Summary: (Show total funding, schedule, and technical changes for the program element that have occurred since the previous President's Budget Submission)

| <u>FY 02</u> | <u>FY 03</u> | <u>FY 04</u> | <u>FY 05</u> |
|--------------|------------------|---------------------------|----------------------------|
| | | | |
| | | 2.360 | 2.345 |
| | | + 2.360 | +2 345 |
| | | =.500 | -0.055 |
| | | 0.010 | 0.055 |
| | | +2.400 | +2.400 |
| | <u>FY 02</u> | <u>FY 02</u> <u>FY 03</u> | 2.360 + 2.360 -0.040 |

Change Summary Explanation: In FY 2003 the O&M funded DLA JECPO office was terminated, with O&M resources realigned to DISA. FY 2003 and prior FY 2002 e-MALL R&D was funded under DISA. Beginning FY 2004, RDT&E resources were realigned from DISA to DLA to sustain EC e-Mall efforts. FYs 2004 and 2005 reflect inflation adjustments (-\$0.040 million and -\$0.055 million, respectively).

C. Other Program Funding Summary: N/A

Acquisition Strategy: N/A

| Exhibit R-3, RDT&E Program Element/Project Cost Breakdown Date: | | | | | | | | | | | |
|---|--------------------|-------------------|------------|-------|-----|-------------|-------------|---------|-----------|-------------|--|
| Appropriation/B | udget Activity | | | | R- | 1 Item Non | nenclature: | | | | |
| RDT&E, Defens | se-wide BA 5 | | | | Ele | ectronic Co | mmerce, 0 | 3058405 | | | |
| A. Project Cost | Breakdown | | | | | | | | | | |
| EC (eMall Sust | ainment) | | | | | | | | | | |
| Project Cost Cat | egories | | | FY 20 | 02 | FY 2003 | FY 2004 | FY 2005 | | | |
| | ring Process Supp | ort Costs | | | - | | 2.360 | 2.345 | | | |
| | | | | | | | | | | | |
| B. Budget Acqu | iisition History a | nd Planning Info | ormation | | | | | | | | |
| Contractor or | Contractor | Award or | Performing | FY 20 | 02 | FY 2003 | FY 2004 | FY 2005 | Budget to | Total | |
| Government | Method/Type | Obligation | Project | | | | | | Complete | Program | |
| Performing | Or Funding | Date | Activity | | | | | | | | |
| Activity | Vehicle | | BAC | | | | 2260 | | | | |
| 1 D 4 | C 4 4 | 00/0000 | | | | | 2.360 | 2.345 | cont. | cont. | |
| 1. Raytheon | Contract | 02/2003 | | | | | | | | | |
| 2. PartNet | Contract | 02/2003 | | | | | | | | | |
| 3. SCRA* | Contract | 02/2003 | | | | | | | | | |
| 4. IBM | Contract | 02/2003 | | | | | | | | | |
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| "South Carolin | a Research Aut | nority | | | | | | | | | |

| | | Exhibit R-4, Schedule Profile | | | | | | | | | | | | I | Dat | e: F | ebr | uar | y 2 | 2003 | 3 | | | | | | | | | | | | | | | | |
|--|---|-------------------------------|----|---|-------|------------|-----------|------------|------------|-----------|-----------|------------|-----------|------------|------|-----------|------------|-----------|---------|------|---|---|----|----|---|---|----|----|-----|---|----|-----|----|---|---|----|---|
| Appropriation/Budget Activity RDT&E, Defense-Wide BA 5 | | | | | P: 0' | rog 708 | gra 80 | m : 115 | Ele S N | em Iar | en nuf | t N fac | un tur | nbe ing | er a | ind ec | l N hno | am olo | e gy | | | | | | | | | | atu | | | 584 | 05 | | | | |
| Fiscal Year | | 20 | 01 | | | 20 | 02 | | | 20 | 003 | 3 | | 2 | 200 | 4 | | | 20 | 05 | | | 20 | 06 | | | 20 | 07 | ' | | 20 | 08 | | | | 09 | |
| riscai i cai | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 3 4 | 1 1 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| TBD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | İ |
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| Exh | / | | | | | | | uary 2003 |
|-------------------------------|----------|------------|--------|--------|------------|-------------|------------|-----------|
| Appropriation/Budget Activity | | Element Nu | | | R-1 Item N | Nomenclatur | re: | |
| RDT&E, Defense-Wide BA 5 | 0708011S | Manufactu | | ology | Electronic | Commerce | , 03058405 | |
| Schedule Profile | FY 2001 | FY 2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 |
| TBD | | | | | | | | |
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| | Exhibit R | -2, RDT&E | Budget Iter | m Justificat | ion | | Date: February 2003 | | |
|------------------------------------|-----------|-----------|-------------|--------------|--------------|----------|---------------------|----------|--|
| Appropriation/Budget Activity | | | | R-1 Item No | omenclature: | | | | |
| RDT&E, Defense-wide BA 06 | | | | DEFENSE | TECHNOLO | GY ANALY | SIS (DTA) (| 0605798S | |
| Cost (\$ in millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | |
| Total PE Cost | 5.626 | 5.017 | 5.209 | 5.279 | 5.393 | 5.498 | 5.672 | 5.771 | |
| Project 1: DoD Technology Analysis | | | | | | | | | |
| Office (DTAO) | 3.958 | 4.259 | 4.452 | 4.539 | 4.665 | 4.780 | 4.961 | 5.065 | |
| Project 2: Technology Integration | 0.711 | 0.758 | 0.757 | 0.740 | 0.728 | 0.718 | 0.711 | 0.706 | |
| Project 3: Commodity Management | | | | | | | | | |
| System Consolidation (CMSC) | 0.957 | | | | | | | | |

A. Mission Description and Budget Item Justification: This program element provides mission support to the Office of the Deputy Under Secretary of Defense (Science and Technology) (ODUSD(S&T)). It covers a wide range of studies and analyses in support of the RDT&E program and impacts the Department's decision-making to fund efforts to sustain operations for general R&D.

Project 1: The Defense Technology Analysis Office is responsible for providing engineering, scientific, and analytical support to the ODUSD(S&T) in its responsibility for direction, overall quality, and content of the Science and Technology (S&T) program and ensuring that the technology being developed is affordable and minimizes systems development risk. S&T is defined as consisting of Basic Research, (6.1) Exploratory Development (6.2) and Advanced Technology (6.3).

Project 2: Technology Integration (TI) activities advance international S&T cooperation of specific projects of bilateral or multilateral interest. It provides the management support for U.S. participation in NATO's Research and Technology Organization (RTO) and "The Technical Cooperative Program" (TTCP). TI oversees, coordinates, and reviews RTO and TTCP activities in which the U.S. has an interest including ongoing and proposed collaborative programs, technical symposia and conferences, and standard operating procedures.

Project 3: The Commodity Management System Consolidation (CMSC) and Integration team is charged with transitioning Commodity Systems to support the DOD Logistics 2010 Vision. This plan includes reducing response time, operational costs, and inventory and enhances customer satisfaction. To support this, the existing commodity management systems, in use by the Defense Logistics Agency (DLA), must be migrated to a common operating environment, which utilizes shared data, business rules that are accessible to DLA, its customers and its suppliers. Requirements to be met include: 1) Development of an automated parts ordering tool allowing a technician working off an Interactive Electronic Technical Manual (IETM) to requisition parts interactively from the technical manual's illustrated parts breakdown in a paperless manner. 2) Maintenance of a Supply Chain Management Council (SCMC) web site that allows SCMC and other personnel to access up-to-date information on the Council's mission, goals, minutes, briefings, papers, etc. 3) Development of a web based SCM Analysis site that allows customers to describe logistics requirements and obtain a proposed integrated solution based on the tools (i.e. prime vendor, e-commerce, Long-Term Contracts (LTCs), etc.) currently available.

| | Exhibit R | -2, RDT&E | Budget Ite | m Justificat | Date: Febr | uary 2003 | | |
|--|-----------|-----------|------------|--------------|--------------|-----------|-----------|----------|
| Appropriation/Budget Activity | | | | R-1 Item N | omenclature: | | | |
| RDT&E, Defense-wide BA 06 | | | | DEFENSE | TECHNOLO | GY ANALY | SIS (DTA) | 0605798S |
| Cost (\$ in millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Total PE Cost | 5.626 | 5.017 | 5.209 | 5.279 | 5.393 | 5.498 | 5.672 | 5.771 |
| Project 1: DoD Technology Analysis | | | | | | | | |
| Office (DTAO) | 3.958 | 4.259 | 4.452 | 4.539 | 4.665 | 4.780 | 4.961 | 5.065 |
| Project 2: Technology Integration | 0.711 | 0.758 | 0.757 | 0.740 | 0.728 | 0.718 | 0.711 | 0.706 |
| Project 3: Commodity Management System Consolidation (CMSC) | 0.957 | | | | | | | |

B. Program Change Summary: (Show total funding, schedule, and technical changes for the program element that have occurred since the previous President's Budget Submission)

| | <u>FY 02</u> | <u>FY 03</u> | <u>FY 04</u> | FY 05 |
|---------------------------------------|--------------|--------------|--------------|--------|
| Previous President's Budget | 4.950 | 5.201 | 5.298 | 5.409 |
| Current President's Budget | 5.626 | 5.017 | 5.209 | 5.279 |
| T-4-1 A Lineary and | . 676 | 0.104 | 0.000 | 0.120 |
| Total Adjustments | +.676 | -0.184 | -0.089 | -0.130 |
| Revised inflation adjustment | | -0.044 | -0.089 | -0.130 |
| Congressional reductions/ rescissions | -0.275 | -0.029 | | |
| Reprogrammings/transfer | +0.957 | | | |
| Program adjustment | 006 | -0.111 | | |

Change Summary Explanation: FY 2002 reflects an inflation adjustment (-\$0.275 million), a program adjustment due to DTA PE's pro-rata share of a DoD Intra-Agency Council bill (-\$0.006 million), and a reprogramming of +\$0.957 million for the CMSC program to correctly place it under DTA versus an Air Force program. FY 2003 reflects congressional adjustments (-\$0.184 million) per Section 8029 Federally Funded Research and Development Centers (FFRDCs) reduction (-\$0.055 million); Section 8100 Business Process Reform (-\$0.045 million); Section 8109 Reducing Cost Growth in IT Development (-\$0.011 million); Section 8135 Rescission (-\$0.029 million); and an FY 2003 inflation adjustment (-\$0.044 million). FYs 2004 and 2005 reflect inflation adjustments (-\$0.089 million and -\$0.130 million respectively).

| | Exhibit R-2 | 2a, RDT&E I | Project Justi | fication | | | Date: Febru | ary 2003 |
|-------------------------------|-------------|-------------|---------------|-------------|---------------|--------------|--------------|----------|
| Appropriation/Budget Activity | | | | Project Nam | ne and Number | er – Defense | Technology A | nalysis |
| RDT&E, Defense-wide BA 06 | | | | Office (DTA | AO), Project | 001 | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| | | | | | | | | |
| Project 001 DTAO | 3.958 | 4.259 | 4.452 | 4.539 | 4.665 | 4.780 | 4.961 | 5.065 |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification:

(U) This Project is to provide program management support for facilitating the development of the DoD Science and Technology Program and conduct assessments and analyses of the program to ensure maximum utilization of research and development funds to accomplish the overall science and technology objectives of the Department. Funds are required for technical and analytical support, equipment, supplies, travel, and publications.

B. Accomplishments/Planned Program

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 3.958 | 4.259 | 4.452 | 4.539 |
| RDT&E Articles Quantity – N/A | | | | |

2002/2003: The project has and continues to provide engineering, analytical, and program managerial support for: 1.) development of strategies and plans to exploit and develop science and technology to meet the needs of the department; 2.) making recommendations and developing guidance for science and technology programs; 3.) reviewing proposed and approved science and technology programs and make recommendations to optimize effectiveness of the DoD investments in science and technology; and 4.) oversight of science and technology issues, initiatives, and Congressional special interest.

2004/2005: The project will continue to provide the same support for execution of approved programs and providing the program management support required for developing future science and technology programs to meet the needs of the Department.

| | Date: February 2003 | | | | | | | | | |
|------------------------------------|---------------------|---|-------|-------|-------|-------|-------|-------|--|--|
| Appropriation/Budget Activity | | Project Name and Number – Technology Integration, Project | | | | | | | | |
| RDT&E, Defense-wide BA 06 | | | | 002 | | | - | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | | |
| Project 002 Technology Integration | | | | | | | | | | |
| | 0.711 | 0.758 | 0.757 | 0.740 | 0.728 | 0.718 | 0.711 | 0.706 | | |
| | | | | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | | |

A. Mission Description and Budget Item Justification:

Technology Integration (TI) activities advance international science and technology (S&T) cooperation of specific projects of bilateral or multilateral interest. It provides the management support for U.S. participation in NATO's Research and Technology Organization (RTO) and "The Technical Cooperative Program" (TTCP). TI oversees, coordinates and reviews RTO and TTCP activities in which the U.S. has an interest including ongoing and proposed collaborative programs, technical symposia and conferences, and standard operating procedures. This effort will leverage Tri-Service S&T dollars through new and ongoing international partnerships. TI also provides selective funding support for administration, travel, conferences, and technical evaluations related to RTO activities carried out by the Services and other organizations.

B. Accomplishments/Planned Program

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 0.711 | 0.758 | 0.757 | 0.740 |
| RDT&E Articles Quantity – N/A | | | | |

2002/2003: The project and continues to provide program management support of the Department's science and technology international cooperative efforts through: 1.) international technology watch efforts to identify ongoing and proposed S&T efforts that could complement efforts or fill shortfalls in meeting U.S. S&T requirements, objectives and goals; 2.) Foster international bilateral and multilateral cooperative agreements in high value science & technology areas with allies, nonaligned nations and former Soviet Block nations; 3.) then establish data exchange agreements, engineer and scientist exchange program visits, international technology assessments and new cooperative programs; 4.) seek opportunities for international cooperation in high priority S&T; and conduct intradepartmental coordination to achieve goals as necessary.

2004/2003: The project will continue to provide the same support for execution of approved programs and providing the program management support required for developing future science and technology international cooperative efforts to meet the needs of the Department.

| | Exhibit R-2a | ject Justifica | tion | | Date: Februar | ry 2003 | | | | | |
|-------------------------------|--------------|--|-------|--|---------------|---------|-------|-------|--|--|--|
| Appropriation/Budget Activity | | Project Name and Number — Commodity Management | | | | | | | | | |
| RDT&E, Defense-wide BA 06 | | | | System Consolidation (CMSC), Project 003 | | | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | | | |
| | | | | | | | | | | | |
| Project 003 CMSC | 0.957 | | | | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | | | |

A. Mission Description and Budget Item Justification:

Consolidation and integration of all the commodity management systems used by the DLA is a large-scale effort. In order to manage program risk, the migration strategy must be designed to include a series of manageable successes, which combine incremental development, testing and fielding manageable subsets of the databases of legacy systems. This build a little, test a little approach assists DLA in early identification of risks of technology changes, staff turnovers, and of business process changes, and will provide management information to migrate these risks effectively and with a minimum of effort. It also improves the flexibility of the overall migration effort. Structurally, project flexibility will allow DLA to reprioritize portions of the migration effort to resolve critical issues.

B. Accomplishments/Planned Program

| • | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 0.957 | | | |
| RDT&E Articles Quantity – N/A | | | | |

- Developed Ordering "Leave-in-Place" Prototype
- Incorporated Knowledge Management Capabilities

| Exhibit 1 | R-2, RDT& | E Budget I | tem Justific | cation | | | Date: Feb | ruary 2003 |
|---|-----------|------------|--------------|------------|--------------|-------------|-----------|------------|
| Appropriation/Budget Activity | | | | R-1 Item N | Nomenclatur | ·e: | | |
| RDT&E, Defense-wide BA 7 | | | | Manufactu | iring Techno | ology 07080 | 11S | |
| Cost (\$ in millions) | FY 2002 | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 |
| Total PE Cost | 40.830 | 20.728 | 16.163 | 11.070 | 10.474 | 10.484 | 10.668 | 10.855 |
| Project 1: Combat Rations | 1.788 | | 1.988 | 2.025 | 2.026 | 2.019 | 2.055 | 2.092 |
| Project 2: Apparel Research Network (ARN) | 2.897 | 2.961 | 4.040 | 3.925 | 3.948 | 3.984 | 4.054 | 4.125 |
| Project 3: Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT) | 2.305 | 2.281 | 2.283 | 2.354 | 2.445 | 2.435 | 2.477 | 2.520 |
| Project 4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST) | 1.306 | 1.933 | 1.960 | 1.970 | 2.055 | 2.046 | 2.082 | 2.118 |
| Project 5: Customer Value Industrial Plant Equipment (CV:IPE) | 1.360 | 1.380 | 1.182 | 0.796 | | | | |
| Project 6: Supply Chain Management (SCM) | 17.774 | | | | | | | |
| Project 7: Classified Programs | | 2.357 | 4.710 | | | | | |
| Project 8: ERIM Defense/Competitive Sustainment (CS) | 7.700 | | | | | | | |
| Project 9: Laser Additive Manufacturing (LAM) | 5.700 | 5.902 | | | | | | |
| Project 10: Twelve Screw Extruder for Fuel Cell Technology | | 1.968 | | | | | | |

A. Mission Description and Budget Item Justification: Manufacturing Technology (ManTech) reduces costs and lead times, and increases quality, by developing and applying advanced manufacturing technology. DLA ManTech includes Combat Rations Network for Technology Implementation (CORANET), Apparel Research Network (ARN), Procurement Readiness Optimization—Advanced Casting Technology (PRO-ACT), and Procurement Readiness Optimization—Forging Advance System Technology (PRO-FAST); and Supply Chain Management (FY 2002 only), in addition to congressionally added programs.

| Exhibit R-2, RDT&E B | udget Item | Justifica | tion | | Date: February 2003 |
|--|------------|-----------------|--------------------|----------------|---------------------|
| Appropriation/Budget Activity | | | R-1 Item Nomenclat | ture: | |
| RDT&E, Defense-wide BA 7 | | | Manufacturing Tech | mology 0708011 | IS |
| B. Program Change Summary: | | | | | |
| | FY 02 | FY 0. | <u>3 FY 04 I</u> | FY 05 | |
| Previous President's Budget | 41.392 | 13.07 | 2 15.330 | 10.274 | |
| Current President's Budget | 40.830 | 20.72 | 8 16.163 | 11.070 | |
| Total Adjustments Congressional increases | -0.562 | -7.650 +8.00 | | +0.796 | |
| Revised inflation rate Congressional program reductions/ rescissions | -0.556 | -0.344 | | -0.220 | |
| Program adjustments | -0.006 | | +1.103 | +1.016 | |

Change Summary Explanation: FY 2002 reflects an inflation adjustment (-\$0.556 million) and the IP/ManTech PE's pro-rata share of a DoD Intra-Agency Council bill (-\$0.006 million). FY 2003 reflects (+\$8.0 million) congressionally added dollars for Laser Additive Manufacturing (+\$6.0 million); and Twelve Screw Extruder for Fuel Cell Technology (+\$2.0 million). FY 2003 also reflects congressional adjustments (-\$0.344 million) per Section 8100 Business Process Reform (-\$0.182 million), Section 8109 Reducing Cost Growth in IT Development (-\$0.043 million), and Section 8135 Rescission (-\$0.119 million). FYs 2004 and 2005 reflect a transfer from the Log R&D PE to the IP/ManTech PE to provide increased funding for the Apparel Research Network program (+\$1.103 million in FY 2004 and +\$1.016 million in FY 2005); and inflation adjustments (-\$10.270 million in FY 2004 and -\$0.0220 million in FY 2005).

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

| | Exhibit R-2 | n | | Date: Feb | ruary 2003 | | | |
|-------------------------------|-------------|-------|-------|-------------|----------------|-------|-------|-------|
| Appropriation/Budget Activity | | | | Project Nan | ne and Numb | er | | |
| RDT&E, Defense-wide BA 7 | | | | Combat Ra | tions, Project | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 1: Combat Rations | 1.788 | 1.946 | 1.988 | 2.025 | 2.026 | 2.019 | 2.055 | 2.092 |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: DLA buys about \$200 million worth of Combat Rations annually. The product is military unique. The limited industrial base is barely capable of producing variety and quantities needed for surge, and has been dependent on orders from Government to remain viable. This initiative ensures that DLA will have an industrial base to continue to support warfighters with needed combat rations. The program partners identify problems and develop new technology for implementation in their plants, after demonstrations conducted at a University demonstration site, unifying the civilian and military manufacturing processes to expand the base. The Joint Steering Group of users, designers, and buyers assures that selected projects contribute to DLA mission.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 1.788 | 1.946 | 1.988 | 2.025 |
| RDT&E Articles Quantity – N/A | | | | |

Develop and implement improved retort rack materials; implement multiple unit leak detectors in MRE plants; develop and implement machine vision on polymeric tray fill lines; evaluate ultrasonic technology for cost and quality benefits.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

| | Exhibi | t R-3, RDT&E | Program Element/P | roject Cost Bre | akdown | | | Date: Fe | bruary 2003 |
|-----------------------|-------------------|-----------------|-------------------|-----------------|--------------|--------------|-----------|------------|--------------|
| Appropriation/Bu | dget Activity | | | Pro | oject Name a | and Number | • | | |
| RDT&E, Defense | e-wide BA 7 | | | Co | mbat Ration | s, Project 1 | | | |
| A. Project Cost I | Breakdown | | | | | | | | |
| Combat Rations | | | | | | | | | |
| | | | | EX. 2002 | EX. 2002 | ETT 0004 | EX. 2007 | | |
| Project Cost Cate | | | | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | |
| a. Manufacturi | ng Process Suppo | ort Costs | | 1.788 | 1.946 | 1.988 | 2.025 | | |
| | | | | | | | | | |
| B. Budget Acqui | sition History an | d Planning Info | rmation | | | | | | |
| Contractor or | Contractor | Award or | Performing | FY 2002 | FY 2003 | FY 2004 | FY 2005 | Budget to | Total |
| Government | Method/Type | Obligation | Project | | | | | Complete | Program |
| Performing | Or Funding | Date | Activity | | | | | | |
| Activity | Vehicle | | BAC | | | | | | |
| | | | | 1.788 | 1.946 | 1.988 | 2.025 | Cont | Cont |
| Ameriqual | Cost, No Fee | 12/01/2001 | Partner | | | | | | |
| Georgia, Univ of | Cost, No Fee | 12/01/2001 | Partner, STP* | | | | | | |
| NCFST | Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| Ohio State Univ | Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| R&D Associates | Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| Rutgers | Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| SAIC | Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| SOPAKCO | Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| Stegner | Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| Sterling | Cost, No Fee | 11/25/2001 | Partner | | | | | | |
| TEES (TAMU) | Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| Tennessee, Univ | of Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| Wornick | Cost, No Fee | 12/01/2001 | Partner, | | | | | | |
| Washington State | Univ Cost, No I | Fee 12/01/200 | 1 Partner, STP | | | | | | |
| Rutgers Demo Si | te Cost, No Fee | 12/01/2001 | Partner, STP | | | | | | |
| | | | | | | | di a sere | | |
| Government Furr | nished Property: | None. | | | | | *STP | = "Short T | erm Project" |

| | | | 1 | Exh | ibi | t F | R-4 , | , S | che | edu | le | Pro | ofil | le | | | | | | | | | | | | | | | I | Date | e: F | ebr | uar | y 2 | 003 | , |
|---|---|----|----|-----|--|-----|--------------|------------|-------|-------|----------|-------------|------|--------|-----|-------|------|------|------|------|------|-------|-------|-------|------|-------|-------|------|------|-------|------|-----|-----|-----|-----|---|
| Appropriation/Budget Activity RDT&E, Defense-Wide BA 7 | | | | | | | | | | | | Nuı .ctu | | | | | | | , | | | _ | | | | e an | | | mt | er | | | | | | |
| · | | 20 | 01 | | | | 02 | | | 200 | | Ctu | | 20 | | /1111 | | 20 | | | | | 06 | | l | | 07 | | 2008 | | | | | 20 | 09 | |
| Fiscal Year | 1 | 2 | 3 | 4 | . | | 3 | 4 | | | | 4 | | | | 4 | _ | 2 | | 4 | | | | | 1 | | | | 1 | 2 | | | 1 | | | 4 |
| BAA Preparation and Issue | | 4 | | Δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BAA Closing and Evaluations | | | | Δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Partner Contracts Awarded | | | | Г | | ١ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kick Off Meeting, Joint Planning Sessions | | | | | -Α | _ | | | | C | onti | inue | Con | tract | for | Part | ners | , Tw | /o Y | ears | plus | five | On | e-yea | ar o | ption | ıs | | | Τ | | | | | | |
| Selection and Award of Demo | | | | | Δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arrange for Facilitation | | | | ſ | Δ | | | | | | | | . D | | 1 | ICC | Ţ. | | OCC | | D | | _ | | | , D | | W | | | | | | | | |
| Initial Review, Disposition of Candidate Projects, initial award of delivery orders | | | | | | Δ | Cont | inuc | ous r | vioni | torir | ng of | Pro | ojects | бу | JSG | Lia | ison | Om | cers | , Ke | porti | ing i | rogi | ress | to P | artne | er w | orks | snops | | | | | | |
| Follow on assessment of candidate Projects, acceptance of qualified subjects by JSG. | | | | | | Δ | Δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Continuing award of delivery orders, start performance | | | | | | | Δ | Δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conduct workshops to review projects, evaluate new candidate proposals, initiate qualified projects | | | | | | | | | Δ | 2 | <u></u> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conduct IPRs to manage and control progress, assure that results are achieved and implemented when applicable | | | | | | | | | | | <u>L</u> | | | | | | | | | | | | | | | | | | | | | | | | | |

| Exh | ibit R-4a, S | Schedule D | etail | | | | Date: Febr | ruary 2003 |
|---|--------------|------------|--------|--------|------------|-----------|------------|------------|
| Appropriation/Budget Activity | _ | Element Nu | | | Project Na | me and Nu | mber | |
| RDT&E, Defense-Wide BA 7 | 0708011S | Manufactu | | ology | Combat R | | | |
| Schedule Profile | FY 2001 | FY 2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 |
| BAA Preparation and Issue | 2Q | | | | | | | |
| BAA Closing and Evaluations | 4Q | | | | | | | |
| Contracts Awarded | | 1Q | | | | | | |
| Kick Off Meeting, Joint Planning Sessions | | 1Q | | | | | | |
| Selection and Award of Demo Site | | 1Q | | | | | | |
| Arrangements for Facilitation | | 2Q | | | | | | |
| Initial Review and Disposition of Candidate Projects, initial award of delivery orders | | 2Q | | | | | | |
| Follow on assessment of candidate Projects, acceptance of qualified subjects by JSG. | | 2-3Q | | | | | | |
| Continuing award of delivery orders | | 3-4Q | | | | | | |
| Conduct workshops to review projects, evaluate new candidate proposals, initiate qualified projects | | 1-4Q | | | | | | |
| Conduct IPRs to manage and control progress, assure that results are achieved and implemented when applicable | | 1-4Q | 1-4Q | 1-4Q | 1-4Q | | | |

| | Exhibit R-2 | a, RDT&E Pro | ject Justificatio | n | | | Date: Feb | ruary 2003 | | | |
|---|-------------|--------------|-------------------|------------|--------------|---------------|-----------|------------|--|--|--|
| Appropriation/Budget Activity Project Name and Number | | | | | | | | | | | |
| RDT&E, Defense-wide BA 7 | | | | Apparel Re | search Netwo | ork (ARN), Pi | oject 2 | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | | | |
| Project 2: ARN | 2.897 | 2.961 | 4.040 | 3.925 | 3.948 | 3.984 | 4.054 | 4.125 | | | |
| RDT&E Articles Quantity - N/A | _ | | | | | | | | | | |

A. Mission Description and Budget Item Justification: The Department of Defense, through the Defense Logistics Agency, purchases an average of \$1.2 billion of clothing and textile items per year. The lead-time is up to 15 months and the current inventory acquisition value over \$1 billion. ARN is a Manufacturing Technology program to improve the responsiveness of the industrial base that supplies the clothing items to the Military Services. It enables the small business oriented apparel producers to access state-of-the-art supply chain management technologies through its R&D and technology transfer mechanism. It allows the military clothing supply chain to have asset visibility and decision support at retail, wholesale and manufacturing levels. The goal of this program is to reduce the lead-time from 6 months to 6 weeks and to reduce the inventory and inventory carrying costs by 50%. A 50% reduction in carrying cost would further reduce the cost to the customer.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|------|-------|-------|-------|-------|
| AAVS | 1.000 | 1.000 | 2.000 | 2.000 |

ARN Asset Visibility System (AAVS) – a data repository that integrates data from existing DoD, Services' legacy systems and manufacturing data and 3D scan data collected from ARN developed systems with decision support with web-based interface.

- Successfully implemented recruit clothing transactions
- Further expansion to include non-recruit clothing: Organizational Clothing & Initial Equipment (OCIE) items; Fiber and Textiles;
- Leveraging with DoD Emall and further expanding to include On-Demand-Manufacturing (ODM) hardware items.

| 8 8 | 1 0 | 2 (| , | |
|----------|-------|-------|-------|-------|
| | FY 02 | FY 03 | FY 04 | FY 05 |
| VIM-ASAP | 1.000 | 1.000 | 1.000 | 1.000 |

Virtual Item Manager – **ARN Supply-chain Automated Processing** (VIM-ASAP) - A web-based system that pulls from the data collected in the AAVS Datamart, for military clothing manufacturers. ASAP receives electronic orders, captures WIP and finished goods inventories, prepares shipping documents, transmits invoices and receive payments electronically.

- Successful implementations at selected group of defense clothing manufacturers
- Leveraging and connecting with DCMA Wide Area Work Flow (WAWF) system.
- Expanding to include regional distribution centers and Emall ODM hardware manufacturers.
- Future implementation of Balance Inventory Flow Replenishment to level manufacturing production capabilities

| | Exhil | oit R-2 | a, RDT&E Pro | ject Justificati | on | | | Date: Feb | ruary 2003 | |
|-------------------------------|-------|---------|--------------|------------------|------------|---------------|---------------|-----------|------------|--|
| Appropriation/Budget Activity | | | | | Project Na | me and Numb | er | | | |
| RDT&E, Defense-wide BA 7 | | | | | Apparel Re | esearch Netwo | ork (ARN), Pr | roject 2 | | |
| Cost (\$ in millions) | FY 0 |)2 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | |
| Project 2: ARN | 2.89 | 7 | 2.961 | 4.040 | 3.925 | 3.948 | 3.984 | 4.054 | 4.125 | |
| RDT&E Articles Quantity - N/A | | | | | | | | | | |
| | | | | | | | | | | |
| FY 02 FY 03 FY 04 FY 05 | | | | | | | | | | |
| VIM | | | 0.897 | 0.9 | 961 | 1.0 |)40 | 0.9 | 925 | |

VIM – Electronic Military Clothing Inventory Management System - Pulls and pushes data to AAVS Datamart to provide fully integrated system, from 3-D full body scanning, size selection issue database with powerful inventory management tools for Military Service employee to view and manage inventory and supplies throughout the supply chain.

- Successful implementations at Marine Corp Recruit Depot (MCRD) San Diego and Parris Island through FY 2002.
- Expanding to include (5) Army, Navy and Air Force Recruit Training Centers, DLA non-recruit OCIE sites and Army Clothing Issue Facilities

C. Other Program Funding Summary: N/A

| | Exhibi | t R-3, RDT&F | Program Element/ | Project Cost Bre | akdown | | | Date: Fe | bruary 2003 |
|----------------------------------|-------------------------|-----------------|------------------|------------------|--------------|-------------|------------|-----------|-------------|
| Appropriation/Bu | | | _ | | oject Name a | | | | - |
| RDT&E, Defense | e-wide BA 7 | | | Ap | parel Resea | rch Networl | k (ARN), P | roject 2 | |
| A. Project Cost l | | | | | | | | | |
| Apparel Research | ch Network | | | | | | | | |
| Project Cost Cate | egories | | | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | |
| | ng Process Supp | ort Costs | | 2.897 | 2.961 | 4.040 | 3.925 | | |
| B. Budget Acqui | isition History an | d Planning Info | ormation | | | | | | |
| Performing Orga Contractor or | nizations Contractor | Award or | Performing | FY 2002 | FY 2003 | FY 2004 | EV 2005 | Budget to | Total |
| Government | Method/Type | Obligation | Project | F I 2002 | ГТ 2003 | Г I 2004 | FY 2003 | Complete | Program |
| Performing | Or Funding | Date | Activity | | | | | Complete | Tiogram |
| Activity | Vehicle | Dute | BAC | | | | | | |
| Note: All contra | | or CPFF | <u>5.10</u> | 2.897 | 2.961 | 4.040 | 3.925 | Cont | Cont |
| PDIT | CPFF/C | | | | | | | | |
| Clemson Univ | CPFF/C | | | | | | | | |
| Cyberware | CPFF/C | | | | | | | | |
| EDI Integration | CPFF/C | | | | | | | | |
| Southern Tech | CPFF/C | | | | | | | | |
| Government Furi | nished Property: | None. | | | | | | | |
| | 1 3 | | | | | | | | |
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| | | | F | Cxhi | ibi | t R | R-4, | Sc | he | dul | e P | rofi | ile | | | | | | | | | | | | | | Г | ate | : F | ebr | uary | / 20 | 003 | |
|---|---|----|---|------|-----|-----|------|-----|-----|--------------------|------|------|------|-----|---|--------------|-----|-----|---|-----|-------------|-----|---|----|---|---|---|-----|-----|-----|------|------|-----|---|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | | | | | P | ΕÖ | 70 | 801 | 11S | nent Inc g T | lust | rial | l Pr | epa | | | | | A | λpp | ect arel | l R | | | | | | | (Al | RN |), | | | |
| Fiscal Year | | 20 | | | | 20 | 02 | | 2 | 2003 | 3 | | 20 | 04 | | | 200 | | | | 06 | | | 20 | | | | 20 | | | | 200 | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| ARN Asset Visibility System Expand Supply Chain to | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Expand Supply Chain to OCIE, and Fiber and Fabric | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | |
| Items | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EMall On Demand | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manufacturing Items | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ARN Supply Chain Automated | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Processing (ASAP) Leveraging WAWF & Emall | | | | | | | t | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Balanced Inventory Flow | | | | | | | Ī | | | | | | | | | | | | | | | | | | | | | | _ | | | | | |
| Replenishment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electronic Military Clothing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inventory Management System Additional Army & Non- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| recruit Sites | | | | | | L | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Ext | nibit R-4a, S | Schedule D | etail | | | | Date: February 2003 | | | |
|--|---------------|-------------------------|--------|--------|--------|---------------------------|---------------------|--------|--|--|
| Appropriation/Budget Activity RDT&E, Defense-Wide BA 7 | _ | Element Nu Manufactu | | | | me and Nur esearch Net | Network (ARN), Proj | | | |
| Schedule Profile | FY 2001 | FY 2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | | |
| ARN Asset Visibility System | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | | | | |
| Expand supply chain to Organizational Clothing & Individual Equipment and Textiles & Fiber | | | 3-4Q | 1-4Q | 1-4Q | 1-4Q | | | | |
| EMall On Demand Manufacturing Items | | | | 2-4Q | 1-4Q | 1-4Q | 1-3Q | | | |
| ARN Supply Chain Automated Processing | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | | |
| ■ Leveraging WAWF & Emall | | 4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | | | |
| Balanced Inventory Flow Replenishment System | | | 2-3Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | | |
| Electronic Military Clothing Inventory Management | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-3Q | | | |
| Additional Army and non-recruit sites | | 2-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-3Q | | | |
| | | | | | | | | | | |
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| | Exhibit R-2 | a, RDT&E Pro | oject Justificatio | on | | | Date: Feb | ruary 2003 |
|-------------------------------|-------------|--------------|--------------------|-------------|--------------|---------------|------------|------------|
| Appropriation/Budget Activity | | | | Project Nar | ne and Numb | er | | |
| RDT&E, Defense-wide BA 7 | | | | Procuremen | nt Readiness | Optimization- | Advanced C | asting |
| | Project 3 | | _ | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 3: PRO-ACT | 2.305 | 2.281 | 2.283 | 2.354 | 2.445 | 2.435 | 2.477 | 2.520 |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: About 6% of all weapon system spare parts are made from castings, but they account for about 10% of all backorders, due to obsolete and incomplete technical data packages, and atrophied supply chains.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|-------------------------------|-------|-------|-------|-------|
| Collaborative Problem Solving | 1.545 | 1.528 | 1.530 | 1.577 |

Collaborative problem solving environments have been prototyped with several of the Military Service Engineering Support Activities. Each environment is custom designed to reflect the needs of the weapon system and the processes used by the Services. Collaborative teams include representatives of DLA, the Services, primes and subcontractors. Efforts have been focused on over 500 different weapon systems parts that have caused backorder problems. This model of providing solutions to vexing spare parts sourcing problems will be further developed and deployed throughout the DoD as resources and opportunities permit.

| | FY 02 | FY 03 | FY 04 | FY 05 |
|---------------------------------------|-------|-------|-------|-------|
| Casting Technology for Cost Reduction | 0.760 | 0.753 | 0.753 | 0.777 |

Casting technology for cost reduction is under development at several sites, including simulation of size, position and type of cast steel porosity and its effect on service life; development of a foundry tooling database; enhancement of die casting visualization software to reduce trial and error; melting and molding process improvements for seal rings used in armored vehicles; investigation of cheaper tooling materials for short run production; improved prediction of patternmakers shrink which will reduce production time.

C. Other Program Funding Summary: N/A

| | Exhibi | t R-3, RDT&E | Program Element/I | Project Cost 1 | Brea | akdown | | | Date: Fe | bruary 2003 |
|----------------------------------|--------------------|------------------|---------------------|----------------|-----------|-------------|----------------------|-----------|-----------|-------------|
| Appropriation/B | udget Activity | | | | Pro | ject Name a | and Number | | | |
| RDT&E, Defens | e-wide BA 7 | | | | | curement R | | | -Advanced | Casting |
| | | | | | Tec | chnology (P | RO-ACT), l | Project 3 | | |
| A. Project Cost | | | | | . ~. | | | | | |
| Procurement R | eadiness Optimi | zation—Advar | nced Casting Techno | ologies (PRO- | AC' | T) | | | | |
| Project Cost Cat | egories | | | FY 200 | 02 | FY 2003 | FY 2004 | FY 2005 | | |
| 3 | ing Process Supp | ort Costs | | 2.305 | | 2.281 | 2.283 | 2.354 | | |
| | | | | | | | | | | |
| B. Budget Acqu | isition History ar | nd Planning Info | ormation | | | | | | | |
| Danfarmina Oraș | mizations | - | | | | | | | | |
| Performing Orga Contractor or | Contractor | Award or | Performing | FY 200 | 02 | FY 2003 | FY 2004 | EV 2005 | Budget to | Total |
| Government | Method/Type | Obligation | Project | F I 200 | 02 | Г 1 2003 | Г I 200 4 | F I 2003 | Complete | Program |
| Performing | Or Funding | Date | Activity | | | | | | Complete | Tiogrami |
| Activity | <u>Vehicle</u> | 2 | BAC | | | | | | | |
| ATI | Cost Share | 06/23/2000 | N/A | 2.305 | 5 | 2.281 | 2.283 | 2.354 | Cont | Cont |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Government Fur | nished Property: | None. | | | | | | | | |
| | 1 3 | | | | | | | | | |
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| | | | F | Exh | ibi | t R | 3-4, | So | che | du | ıle | Pr | ofi | ile | | | | | | | | | | | | | | | Γ | ate | e: F | ebr | uar | y 2 | 2003 | 3 |
|-------------------------------|---|----|----|-----|-----|-----|------|-----|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|---|---|------|-----|----|-----|--------|------|-----|------|-----|------|-----|-----|----------|----------|---|
| Appropriation/Budget Activity | | | | | Pı | rog | ran | n E | Eler | me | nt : | Nu | ml | oer | an | d N | Var | me | | | P | roje | ect | Νυ | ıml | oer | an | d N | Jan | ne | | | | | | |
| RDT&E, Defense Wide BA 7 | | | | | P) | ΕŌ | 708 | 30 | 118 | S It | ndı | ıstı | ial | Pr | epa | are | dn | ess | ; | | P | roj | ect | 3, | Pr | ocı | arei | me | nt l | Rea | adiı | nes | S | | | |
| , | | | | | Μ | [an | ufa | ctı | ırir | ng ' | Te | chr | nol | og | y | | | | | | | | | | | | Ad | | | | | | | | | |
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| T1 1.57 | | 20 | 01 | | | 200 |)2 | | - 2 | 200 | 03 | | | 20 | 04 | | | 2(| 005 | , | | 20 | 06 | | | 20 | 07 | | | 20 | 08 | | | 20 | 09 | |
| Fiscal Year | 1 | 2 | | 4 | | _ | 3 | 4 | | | _ | 4 | 1 | | 3 | | 1 | _ | 3 | | 1 | | | 4 | 1 | | 3 | 4 | 1 | | | _ | 1 | | _ | 4 |
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| Collaborative Problem Solving | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | \equiv | \equiv |] |
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| Casting Technology for Cost | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reduction | | | | | | | | _ | | | | | | | | | | | | | | | | | | \Box | | | | | | | | | | |
| Reduction | | | | | | | | _ | | | | | | | | | | | | | | | | | | | | | | | | | | Ш | | |
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| Exh | ibit R-4a, S | Schedule D | etail | | | | Date: Febr | uary 2003 |
|---|--------------|---------------------------------------|--------------|--------|--------------------------|--|-----------------------------|-----------|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | PE 07080 | Element Nur 11S Industruring Techn | ial Prepared | | Project 3, Optimizati | umber and N Procuremention – Advar gy (PRO-AC) | nt Readines nced Casting | |
| Schedule Profile | FY 2001 | FY 2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 |
| Collaborative Problem Solving | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q |
| Casting Technology for Cost Reduction | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-2Q | |
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| | Exhibit R-2 | a, RDT&E Pro | oject Justificatio | n | | | Date: Feb | ruary 2003 |
|-------------------------------|-------------|--------------|--------------------|-------------|----------------|---------------|-------------|------------|
| Appropriation/Budget Activity | | | | Project Nar | ne and Numb | er | | |
| RDT&E, Defense-wide BA 7 | | | | Procuremen | nt Readiness (| Optimization- | Forging Adv | anced |
| | | | | System Tec | hnology (PR | O-FAST), Pro | oject 4 | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 4: PRO-FAST | 1.306 | 1.933 | 1.960 | 1.970 | 2.055 | 2.046 | 2.082 | 2.118 |
| RDT&E Articles Quantity - N/A | _ | | | | | | | |

A. Mission Description and Budget Item Justification: About 6% of all weapon system spares are made from forgings but forgings account for 10% of all backorders, due to obsolete and incomplete technical data packages and atrophied supply chains.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|-------------------------------|-------|-------|-------|-------|
| Collaborative Problem Solving | 0.875 | 1.295 | 1.313 | 1.320 |

This program develops and demonstrates innovate solutions to forged spare parts problems by building collaborative teams with DLA and the Military Services. It also develops fast, cheap tooling technology. Tooling is a major lead-time driver for small quantity forging production.

Collaborative problem solving environments have been prototyped with several of the Military Service Engineering Support Activities. Each environment is custom designed to reflect the needs of the weapon system and the processes used by the Services. Collaborative teams include representatives of DLA, the Services, primes and subcontractors. Efforts have been focused on over 50 different weapon systems parts that have caused backorder problems. This model of providing solutions to vexing spare parts sourcing problems will be further developed and deployed throughout the DoD as resources and opportunities permit.

| | FY 02 | FY 03 | FY 04 | FY 05 |
|---|-------|-------|-------|-------|
| Forging Technology for Lead Time Reduction | 0.431 | 0.638 | 0.647 | 0.65 |

Forging technology for lead-time development is under development at several sites. Rapid low cost tooling will be developed based on a spray metal technique; lean manufacturing demonstrations in a job shop forging environment will be used to prototype new practices for faster forging; a database of forging dies will be developed and fielded.

C. Other Program Funding Summary: N/A

| | Exhibi | t R-3, RDT&E | Program Element/Pro | oject Cost B | reakdown | | | Date: Fe | bruary 2003 |
|-----------------------------------|-------------------------|-----------------|----------------------|--------------|---------------|------------|------------|-----------|-------------|
| Appropriation/Bu | idget Activity | | | H | Project Name | and Number | | | • |
| RDT&E, Defense | e-wide BA 7 | | | | Procurement R | | | | dvanced |
| | | | | S | System Techno | ology (PRO | -FAST), Pr | oject 4 | |
| A. Project Cost I | | | | | | | | | |
| Procurement Re | eadiness Optimiz | zation—Forgii | ng Advanced System T | echnology (| PRO-FAST) | | | | |
| Project Cost Cate | ogories | | | FY 2002 | 2 FY 2003 | FY 2004 | FY 2005 | | |
| | ng Process Supp | ort Costs | | 1.306 | 1.933 | 1.960 | 1.970 | | |
| a. Manaracturi | ing 110ccss Supp | ort Costs | | 1.500 | 1.755 | 1.700 | 1.570 | | |
| | | | | | | | | | |
| B. Budget Acqui | isition History an | d Planning Info | ormation | | | | | | |
| D C : 0 | • ,• | | | | | | | | |
| Performing Organ Contractor or | nizations Contractor | Award or | Performing | FY 2002 | 2 FY 2003 | FY 2004 | EV 2005 | Budget to | Total |
| Government | Method/Type | Obligation | Project | F 1 2002 | Z F1 2003 | Г I 2004 | F Y 2003 | Complete | Program |
| Performing | Or Funding | Date | Activity | | | | | Complete | Tiogram |
| Activity | Vehicle | Bute | BAC | | | | | | |
| ATI | Cost Share | 02/09/2001 | N/A | 1.306 | 1.933 | 1.960 | 1.970 | Cont | Cont |
| | | | | | | | | | |
| | | | | | | | | | |
| Carramant Euro | aighad Dramarty | None | | | | | | | |
| Government Furr | iisned Property. | None. | | | | | | | |
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| | Program Element Number and Name | | | | | | | | | | | | | | | | | | I | Date | e: F | ebr | uary | y 2 | 003 | ; | | | | | | | | |
|--|---------------------------------|---|--|---|---|-----|-----|-----|-----|----|-----|------|-------|------|-----|-----|-----|---|---|---------|--|--------------|------------|------------|-----------|------------|------|-----------|----|---|----------|----------|----|---|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | | | | | P | E 0 | 708 | 301 | 11S | In | ıdu | stri | ial l | Prej | | | | | | Pr O | ojecojecojecojecojecojecojecojecojecojec | ct 4 niza | Pr atio | ocu n – | ren Fo | ner rgi | nt R | eac Ad | | | | yst | em | |
| Fiscal Year | | _ | | | | | | | | | | | | | | | _ | | _ | | 200 | 6 | | 2 | 007 | 7 | | 20 | 08 | | | 200 | | _ |
| Tiscai Teai | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 3 | 3 4 | 1 1 | 1 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 2 | 2 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Collaborative Problem Solving | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | <u> </u> | <u> </u> | | J |
| Collaborative Froblem Solving | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | _ |
| Forging Technology for Lead | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Time Reduction | | | Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology 2001 2002 2003 2004 2005 | | | | | | | | | | | | Т | | | | | | | | | | | | | | | | | | | |
| | | | Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology 2002 2003 2004 2 | | | | | | | | | | | | | | | | | | | | | | | | + | \dashv | | | | | | |
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| Exh | ibit R-4a, S | Schedule D | etail | | | | Date: Febr | ruary 2003 |
|---|--------------|---------------------------------------|--------------|--------|--------------------------|--|---------------------------|------------|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | PE 07080 | Element Nur 11S Industruring Techn | ial Prepared | | Project 4 I Optimizat | omber and Norocurement ion – Forgingy (PRO-FA | t Readiness ng Advance | |
| Schedule Profile | FY 2001 | FY 2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 |
| Collaborative Problem Solving | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q |
| Forging Technology for Lead Time Reduction | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | |
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| | Exhibit R-2 | a, RDT&E Pro | ject Justificat | tion | | | Date: Feb | ruary 2003 |
|-------------------------------|-------------|--------------|-----------------|--------------|---------------|--------------|--------------|--------------|
| Appropriation/Budget Activity | | | | Project Name | and Number | | | |
| RDT&E, Defense-wide BA 7 | | | | Customer Val | ue Industrial | Plant Equipn | nent (CV:IPE |), Project 5 |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 5: CV:IPE | 1.360 | 1.380 | 1.182 | 0.796 | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: Industrial Plant Equipment (IPE) is used by maintenance depots, air logistics centers and on bases and ships everywhere to maintain weapons. When this equipment becomes worn, it can either be rebuilt or replaced with new. Its not unusual for rebuilt equipment to be 40% cheaper than new equipment. Rebuilds also save money because they use the same foundations and utility connections. Rebuilds can be challenging because there is little standardization, spare parts can be hard to get, and old equipment can conceal hidden defects. Rebuild times can stretch out, which is a risk factor to maintenance activities, because large machines can have unique capabilities and cannot be kept offline for long periods.

B. Accomplishments/Planned Program:

| | • | | | |
|-------------------------------|-------|-------|-------|-------|
| | FY 02 | FY 03 | FY 04 | FY 05 |
| Lean Manufacturing Principles | 1.360 | 1.380 | 1.182 | 0.796 |

This project applies lean manufacturing principles to the overhaul of IPE. Lean manufacturing is a methodology that looks at every process step from the end consumer's viewpoint. If it doesn't add value, it is a candidate for elimination. Lean manufacturing has a toolbox of methods that will be applied to rebuilding IPE, including standard work; visible processes; capable processes; and empowered workforce.

C. Other Program Funding Summary: N/A

| | Exhibi | t R-3, RDT&F | Program Element/ | Project Cost Bre | akdown | | | Date: Fe | bruary 2003 |
|--------------------------|---------------------------|------------------------|-----------------------|------------------|--------------|--------------|------------|--------------------|------------------|
| Appropriation/E | | | | | t Name and | | | | |
| RDT&E, Defen | | | | Custor | ner Value Ir | dustrial Pla | nt Equipme | ent (CV:IPE | 2), Project 5 |
| A. Project Cost | | | | | | | | | |
| Customer Value | Industrial Plant E | Equipment (CV: | IPE) | | | | | | |
| Project Cost Car | tegories | | | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | |
| a. Manufactur | ring Process Supp | ort Costs | | 1.360 | 1.380 | 1.182 | 0.796 | | |
| B. Budget Acqu | uisition History ar | nd Planning Info | ormation | | | | | | |
| Performing Org | | | | | | | | | _ |
| Contractor or Government | Contractor Method/Type | Award or Obligation | Performing Project | FY 2002 | FY 2003 | FY 2004 | FY 2005 | Budget to Complete | Total Program |
| Performing | Or Funding | Date | Activity | | | | | Complete | riogram |
| Activity | Vehicle | Dute | BAC | | | | | | |
| 1 Total vity | v cilicie | | <u> </u> | 1.360 | 1.380 | 1.182 | 0.796 | 1.360 | 4.718 |
| Various | CPFF | 03/2002 | | | | | | | |
| | | | | | | | | | |
| Government Fu | rnished Property: | None. | | | | | | | |
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| | | |] | Exh | ib | it F | R- 4 | 1, S | ch | edı | ule | Pr | ofi | ile | | | | | | | | | | | | I | Date | e: F | ebr | uar | y 2 | 2003 | 3 |
|--|---|----|----|-----|----|------|-------------|-------------------|----------|-----|-----|------|------|------|----------------|---|----|-----|--------|-----|-----|----|-----|----|---|---|------|------|-----|------|------|------|----|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | | | | | P | Ε(|)7(| m] 080 act | 11 | S I | ndı | ust | rial | l Pr | epa | | | | P | roj | ect | Cu | sto | me | | | | Inc | dus | tria | ıl P | Plan | ıt |
| | | 20 | 01 | | 11 | 20 | | | | 20 | | ·C11 | 101 | | <u>)</u> 04 | | 20 | 005 | | | 06 | | | 07 | _ | | 20 | 08 | | | 20 | 09 | |
| Fiscal Year | 1 | 2 | | 4 | 1 | | | 4 | | | | 4 | 1 | | | 1 | 2 | | 1 | | | 1 | | 3 | | 1 | | 3 | | | | | |
| Baselining Current Processes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Develop Standard Templates | | | | | | | | |] | | | | | | | | | | | | | | | | | | | | | | | | |
| New Methods for Project Initiation & Risk Management Plans | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| Rapid Design of Control Systems | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | |
| Parametric Estimating Models for Rapid Cost Estimates | | | | | | | | | | | | | | | | Ц | | |]] | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Exh | Exhibit R-4a, Schedule Detail | | | | | | | | | | | | |
|--|-------------------------------|---------------------------------------|--------------|--------|--|--------|--------|--------|--|--|--|--|--|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | PE 07080 | Element Nur 11S Industraring Techn | ial Prepared | | Project Number and Name Project 5, Customer Value: Industrial Plant Equipment (CV:IPE) | | | | | | | | |
| Schedule Profile | FY 2001 | FY 2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | | | | | |
| Baselining Current Processes | | 1-4Q | | | | | | | | | | | |
| Develop Standard Templates | | 1-4Q | | | | | | | | | | | |
| New Methods for Project Initiation & Risk Management Plans | | | 1-4Q | | | | | | | | | | |
| Rapid Design of Control Systems | | | | 1-4Q | | | | | | | | | |
| Parametric Estimating Models for Rapid Cost Estimates | | | | | 1-4Q | | | | | | | | |
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| | Exhibit R-2 | a, RDT&E Pro | ject Justificatio | n | | | Date: Feb | ruary 2003 |
|-------------------------------|-------------|--------------|-------------------|-------------|-------------|--------------|-----------|------------|
| Appropriation/Budget Activity | | | | Project Nan | ne and Numb | er | | |
| RDT&E, Defense-wide BA 7 | | | | Supply Cha | in Manageme | ent (SCM), P | roject 6 | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 6: SCM | 17.774 | | | | | | | |
| RDT&E Articles Quantity - N/A | _ | | | | | | | |

A. Mission Description and Budget Item Justification: The DLA mission is to get the right item, at the right time, to the right place, at the right price, every time, in support of America's warfighter. To accomplish its mission DLA must use an integrated combat logistics solution that is coordinated among the services and across DoD to meet all combat support requirements in peace and war. There is a need for the Agency to stay abreast of the latest supply chain management principals and techniques that will improve the supply availability of DLA managed items by assembling supply chains to shorten lead times and reduce costs. The Agency must ensure that outsourcing strategies are coordinated; performance measures are in place to measure effectiveness, that the organizational structure promotes successful supply chain management and to incorporate the latest electronic commerce initiatives into its supply chain.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|--------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 17.774 | | | |
| RDT&E Articles Quantity – N/A | | | | |

Projects to enhance asset visibility and tracking by adding serial number tracking and web access to the Microchip Logistics Program; add uxiliary search engine capability and a "manufacture to order" capability for the DoD E-MALL; add capabilities to DLA's Procurement History Data Mart and to extend similar functionality to an online database for requisition data.

C. Other Program Funding Summary: N/A

| | Date: February 2003 | | | | | | | |
|-------------------------------|---------------------|-------|-------|--------------|-------------|--------------|-------|-------|
| Appropriation/Budget Activity | | | | Project Nan | ne and Numb | er | | |
| RDT&E, Defense-wide BA 7 | | | | Classified P | rograms (CP |), Project 7 | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 |
| Project 7: CP | | 2.357 | 4.710 | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | |

A. Mission Description and Budget Item Justification: $\ensuremath{\mathrm{N/A}}$

B. Accomplishments/Planned Program:

| - | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | | 2.357 | 4.710 | |
| RDT&E Articles Quantity – N/A | | | | |

CP

C. Other Program Funding Summary: N/A

| | Exhibit R-2 | 2a, RDT&E Pro | ject Justification | on | | | Date: Feb | ruary 2003 | | |
|--|-------------|---|--------------------|-------|-------|-------|-----------|------------|--|--|
| Appropriation/Budget Activity RDT&E, Defense-wide BA 7 | | Project Name and Number ERIM Defense/Competitive Sustainment Initiative (ERIM Def/CS Initiative), Project 8 | | | | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | | |
| Project 8: ERIM Def/(CS) Initiative | 7.700 | | | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | | |

A. Mission Description and Budget Item Justification: ERIM Competitive Sustainment (CS) was added by Congress in FY 02 in recognition of the need to substantially reduce the cost of support for aging weapon systems by addressing the manufacturing requirements associated with producing parts for aging weapon systems. A competitive source selection process was conducted for a manager of an industry coalition to conduct the work.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 7.700 | | | |
| RDT&E Articles Quantity – N/A | | | | |

Conducts industry/Government pilots in the following five areas: 1) effective supply partnerships; 2) significant improvement in quality and access to technical data; 3) a streamlined maintenance process; 4) upgrade strategies for increased reliability and 5) innovative training. The goals are to reduce total costs of spares/replacements, cut the time from requirement to delivery for supplies and cut repair cycle time.

2.4

49

5.6

cont

cont

C. Other Program Funding Summary: To Total BY^1 BY^2 BY^{2+3} BY^{2+4} PY CY Complete Cost Related RDT&E: 0603712S

1.2

1.0

Competitive Sustainment 3.0 0.0 1.0

| | Exhibit R-3, RDT&E Program Element/Project Cost Breakdown Date: February 2003 | | | | | | | | | | | |
|-------------------------------------|---|-----------------|----------------|-------|----|---------------|--------------|----------|---------------|---------|--|--|
| Appropriation/Bu | | | | | | oject Name a | | | | | | |
| RDT&E, Defense | -wide BA 7 | | | | | IM Defense | | | ent Initiativ | e (ERIM | | |
| | | | | | De | f/CS Initiati | ve), Project | 8 | | | | |
| A. Project Cost B | | | _ | | | | | | | | | |
| ERIM Defense/C | Competitive Sus | tainment Initi | ative | | | | | | | | | |
| Project Cost Cotor | rorios | | | FY 20 | റാ | FY 2003 | FY 2004 | FY 2005 | | | | |
| Project Cost Cates a. Manufacturir | | ort Costs | | 7.70 | - | F I 2003 | ГТ 2004 | F I 2003 | | | | |
| a. Manufacturii | ig Frocess Supp | ort Costs | | 7.70 | U | | | | | | | |
| | | | | | | | | | | | | |
| B. Budget Acquis | sition History an | d Planning Info | ormation | | | | | | | | | |
| | , | | | | | | | | | | | |
| Performing Organ | nizations | | | | | | | | | | | |
| Contractor or | Contractor | Award or | Performing | FY 20 | 02 | FY 2003 | FY 2004 | FY 2005 | Budget to | Total | | |
| Government | Method/Type | Obligation | Project | | | | | | Complete | Program | | |
| Performing | Or Funding | Date | Activity | | | | | | | | | |
| <u>Activity</u> | <u>Vehicle</u> | | BAC | | | | | | | | | |
| ERIM/ATI | Competitive | 2Q02 | | 7.700 | 0 | | | | 7.700 | 7.700 | | |
| | Contract | | | | | | | | | | | |
| | Awarded | | | | | | | | | | | |
| Contract Support | Cost | 2002 | Andrulis Corp. | | | | | | | | | |
| Contract Support | Cost | 2002 | Andruits Corp. | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Government Furn | ished Property: | None. | | | | | | | | | | |
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| | | | I | Exh | ibi | it F | R-4 , | Sc | he | dul | e I | Prof | file | ! | | | | | | | | | | | | | | Ι | Date | e: F | ebr | uar | y 2 | 003 | , |
|---|---|---|--|-----|-----|------|--------------|-----|---------|------|----------|---------------|----------|------|-----|-----|--------------------|------|-----|----|-----|-----|------|-----|-----|-----|----|---|------|------|-----|-----|-----|-----|---|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | | | Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology | | | | | | | E | RÍN | M D | efe | ense | e/C | om | uml peti f/C | itiv | e S | | | | | t 8 | | | | | | | | | | | |
| Fiscal Year | | | 01 | | | | 02 | | | 200. | _ | | | 004 | | | | 005 | | | | 06 | | | | 07 | | | 20 | | | | 20 | | |
| Tiscui Teur | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 3 | 3 4 | 4 1 | 2 | 2 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| BAA Preparation and Issue | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BAA Closing and Evaluations | | | | \ | _ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Industry Coalition Mgt Awarded | | | | | 4 | Δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Organize and manage an industry coalition | | | | | | | (| Con | trac | ct a | wa | rde | d f | or 5 | уe | ars | s — | -Aı | var | de | d u | nde | er F | PΕ | 060 |)37 | 12 | S | | | | | | | |
| Exchange to Exchange Services | | | | | 4 | | | | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| EPortal for Obsolete parts solutions | | | | | | | | F | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contractor Repair Information Support Pilot Phase 0 | | | | | Δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contractor Repair Information Support Pilot Phase 1 | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supply Chain Portal - AF | | | | | | | | 个 | | | | | <u> </u> | | | | | | | | | | | | | | | | | | | | | | |
| Robust Lean Supply Chains | | | | | | | | 中 | | | <u> </u> | $\frac{1}{2}$ | _ | | | | | | | | | | | | | | | | | | | | | | |
| Shared Condition Based Maintenance Systems | | | | | | | | Z | <u></u> | | I | 7 | 7 | | | | | | | | | | | | | | | | | | | | | | |

| Exh | ibit R-4a, S | Schedule D | etail | | | | Date: Febr | uary 2003 |
|---|--------------|---------------------------------------|--------------|--------|-----------|--|--------------|-----------|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | PE 07080 | Element Nur 11S Industraring Techn | ial Prepared | | ERIM Defe | ne and Numb ense/Competi ERIM Def/CS | tive Sustain | |
| Schedule Profile | FY 2001 | FY 2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 |
| BAA Preparation and Issue | 1-3Q | | | | | | | |
| BAA Closing and Evaluations | 4Q | 1Q | | | | | | |
| Industry Coalition Mgt Awarded | | 2Q | | | | | | |
| Organize and manage an industry coalition | | 2-4Q | 1-4Q | 1-4Q | 1-4Q | 1-4Q | | |
| Exchange to Exchange Services | | 1-4Q | 1-2Q | | | | | |
| EPortal for Obsolete parts solutions | | 1-4Q | 1-2Q | | | | | |
| Contractor Repair Information Support Pilot Phase 0 | | 1-3Q | | | | | | |
| Contractor Repair Information Support Pilot Phase 1 | | 4Q | 1-4Q | 1Q | | | | |
| Supply Chain Portal - AF | | 4Q | 1-4Q | 1Q | | | | |
| Robust Lean Supply Chains | | 4Q | 1-4Q | 1Q | | | | |
| Shared Condition Based Maintenance Systems | | 4Q | 1-4Q | 1Q | | | | |
| BAA Preparation and Issue | | 4Q | 1-4Q | 1Q | | | | |

| | Exhibit R-2a, RDT&E Project Justification | | | | | | | | | | | | |
|-------------------------------|---|-------|-------|-------------|---------------|--------------|--------------|-------|--|--|--|--|--|
| Appropriation/Budget Activity | | | | Project Nan | ne and Numb | er | | | | | | | |
| RDT&E, Defense-wide BA 7 | | | | Laser Addit | tive Manufact | turing (LAM) |), Project 9 | | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | | | | | |
| Project 9: LAM | 5.700 | 5.902 | | | | | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | | | | | |

A. Mission Description and Budget Item Justification: This program will develop a rapid manufacturing capability that produces high performance military and commercial components via laser additive manufacturing. It will be executed to realize as many applications as possible across the services and also support the DLA mission. The Laser Additive Manufacturing (LAM) process has the ability to produce components with properties bridging between the high end of castings and the low end of forgings. The major advantages are a reduced cycle time of up to 75%, reduced cost, elimination of forging dies and casting molds, inserts and fixtures, and reduced machining requirements.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | 5.700 | 5.902 | | |
| RDT&E Articles Quantity – N/A | | | | |

A joint advisory board will be constituted to provide oversight. Initial applications are planned for components of aerospace systems including fighters, and helicopters, applications for missiles including rhenium motors and thrusters, and other components. A portion of the program will also focus on repairs. Weapon system contractors such as Boeing and Sikorsky will also be participating to assure the smooth transition of the technology. Aerospace components have been selected for transition. A qualification matrix has been developed. Prototype parts will be processed and qualified. A test matrix to qualify repair parts will be developed. Technology will be developed for non-aerospace applications. The technology will be transitioned to as many parts as possible.

C. Other Program Funding Summary: N/A

| | Exhibit R-3, RDT&E Program Element/Project Cost Breakdown Date: February 2003 | | | | | | | | | | | |
|----------------------------------|---|------------------|------------|-------|-----|--------------|-----------|------------|--------------|---------|--|--|
| Appropriation/Bu | | | | | | oject Name a | | | | | | |
| RDT&E, Defense | | | | | Las | ser Additive | Manufactu | ring (LAM) |), Project 9 | | | |
| A. Project Cost l | | | | | | | | | | | | |
| Laser Additive | Manufacturing | (LAM) | | | | | | | | | | |
| Project Cost Cate | egories | | | FY 20 | 02 | FY 2003 | FY 2004 | FY 2005 | | | | |
| | ing Process Supp | ort Costs | | 5.70 | | 5.902 | | | | | | |
| W. 111W11W1W1W1 | g 110 00 55 2 0 pp | 010 0 0 0 0 0 0 | | 2.70 | | 0.502 | | | | | | |
| B. Budget Acqui | isition History ar | nd Planning Info | ormation | | | | | | | | | |
| | • | 6 | - | | | | | | | | | |
| Performing Orga Contractor or | nizations Contractor | Award or | Performing | FY 20 | 02 | FY 2003 | FY 2004 | FY 2005 | Budget to | Total | | |
| Government | Method/Type | Obligation | Project | 1120 | 02 | 1 1 2003 | 1 1 2004 | 1 1 2003 | Complete | Program | | |
| Performing | Or Funding | Date | Activity | | | | | | Complete | Trogram | | |
| Activity | <u>Vehicle</u> | | BAC | | | | | | | | | |
| | | | | 5.70 | 0 | 5.902 | | | 5.700 | 11.602 | | |
| Aeromet Corp | Section 845 | 27 Sep 02 | | | | | | | | | | |
| | Prototype | | | | | | | | | | | |
| | Agreement | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| Government Furi | nished Property: | None. | | | | | | | | | | |
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| | Exhibit R-4, Schedule Profile Date: February 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|----|----|----|----------|-------------|------------|---|------|------|-----|-----|------|-----|-----|-----|-----|------|---|---|-----|------|----|------|-----|------|-----|-----|---------|-----|----|----------|---------|---|---|
| Appropriation/Budget Activity | | | | | P | rog | gram | E | lem | ent | Νι | ım | ber | an | d N | Var | ne | | | P | roj | ect | Na | me | ar | nd : | Nu | mb | er | | | | | | |
| RDT&E, Defense Wide BA 7 | | | | | P | E C | 708 | 01 | 1S | Ind | ust | ria | l Pı | rep | are | dn | ess | | | L | ase | er A | dd | itiv | e I | Ma | nuí | fac | turi | ing | (L | AN | 1), | | |
| | | | | | N | A an | ıufac | etui | ring | g To | ech | nol | log | y | | | | | | P | roj | ect | 9 | | | | | | | | | | | | |
| Fiscal Year | | 20 | 01 | | | 20 | 02 | 12 2003 2004 2005 2006 2007 2008 | | | | | | | | | 08 | 2009 | | | | | | | | | | | | | | | | | |
| riscai Year | 1 | 2 | 3 | 4 | 1 | 2 | 3 4 | 4 1 | 1 2 | 2 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Establish Tri-service joint | | | | | | | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| advisory board. | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | i | | | l |
| Select target aerospace | | | | | Г | | | - | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| components for transition | | | | | ۲ | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | i | | | l |
| Develop a qualification matrix | | | | | Г | | | - | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| for the parts | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | i | | | l |
| Process prototype parts and | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| qualify the process, material, | | | | | | | \Box | | | | | | | | | | | | | | | | | | | | | | | | | ł | | | 1 |
| and the part | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Research DOD parts that can | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł | | | |
| be repaired at a reduced cost | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł | | | |
| versus procurement of new | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ł | | | |
| parts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Establish a test matrix for | | | | ١, | | | Ц. | | | | | | | | | | | | | | | | | | | | | | | | | i | | | l |
| repair parts to qualify the | | | | L | | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | ł | | | |
| repair | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Produce and qualify prototype | | | | l | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | ł | | | |
| parts | ļ | ļ | | " | | | | | | | | | | | | | | | | | | | | | | | ļ | | igsqcut | | | | | | |
| Develop technology for non- | | | | ſ | _ | | \dashv | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| aerospace applications | | | | " | | | $\Box\Box$ | | | | | | | | | | | | | | | | | | | | | | | | | I | \perp | |] |

| Exh | Exhibit R-4a, Schedule Detail | | | | | | | | | | | | |
|---|-------------------------------|---------------------------------------|--------------|--------|--------|---------------------------|--------|--------|--|--|--|--|--|
| Appropriation/Budget Activity RDT&E, Defense Wide BA 7 | PE 07080 | Element Nur 11S Industraring Techn | ial Prepared | | | me and Nur itive Manuf | | AM), | | | | | |
| Schedule Profile | FY 2001 | FY 2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | | | | | |
| Establish Tri-service joint advisory board. | | 1-4Q | | | | | | | | | | | |
| Select target aerospace components for transition | | 1-4Q | | | | | | | | | | | |
| Develop a qualification matrix for the parts | | 1-4Q | | | | | | | | | | | |
| Process prototype parts and qualify the process, material, and the part | | 1-4Q | | | | | | | | | | | |
| Research DOD parts that can be repaired at a reduced cost versus procurement of new parts | | 1-4Q | | | | | | | | | | | |
| Establish a test matrix for repair parts to qualify the repair | | 1-4Q | | | | | | | | | | | |
| Produce and qualify prototype parts | | 1-4Q | 1-4Q | | | | | | | | | | |
| Develop technology for non-aerospace applications | | 1-4Q | | | | | | | | | | | |
| Transition the LAM process for as many parts as possible | | 1-4Q | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| | Exhibit R-2 | 2a, RDT&E Pro | oject Justification | on | | | Date: February 2003 | | | | | |
|-------------------------------|-------------|---------------|---------------------|---|-------|-------|---------------------|-------|--|--|--|--|
| Appropriation/Budget Activity | | | | Project Name and Number | | | | | | | | |
| RDT&E, Defense-wide BA 7 | | | | Twelve Screw Extruder for Fuel Cell Technology (FCT), | | | | | | | | |
| | | | | Project 10 | | | | | | | | |
| Cost (\$ in millions) | FY 02 | FY 03 | FY 04 | FY 05 | FY 06 | FY 07 | FY 08 | FY 09 | | | | |
| Project 10: Twelve Screw | | | | | | | | | | | | |
| Extruder for Fuel Cell | | 1.968 | | | | | | | | | | |
| Technology (FCT) | | | | | | | | | | | | |
| RDT&E Articles Quantity - N/A | | | | | | | | | | | | |

A. Mission Description and Budget Item Justification: Congressional add. This program will develop and demonstrate manufacturing technology for fuel cell extruders.

B. Accomplishments/Planned Program:

| | FY 02 | FY 03 | FY 04 | FY 05 |
|--------------------------------------|-------|-------|-------|-------|
| Accomplishment/ Effort/Subtotal Cost | | 1.968 | | |
| RDT&E Articles Quantity – N/A | | | | |

Congressional add. Program plan being developed.

C. Other Program Funding Summary: $\ensuremath{N/A}$

| | Exhibi | t R-3, RDT&F | Program Element/ | Project Cost Bro | eakdown | | | Date: Fe | bruary 2003 |
|--|--|--------------------------------|---------------------------------|------------------|-------------|-------------|-------------|-----------------------|------------------|
| Appropriation/B | Budget Activity | | | Pr | oject Name | and Number | • | | |
| RDT&E, Defens | se-wide BA 7 | | | Ty | welve Screw | Extruder fo | r Fuel Cell | Technology | y (FCT), |
| | | | | Pr | oject 10 | | | | |
| A. Project Cost | Breakdown | | | | | | | | |
| Twelve Screw I | Extruder for Fue | l Cell Technol | ogy (FCT) | | | | | | |
| Project Cost Cat | tegories | | | FY 2002 | FY 2003 | FY 2004 | FY 2005 | | |
| | ring Process Supp | ort Costs | | | 1.968 | | | | |
| B. Budget Acque Performing Orga Contractor or Government Performing Activity | anizations Contractor Method/Type Or Funding Vehicle | Award or Obligation Date | Performing Project Activity BAC | FY 2002 | FY 2003 | FY 2004 | FY 2005 | Budget to Complete | Total Program |
| TBD | TBD | TBD | | | 1.968 | | | | 1.968 |
| Government Fu | rnished Property: | None. | | | | | | | |

| Exhibit | Date: Feb | ruary 2003 | | | | | | |
|-------------------------------|---|------------|--------|--------|-------|-------|-------|-------|
| Appropriation/Budget Activity | | | | | | | | |
| RDT&E, Defense-wide BA 7 | 012S | | | | | | | |
| Cost (\$ in millions) | FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 F | | | | | | | |
| Total PE Cost | | 28.182 | 35.781 | 11.457 | 6.957 | 6.944 | 7.131 | 7.118 |
| Classified Programs (CP) | | 28.182 | 35.781 | 11.457 | 6.957 | 6.944 | 7.131 | 7.118 |

A. Mission Description and Budget Item Justification: This is a classified program. Justification will be provided under a separate cover.

B. Program Change Summary

| Previous President's Budget | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|-----------------------------|---------|---------|---------|---------|
| Current President's Budget | | 28.182 | 35.781 | 11.457 |
| Total Adjustments | | | | |
| Revised inflation rate | | -0.418 | -0.619 | -0.143 |
| Congressional increases | | +28.600 | +36.400 | +11.600 |

Change Summary Explanation: N/A

C. Other Program Funding Summary: N/A

| | Exhibit F | R-3, RDT&E | Program Elemen | t/Project Cost B | reakdown | | | Date: Fe | bruary 2003 |
|-------------------|-----------------------------|------------------|----------------|------------------|-------------------|-------------------|-------------------|-----------|-------------|
| Appropriation/ | Budget Activity | | | Pr | oject Name | and Numb | oer | | |
| RDT&E, Defer | se-wide BA 7 | | | CI | P, Project 1 | | | | |
| A. Project Cos | t Breakdown | | | | | | | | |
| Classified Prog | grams | | | | | | | | |
| | | | | EV 2002 | EM 2002 | EM 2004 | EV 2005 | | |
| Project Cost Cate | egories ing Process Supp | ort Costs | | FY 2002 | FY 2003 28.182 | FY 2004 35.781 | FY 2005 11.457 | | |
| a. Manufactur | ing Process Supp | or Cosis | | | 20.102 | 33.761 | 11.43/ | | |
| | | 1D1 ' 1 C | | | | | | | |
| B. Budget Acqu | isition History an | id Planning Info | ormation | | | | | | |
| Performing Orga | nizations | | | | | | | | |
| Contractor or | Contractor | Award or | Performing | FY 2002 | FY 2003 | FY 2004 | | Budget to | Total |
| Government | Method/Type | Obligation | Project | | 28.182 | 35.781 | 11.457 | Complete | Program |
| Performing | Or Funding | Date | Activity | | | | | | |
| Activity | <u>Vehicle</u> | | BAC | | | | | | |
| | N/A | | | | | | | | |
| | | | | | | | | | |
| Government Fur | nished Property: | NI/A | | | | | | | |
| Government rui | ilished Froperty. | 1 \ /A. | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |

UNCLASSIFIED

DEFENSE LOGISTICS AGENCY SUMMARY OF FY 2004/2005 DESCRIPTIVE SUMMARIES

Defense Logistics Agency (\$ in Thousands)

| | | Direct Budg | get Plan (TO | | Budget Authority | | | | | | |
|-----------------------------|-------------------|---------------------|---------------------|---------------------|--------------------------|---------------------|---------------------|---------------------|--|--|--|
| Appropriation Title | FY 2002 Actual | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2002 <u>Actual</u> | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | | | |
| RDT&E DLA Direct Program | 135,633 | 178,201 | 76,663 | 48,414 | 135,633 | 178,201 | 76,663 | 48,414 | | | |
| Defense Technology Analysis | 5,626 | 5,017 | 5,209 | 5,279 | 5,626 | 5,017 | 5,209 | 5,279 | | | |

Exhibit PB-1

Unclassified FY 2004/2005

DESCRIPTIVE SUMMARIES ADVISORY AND ASSISTANCE SERVICES DEFENSE LOGISTICS AGENCY

(Dollars in Thousands)

| | FY 02 <u>Actual</u> | FY 03 <u>Estimate</u> | FY 04 <u>Estimate</u> | FY 05 <u>Estimate</u> |
|---|------------------------|--------------------------|--------------------------|--------------------------|
| Appropriation: RDT&E,DW | | | | |
| I. Management & Professional Support Services | | | | |
| FFRDC Work | 0 | 0 | 0 | 0 |
| Non-FFRDC Work | 0 | 0 | 0 | 0 |
| Subtotal | 0 | 0 | 0 | 0 |
| II. Studies, Analysis, & Evaluation | | | | |
| FFRDC Work | 100 | 600 | 600 | 600 |
| Non-FFRDC Work | 0 | 0 | 0 | 0 |
| Subtotal | 100 | 600 | 600 | 600 |
| III. Engineering & Technical Services | | | | |
| FFRDC Work | 0 | 0 | 0 | 0 |
| Non-FFRDC Work | 0 | 0 | 0 | 0 |
| Subtotal | 0 | 0 | 0 | 0 |
| TOTAL | 100 | 600 | 600 | 600 |
| FFRDC Work | 100 | 600 | 600 | 600 |
| Non-FFRDC Work | 0 | 0 | 0 | 0 |
| Unclassifie | ed | | | Exhibit PB-15 |