Defense Logistics Agency
FY 2005 RDT&E PROGRAM

EXHIBIT R-1

APPROPRIATION: 0400D Research, Development, Test & Eval, DW

Date: FEB 2004

Line No	Program Element Number	Item	Act	Thousands of Dollars FY 2003	FY 2004	FY 2005	SEC
37	0603712S	Generic Logistics R&D Technology Demonstrations	3	130,577	123,111	27,542	U
51	0603805S	Dual Use Application Programs	3	5,750	3,710		U
		Advanced Technology Development (ATD)		**136,327**	**126,821**	**27,542**	
99	0305840S	Electronic Commerce	5		2,335	2,345	U
		System Development and Demonstration (SDD)			**2,335**	**2,345**	
127	0605798S	Defense Technology Analysis	6	6,625	5,035	7,279	U
		RDT&E Management Support		**6,625**	**5,035**	**7,279**	
192	0708011S	Industrial Preparedness	7	20,741	45,871	11,005	U
193	0708012S	Logistics Support Activities	7	28,182	35,401	11,389	U
		Operational Systems Development		**48,923**	**81,272**	**22,394**	
		Total Defense Logistics Agency		**191,875**	**215,463**	**59,560**	

Exhibit R-2, RDT&E Budget Item Justification						Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense-wide BA 3			R-1 Item Nomenclature: Logistics R&D Technology Demonstration 0603712S				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	130.577	123.111	27.542	24.905	26.565	27.022	27.488
Project 1: Material Acquisition: Electronics (MAE)	16.573	9.571	10.160	10.267	10.326	10.494	10.678
Project 2: Computer to Computer Negotiations (CCN)	3.562	-----	-----	-----	-----	-----	-----
Project 3: Pay Per Use Logistics System (PUL)	1.747	-----	-----	-----	-----	-----	-----
Project 4: Aging Aircraft Sustainment Technology (AAST)	5.349	6.023	5.293	5.388	5.469	5.557	5.652
Project 5: Virtual Reality Medical Assembly (VRMA)	0. 594	1.902	2.946	2.947	1.935	1.968	2.002
Project 6: Diminishing Manufacturing Source Data (DMS)	0.974	2.473	-----	-----	-----	-----	-----
Project 7: Computer Assisted Technology Transfer (CATT)	2.723	-----	-----	-----	-----	-----	-----
Project 8: Competitive Sustainment (CS)	0.965	0.976	1.196	2.356	4.893	5.546	5.402
Project 9: Supply Chain Management (SCM)	15.564	3.375	3.457	3.457	3.453	-----	-----
Project 10: Agent Based Logistics Processes (ABLP)	-----	-----	-----	-----	-----	2.969	3.267
Project 11: eMASS (Completion Project)	-----	1.265	0.490	0.490	0.489	0.488	0.487
Project 12: Defense Microelectronics Activity (DMEA)	58.321	73.314	-----	-----	-----	-----	-----
Project 13: Other Congressionally Added Programs (OCAs)	22.955	20.381	-----	-----	-----	-----	-----
Project 14: Logistics Domain (LD)	1.250	-----	-----	-----	-----	-----	-----
Project 15: Continuous Acquisition Life-Cycle Support (CALS)	-----	3.831	4.000	-----	-----	-----	-----

Exhibit R-2, RDT&E Budget Item Justification	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3	R-1 Item Nomenclature: Logistics R&D Technology Demonstration 0603712S

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 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)

	FY 2003	FY 2004	FY 2005
Previous President's Budget	129.291	22.359	23.542
Current President's Budget	130.577	123.111	27.542
Total Adjustments	+1.286	+100.752	+4.000
Congressional Increase		+98.200*	
Reprogrammings/transfer		+3.831	+4.000
Program adjustments	+1.286	-1.279	

Change Summary Explanation: FY 2003 reflects (+$1.250 million) for additional funding provided by OSD in the 4th Qtr FY 2003 for Logistics Domain owner costs in support of portfolio management and enterprise architect portions of the LSM mission and (+$0.036 million) for a minor program adjustment. FY 2004 reflects a net increase (+$100.752 million) due to (+$98.2 million) in congressionally added programs; (+$3.831 million) for the Continuous Acquisition and Life-Cycle Support (CALS) program transferred from OSD to DLA; and (-$1.279 million) for proration of DW FY 2004 Appropriations Act adjustments for DW savings from management improvements per Section 8094 (-$0.255 million) and DW savings from outsourcing management efficiencies, and economic assumptions per Section 8126 (-$1.024 million).

*See Exhibits R-2a for programs and net funding for the following adds: Star4D Pollution Prevention ($1.0 million); DMS Data Warehouse Solution ($2.5 million); several Defense Microelectronics Activity (DMEA) advanced technologies programs ($74.1 million); and Other Congressional Adds (OCAs) for the California Manufacturing Center ($5.1 million); Connectivity for Rapid ID of Tech Sources ($1.0 million); Wireless Rural Communication Demonstration ($3.0 million); Fuel Cell Mine Loader Prototype Locomotive ($1.0 million); Vehicle Fuel Cell Program ($4.9 million); and New England Manufacturing Supply Chain ($5.6 million).

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number Material Acquisition: Electronics (MAE), Project 1			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 1: MAE	16.573	9.571	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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	9.665	9.571	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 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.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number Computer to Computer Negotiations (CCN), Project 2			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 2: CCN	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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	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.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number Pay per Use Logistics Systems (PUL), Project 3			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 3: PUL	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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	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							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Aging Aircraft Sustainment Technology (AAST), Project 4			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 4: AAST	5.349	6.023	5.293	5.388	5.469	5.557	5.652
RDT&E Articles Quantity- N/A							

A. Mission Description and Budget Item Justification: The mission is to fund efforts to explore, develop, and prototype tools & technologies that both help DLA people do their jobs better when it comes to supporting aviation part customers and help those customers coordinate & collaborate their efforts with DLA to solve parts issues.

The current effort is divided into two major thrusts: Parts Situation Awareness and Supply Response Time

- Parts Situation Awareness targets providing DLA people and its aviation part customers with tools/technologies that provide a more comprehensive and accurate view of the current and emerging parts situation; reducing the number of "surprises"
- Supply Response Time takes on the challenge of reducing DLA's reaction time to those inevitable surprises that cannot be prevented via better parts situation awareness. It seeks improvements in processes & practices aided by tools/technologies.

Part of the Aging Aircraft Sustainment Program is the Corrosion Prevention feature. In FY 2003, Milstar Painting and Coating Pollution Prevention, a congressional add, was funded under AAST ($0.973 million). In FY 2004 the Star 4D Pollution Prevention, a congressional add is also funded under AAST ($0.990 million).

B. Accomplishments/Planned Program:

	FY 03	FY 04	FY 05
AAST	4.376	5.033	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.

	FY 03	FY 04	FY 05
Star4D Pollution Prevention	0.973	0.990	-----
RDT&E Articles Quantity - N/A			

The IOWA Waste Reduction Center (WRC) at the University of Northern Iowa (UNI), in cooperation with the U.S. Environmental Protection Agency, has developed a training program for spray technicians known as Spray Technique Analysis and Research (STAR). The STAR 4 Defense (STAR4D) will take STAR training techniques and equipment to selected sites to train and educate military painting technicians. The approach for STAR4D will be to train trainers so they can conduct the STAR program at their home base and provide oversight for continued improvement and data collection.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Virtual Reality Medical Assembly (VRMA), Project 5			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 5: VRMA	0. 594	1.902	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 life-cycle costs.

B. Accomplishments/Planned Program:

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	0. 594	1.902	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 was developed. In addition, formal requirements will be developed for a more complex medical assembly. In FY 2003, the first-aid kit assembly was 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.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Diminishing Manufacturing Source Data (DMS), Project 6			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 6: DMS	0.974	2.473	-----	-----	-----	-----	-----
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 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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	0.974	2.473	-----
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.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Computer Assisted Technology Transfer (CATT), Project 7			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 7: CATT	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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	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.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Competitive Sustainment (CS), Project 8			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 8: CS	0.965	0.976	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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	0.965	0.976	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.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Supply Chain Management (SCM), Project 9			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 9: SCM	15.564	3.375	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 ($11.673 million).

B. Accomplishments/Planned Program:

	FY 03	FY 04	FY 05
SCM/DSCT	15.564	3.375	3.457
RDT&E Articles Quantity - N/A			

We are managing both the baseline SCM (3.891M) and congressionally added DSCT (11.673) 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.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number- Agent Based Logistics Processes (ABLP), Project 10			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 10: ABLP	-----	-----	-----	-----	-----	2.969	3.267
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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	-----	-----	-----
RDT&E Articles Quantity – N/A			

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – eMASS (Completion Project), Project 11			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 11: eMASS (Completion Project)	-----	1.265	0.490	0.490	0.489	0.488	0.487
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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	-----	1.265	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.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Defense Microelectronics Activity (DMEA), Project 12			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 12: DMEA	58.321	73.314	-----	-----	-----	-----	-----
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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal C ost	8.513	8.410	-----
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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	6.809	10.091	-----
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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	6.225	11.873	-----
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.			
	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	24.321	29.681	-----
RDT&E Articles Quantity – N/A			
Ultra-low Power Battlefield Sensor Communication System (ULBPSCS) efforts are to develop a netted battlefield sensor system with a combination of ultra-sensitive receivers, ultra-low power miniature sensors, advanced manufacturing processes, and a real-time mission critical distributed information system.			

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Defense Microelectronics Activity (DMEA), Project 12			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 12: DMEA	58.321	73.314	-----	-----	-----	-----	-----
RDT&E Articles Quantity - N/A							

B. Accomplishments/Planned Program: (continue d)

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	6.809	7.619	-----
RDT&E Articles Quantity – N/A			

Miniaturized Wireless Communications System (Chameleon) efforts are to develop a covert self-contained microsensor package with on-board real-time mission critical information processing and an ultra-sensitive high temperature super-conducting transceiver.

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	1.947	1.236	-----
RDT&E Articles Quantity – N/A			

Silicon Germanium Technology efforts are to develop viable methods to replace microcircuits that are used in high performance digital and mixed signal applications for DOD weapon systems.

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	2.237	-----	-----
RDT&E Articles Quantity – N/A			

High Power Microelectronics efforts are to develop viable methods to replace high power microcircuits in the 40-volt to 100-volt range that are used in DOD weapon systems.

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	1.460	1.187	-----
RDT&E Articles Quantity – N/A			

Ferrite Diminishing Manufacturing Program efforts are to assess the viability of alternative approaches to and prospective technologies for the mitigation of ferrite diminishing manufacturing source issues in microwave/millimeter-wave-based DOD weapon systems.

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	-----	1.237	-----
RDT&E Articles Quantity – N/A			

Commercial-off-the-shelf (COTS) Microelectronics Sustainment efforts are to archive an optimal set of robust processes which, together, can solve the obsolescence of a diverse number of circuit functions.

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	-----	0.990	-----
RDT&E Articles Quantity – N/A			

Functional Decomposition of Application Specific Integrated Circuits (ASIC) efforts are to develop the processes necessary to fabricate replacement processor components in DMEA's Flexible Foundry. The scope of the effort will include developing the ability to design, simulate, operate and test newly developed,

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Defense Microelectronics Activity (DMEA), Project 12			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 12: DMEA	58.321	73.314	-----	-----	-----	-----	-----
RDT&E Articles Quantity - N/A							

B. Accomplishments/Planned Program: (continued)

complex designs without having to prototype the hardware.

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	-----	0.990	-----
RDT&E Articles Quantity – N/A			

Integration and Assimilation of Hard and Soft Core Intellectual Property (IP) efforts develops methods for using existing hard cores as building blocks for complex chips, incorporating hard cores with soft cores in a single design, and fabricating these designs in the Flexible Foundry.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Other Congressionally Added Programs (OCAs), Project 13			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 13: OCAs	22.955	20.381	-----	-----	-----	-----	-----
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 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	22.955	20.381	-----
RDT&E Articles Quantity – N/A			

FY 2003:

- HDTCC ($1.751) – Homeland Defense Technology Collaboration Center. Congressional Add. Program Management. Funding was 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 oversaw this add on behalf of DLA.
- FCL ($0.973) – Fuel Cell Locomotives. Congressionally Add. US Army TACOM oversaw this add on behalf of DLA.
- APD (CC DOT) ($4.184) – Agile Port Demonstrator. Congressional Add. OSD (DDR&E)/WHS oversaw 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 managed this add on behalf of DLA.

FY 2004:

These programs are in the Requirements Definition Phase and final details have not been developed.

- California Manufacturing Center ($5.046)
- Connectivity for Rapid ID of Tech Center ($0.990)
- Vehicle Cell ($4.847)
- Fuel Cell Mine Loader Prototype Locomotive ($0.990)
- Wireless Rural Communication Demonstration ($2.968)
- New England Manufacturing Supply Chain ($5.540)

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Logistics Domain (LD), Project 14			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 14: LD	1.250	-----	-----	-----	-----	-----	-----
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: This effort supports the portfolio management and enterprise architecture portions of the LSM mission. In support of portfolio management, the contractor shall continue to define and execute the necessary activities for the Logistics Domain. The goal of this tasking is to support the mission of the Logistics Domain as it exercises its responsibilities in the areas of compliance, domain advocacy, and investment analysis and to ensure horizontal (with other Domains) an vertical (with Business Management Modernization Program and with the Components) coordination occurs.

B. Accomplishments/Planned Program:

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	1.250	-----	-----
RDT&E Articles Quantity – N/A			

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 3				Project Name and Number – Continuous Acquisition Life Cycle Support (CALS), Project 15			
Cost ($ in millions)	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
Project 15: CALS	-----	3.831	4.000	-----	-----	-----	-----
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: This effort was transferred from the Office of the Secretary of Defense (OSD) to the Defense Logistics Agency (DLA) for the Continuous Acquisition and Life-cycle Support Initiative (CALS) program. CALS is a core strategy program to share integrated digital product data through a set of standards to achieve efficiencies in business and operational mission areas. DoD's overarching goal in CALS is to develop a seamless defense enterprise in which the knowledge products of the acquisition process are immediately and rapidly accessible to all authorized users while maintaining near immediate currency and quality of information. This program element is used to (1) assess and transition evolving automated technologies into the CALS Strategy; (2) develop, maintain and apply to weapon system program office operations an executable business model for the application of CALS and related technologies; and, (3) integrate technical and functional requirements into a shared information framework of the standards, protocols, procedures and network management conventions required to achieve a shared data environment throughout the international defense enterprise. CALS will support six on-going high-technology programs.

B. Accomplishments/Planned Program:

	FY 03	FY 04	FY 05
Accomplishment/ Effort/Subtotal Cost	-----	3.831	4.000
RDT&E Articles Quantity – N/A			

C. Other Program Funding Summary: N/A

Exhibit R-2, RDT&E Budget Item Justification						Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense-wide BA 3			R-1 Item Nomenclature: Dual Use Applications Program (DUAP), 0603805S				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	5.750	3.710	-----	-----	-----	-----	-----
National Center for Manufacturing Sciences (NCMS)/Commercial Technology & Maintenance Activities (CTMA)	5.750	3.710	-----	-----	-----	-----	-----

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.

B. Program Change Summary

	FY 2003	FY2004	FY 2005	FY 2006
Previous President's Budget	0.000	-----	-----	-----
Current President's Budget	5.750	3.710		
Total Adjustments	+5.750	3.710		
Reprogrammings/transfers	+5.750	+3.750		
Program Adjustment		-0.040		

Change Summary Explanation: In FY 2003 the Congress added this funding to the Office of the Secretary of Defense O&M, D-W appropriation. Funding was transferred to the DLA RDT&E, D-W appropriation for execution. In FY 2004 Congress added this funding to the DLA Logistics R&D program in error, but later transferred it to the DUAP PE. FY 2004 reflects (-$0.040 million) pro-ration of defense-wide (DW) adjustments for DW savings from management improvements per Section 8094 (-$0.008 million); and savings from outsourcing, management efficiencies, and economic assumptions per Section 8126 (-$0.032 million) of the FY 2004 Appropriations Act.

C. Other Program Funding Summary: N/A

Exhibit R-2, RDT&E Budget Item Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 5			R-1 Item Nomenclature: Electronic Commerce, 0305840S				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	-----	2.335	2.345	2.345	2.340	2.335	2.330
EC (eMall Sustainment)	-----	2.335	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. This logistics transformation demonstration 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)

	FY 2003	FY 2004	FY 2005
Previous President's Budget	-----	2.335	2.345
Current President Budget		2.335	2.345
Total Adjustments		-0.025	
Program Adjustment		-0.025	

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 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. FY 2004 also reflects a net decrease (-$0.025 million) for pro-ration of Defense-wide (DW) FY 2004 Appropriations Act adjustments for DW savings from management improvements per Section 8094 (-$0.005 million); and DW savings from outsourcing management efficiencies, and economic assumptions per Section 8126 ($0.020 million).

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 5	R-1 Item Nomenclature: Electronic Commerce, 0305840S

A. Project Cost Breakdown

EC (eMall Sustainment)

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	-----	2.335	2.345

B. Budget Acquisition History and Planning Information

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
					2.335	2.345	cont.	cont.
1. Raytheon	Contract	02/2003						
2. PartNet	Contract	02/2003						
3. SCRA*	Contract	02/2003						
4. IBM	Contract	02/2003						

*South Carolina Research Authority

Exhibit R-4, Schedule Profile			Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-Wide BA 5	Program Element Number and Name 0708011S Manufacturing Technology	R-1 Item Nomenclature: Electronic Commerce, 0305840S	

Fiscal Year	2003				2004				2005				2006				2007				2008				2009			
	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
DOD EMALL version 5.4																												
DOD EMALL version 5.5																												
DOD EMALL version 5.6																												
DOD EMALL version 6.0																												
Future Releases TBD																												

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense-Wide BA 5	Program Element Number and Name 0708011S Manufacturing Technology			R-1 Item Nomenclature: Electronic Commerce, 0305840S		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
DOD EMALL version 5.4	3Q					
DOD EMALL version 5.5	2Q					
DOD EMALL version 5.6	3Q					
DOD EMALL version 6.0			3Q			

Exhibit R-2, RDT&E Budget Item Justification							Date February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 6			R-1 Item Nomenclature: Defense Technology Analysis (DTA), 0605798S				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	6.625	5.035	7.279	5.393	5.498	5.672	5.771
Project 1: DOD Technology Analysis Office (DTAO)	4.256	4.286	4.539	4.665	4.780	4.961	5.065
Project 2: Technology Integration	0.757	0.749	0.740	0.728	0.718	0.711	0.706
Project 3: Commodity Management System Consolidation (CMSC)	1.612	-----	2.000	-----	-----	-----	-----

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) Development of a web based data base for Contractor Logistics Support, Performance Based Logistics and Reduction of Total Ownership Cost initiatives.3) Perform a Business Case Analysis (BCA) to determine economic feasibility of the use of Freight on Board (FOB) origin contracts in the Distribution Planning and Management System (DPMS). 4) Research and perform digital (DVD) Conversion. 5) DLA modernization of the DLA distribution system through conversion from paper-based to electronic products using COTs.

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)

	FY 2003	FY 2004	FY 2005
Previous President's Budget	5.017	5.209	5.279
Current President's Budget	6.625	5.035	7.279
Total Adjustments	+1.608	-0.174	+2.000
Revised inflation adjustment			
Congressional reductions/ rescissions			
Reprogrammings/transfer	+1.612		+2.000
Program adjustment(s)	-0.004	-0.174	

Change Summary Explanation: FY 2003 reflects a minor program adjustment (-$0.004 million), and a reprogramming of +$1.612 million for the CMSC program to correctly place it under DTA versus an AF PE. FY 2004 reflects (-$0.174 million) pro-ration of Defense-wide (DW) FY 2004 Appropriations Act adjustments for DW Federally Funded Research and Development Centers (FFRDCs) per Section 8029 (-$0.119 million); savings from management improvements per Section 8094 (-$0.011 million); savings from outsourcing management efficiencies, and economic assumptions per Section 8126 (-$0.044 million). FY 2005 reflects a transfer of +$2.0 million for the CMSC program to correctly place it under the DTA PE versus an AF PE.

C. Other Program Funding Summary: N/A

Exhibit R-2a, RDT&E Project Justification							Date February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 6			Project Name and Number – Defense Technology Analysis Office (DTAO), Project 1				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 1: DTAO	4.256	4.286	4.539	4.665	4.780	4.961	5.065
RDT&E Articles Quantity - NA							

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 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	4.256	4.286	4.539
RDT&E Articles Quantity - NA			

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
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.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 6			Project Name and Number – Technology Integration, Project 2				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 2: Technology Integration	0.757	0.749	0.740	0.728	0.718	0.711	0.706
RDT&E Articles Quantity - NA							

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 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.757	0.749	0.740
RDT&E Articles Quantity - NA			

2003: The project has 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.

2004/2005: 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 international cooperative efforts to meet the needs of the Department.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 6			Project Name and Number – Commodity Management System Consolidation (CMSC), Project 3				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 3: CMSC	1.612	-----	2.000	-----	-----	-----	-----
RDT&E Articles Quantity - NA							

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 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	1.612	-----	2.000
RDT&E Articles Quantity - NA			

- Developed Ordering "Leave-in-Place" Prototype
- FY 2005 capability will include deployment of this tool at three military services.
- Incorporated Knowledge Management Capabilities

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2, RDT&E Budget Item Justification						Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense-wide BA 7			R-1 Item Nomenclature: Manufacturing Technology, 0708011S				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	20.741	45.871	11.005	10.391	10.418	10.649	10.898
Project 1: Combat Rations (CR)	1.959	1.967	2.013	2.011	2.007	2.051	2.103
Project 2: Apparel Research Network (ARN)	2.961	3.997	3.902	3.912	3.956	4.046	4.140
Project 3: Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT)	2.281	3.249	2.340	2.428	2.421	2.473	2.529
Project 4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)	1.933	1.939	1.958	2.040	2.034	2.079	2.126
Project 5: Customer Value Industrial Plant Equipment (CV:IPE)	1.380	1.170	0.792	-----	-----	-----	-----
Project 6: Classified Programs (CP)	2.357	4.660	-----	-----	-----	-----	-----
Project 7: Laser Additive Manufacturing (LAM)	5.902	2.375	-----	-----	-----	-----	-----
Project 8: Twelve Screw Extruder for Fuel Cell Technology (FCT)	1.968	1.484	-----	-----	-----	-----	-----
Project 9: Supply Chain Management (SCM)	-----	4.749	-----	-----	-----	-----	-----
Project 10: Other Congressionally Added Programs (OCAs)	-----	3.462	-----	-----	-----	-----	-----
Project 11: Defense Microelectronics (DMEA)	-----	16.819	-----	-----	-----	-----	-----

Exhibit R-2, RDT&E Budget Item Justification	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	R-1 Item Nomenclature: Manufacturing Technology 0708011S

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) - in addition to congressionally added programs. Copper Based Casting Technology, Defense Supply Chain Technology, Laser Additive Manufacturing, Twelve Screw Extruder, Other Congressionally Added programs for Next Generation Manufacturing Technology and Small Business Technical Procurements. Congress also added funding for Spray Cooling Manufacturing for DMEA to continue its work with the services to increase service familiarity with this advanced technology.

B. Program Change Summary:

	FY 2003	FY 2004	FY 2005
Previous President's Budget	20.728	16.163	11.070
Current President's Budget	20.741	45.871	11.005
Total Adjustments	+0.013	+29.708	-0.065
Revised Inflation adjustment	-----	-----	-0.065
Congressional increase	-----	+30.200	-----
Program adjustments	+0.013	-0.492	-----

Change Summary Explanation: FY 2003 reflects (+$0.013 million) minor program adjustment. FY 2004 reflects a net increase (+$29.708 million) due to: 1. (+$30.2 million) in congressionally added programs (+$1.5 million) for Copper Based Castings Technology; (+$4.8 million) for Defense Supply Chain Technology; (+$1.5 million) for Twelve Screw Extruder for Fuel Cell Technology; (+$2.4 million) for Laser Additive Manufacturing; (+$17.0 million) for Mfg. Engineering of Spray Cooling managed by the Defense Microelectronics Activity (DMEA); and Other Congressional Adds (OCAs) – (+$2.250 million) for Next Generation Manufacturing Technology and (+$1.250 million) for Small Business Technical Procurements; and 2. (-$0.492 million) for pro-ration of DW FY 2004 Appropriations Act adjustments for DW savings from management improvements per Section 8094 (-$0.098 million) and DW savings from outsourcing, management efficiencies, and economic assumptions per Section 8126 (-$0.394 million). FY 2005 reflects inflation adjustments (-$0.065 million).

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Combat Rations, Project 1			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 1: Combat Rations	1.959	1.967	2.013	2.011	2.007	2.051	2.103
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 2003	FY 2004	FY 2005
Accomplishment/ Effort/Subtotal Cost	1.959	1.967	2.013
RDT&E Articles Quantity – N/A			

Develop and implement Improved Retort Rack Materials And Design; implement Ultra-Sonic Sealing for MRE; develop and implement Streamline Inspection Criteria For Operational Rations. Evaluate commercial items for introduction into ration program.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Combat Rations, Project 1

A. Project Cost Breakdown

Combat Rations

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	1.959	1.967	2.013

B. Budget Acquisition History and Planning Information

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
				1.959	1.967	2.013	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					
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 Fee	12/01/2001	Partner, STP					
Rutgers Demo Site	Cost, No Fee	12/01/2001	Partner, STP					

Government Furnished Property: None.

*STP = "Short Term Project"

Exhibit R-4, Schedule Profile																												Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-Wide BA 7					Program Element Number and Name 0708011S Manufacturing Technology								Project Name and Number - Combat Rations, Project 1																
Fiscal Year	**2003**				**2004**				**2005**				**2006**				**2007**				**2008**				**2009**			
	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**
Initial Review, Disposition of Candidate Projects, initial award of delivery orders																												
Follow on assessment of candidate Projects, acceptance of qualified subjects by JSG.																												
Continuing award of delivery orders, start performance																												
Conduct workshops to review projects, evaluate new candidate proposals, initiate qualified projects																												
Conduct IPRs to manage and control progress, assure that results are achieved and implemented when applicable																												

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense-Wide BA 7	Program Element Number and Name 0708011S Manufacturing Technology			Project Name and Number - Combat Rations, Project 1		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
BAA Preparation and Issue					1-4Q	1-4Q
BAA Closing and Evaluations						1-4Q
Contracts Awarded						1-4Q
Kick Off Meeting, Joint Planning Sessions		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
-- Selection and Award of Demo Site						1-4Q
-- Arrangements for Facilitation		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Initial Review and Disposition of Candidate Projects, initial award of delivery orders		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Follow on assessment of candidate Projects, acceptance of qualified subjects by JSG.		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Continuing award of delivery orders		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Conduct workshops to review projects, evaluate new candidate proposals, initiate qualified projects		1-4Q	1-4Q	1-4Q	1-4Q	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	1-4Q	1-4Q

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Apparel Research Network (ARN), Project 2			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 2: ARN	2.961	3.997	3.902	3.912	3.956	4.046	4.140
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 2003	FY 2004	FY 2005
AAVS	1.000	1.957	1.977

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.

	FY 2003	FY 2004	FY 2005
VIM-ASAP	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

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Apparel Research Network (ARN), Project 2			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 2: ARN	2.961	3.997	3.902	3.912	3.956	4.046	4.140
RDT&E Articles Quantity -N/A							

	FY 2003	FY 2004	FY 2005
VIM	0.961	1.040	0.925

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 2003.
- 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

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Apparel Research Network (ARN), Project 2

A. Project Cost Breakdown

Apparel Research Network

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	2.961	3.997	3.902

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
Note: All contracts are Fixed Cost or Cost Plus Fixed Fee				2.961	3.997	3.902	Cont	Cont
PDIT	Cost Plus Fixed Fee/Contractor							
Clemson Univ	Cost Plus Fixed Fee/Contractor							
Cyberware	Cost Plus Fixed Fee/Contractor							
EDI Integration	Cost Plus Fixed Fee/Contractor							
Southern Tech	Cost Plus Fixed Fee/Contractor							

Government Furnished Property: None.

Exhibit R-4, Schedule Profile			Date: February 2004
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology	Project Name and Number - Apparel Research Network (ARN), Project 2	

Fiscal Year	2003				2004				2005				2006				2007				2008				2009			
	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 OCIE, and Fiber and Fabric Items ▪ EMall On Demand Manufacturing Items																												
ARN Supply Chain Automated Processing (ASAP) ▪ Leveraging WAWF & Emall ▪ Balanced Inventory Flow Replenishment																												
Electronic Military Clothing Inventory Management System ▪ Additional Army & Non-recruit Sites																												

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense-Wide BA 7	Program Element Number and Name 0708011S Manufacturing Technology			Project Name and Number - Apparel Research Network (ARN), Project 2		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
ARN Asset Visibility System	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
▪ Leveraging WAWF & Emall	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	1-3Q	
▪ Additional Army and non-recruit sites	1-4Q	1-4Q	1-4Q	1-4Q	1-3Q	

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 3: PRO-ACT	2.281	3.249	2.340	2.428	2.421	2.473	2.529
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 2003	FY 2004	FY 2005
Collaborative Problem Solving	1.528	1.506	1.563

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 2003	FY 2004	FY 2005
Casting Technology for Cost Reduction	0.753	1.743	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. FY 2004 includes congressional funding for Copper Based Casting Technology ($0.990 million); and Agency base funding for casting technology ($0.753 million).

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3

A. Project Cost Breakdown

Procurement Readiness Optimization—Advanced Casting Technologies (PRO-ACT)

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	2.281	3.249	2.340

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
ATI	Cost Share	06/23/2000	N/A	2.281	2.259	2.340	Cont	Cont
ARL	Cost Plus Fixed Fee/ Contractor	TBD			0.990			

Government Furnished Property: None.

Exhibit R-4, Schedule Profile			Date: February 2004
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology	Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3	

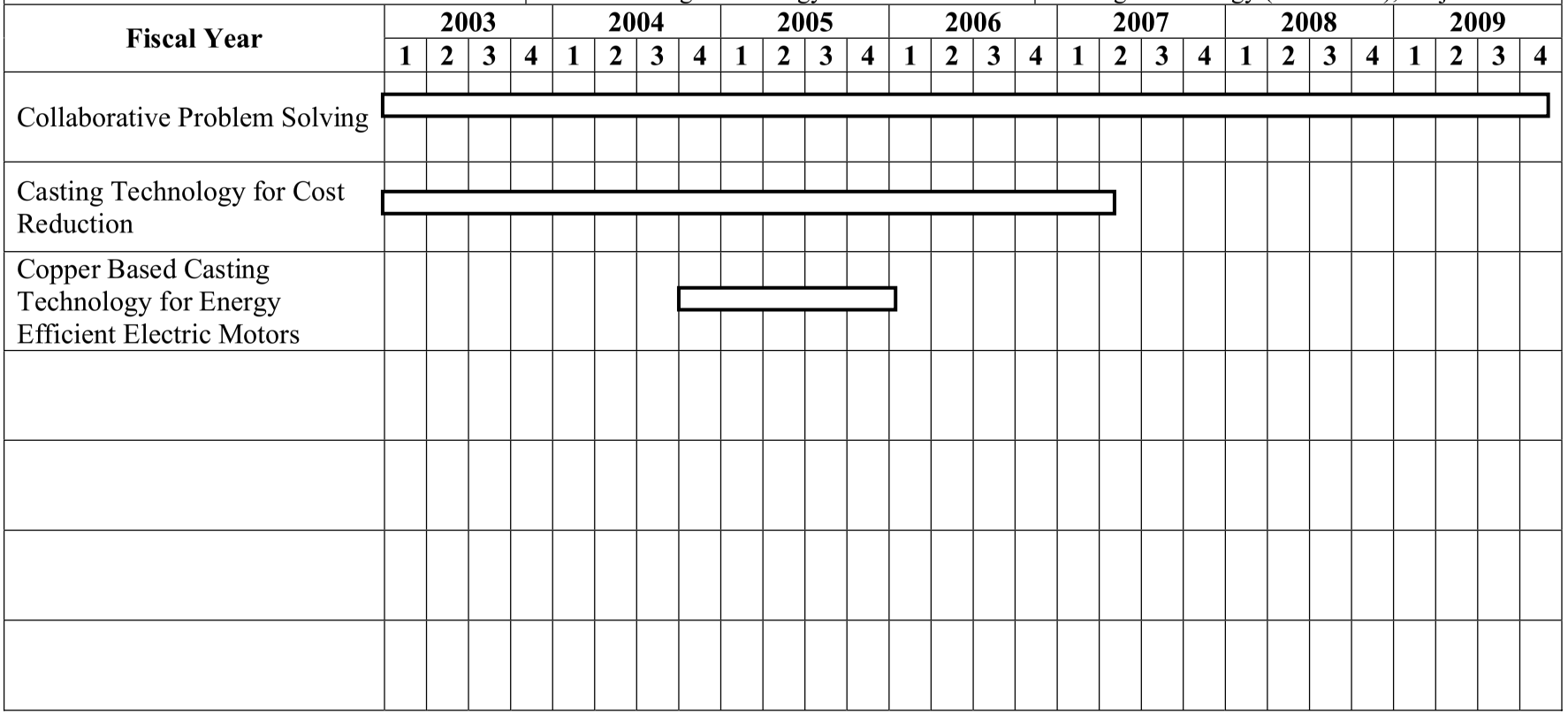

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT), Project 3		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
Collaborative Problem Solving	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	1-2Q	
Copper Based Casting Technology for Energy Efficient Electric Motors		2-4Q	1-4Q			

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 4: PRO-FAST	1.933	1.939	1.958	2.040	2.034	2.079	2.126
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 2003	FY 2004	FY 2005
Collaborative Problem Solving	1.295	1.292	1.308

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 2003	FY 2004	FY 2005
Forging Technology for Lead Time Reduction	0.638	0.647	0.650

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

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4

A. Project Cost Breakdown

Procurement Readiness Optimization—Forging Advanced System Technology (PRO-FAST)

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	1.933	1.939	1.958

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
ATI	Cost Share	02/09/2001	N/A	1.933	1.939	1.958	Cont	Cont

Government Furnished Property: None.

Exhibit R-4, Schedule Profile																												Date: February 2004
Appropriation/Budget Activity RDT&E, Defense Wide BA 7					Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology												Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4												
Fiscal Year	**2003**				**2004**				**2005**				**2006**				**2007**				**2008**				**2009**			
	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**
Collaborative Problem Solving																												
Forging Technology for Lead Time Reduction																												

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST), Project 4		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
Collaborative Problem Solving	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	

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7			Project Name and Number - Customer Value Industrial Plant Equipment (CV:IPE), Project 5				
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 5: CV:IPE	1.380	1.170	0.792	-----	-----	-----	-----
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 2003	FY 2004	FY 2005
Lean Manufacturing Principles	1.380	1.170	0.792

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

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Customer Value Industrial Plant Equipment (CV:IPE), Project 5

A. Project Cost Breakdown

Customer Value Industrial Plant Equipment (CV:IPE)

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	1.380	1.170	0.792

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
				1.380	1.170	0.792	1.962	3.342
Various	COST PLUS FIXED FEE		03/2002					

Government Furnished Property: None.

Exhibit R-4, Schedule Profile																															Date: February 2004
Appropriation/Budget Activity RDT&E, Defense Wide BA 7							Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology										Project Name and Number - Customer Value Industrial Plant Equipment (CV:IPE), Project 5															
Fiscal Year	**2003**				**2004**				**2005**				**2006**				**2007**				**2008**				**2009**			
	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**
Baselining Current Processes																												
Develop Standard Templates																												
New Methods for Project Initiation & Risk Management Plans																												
Rapid Design of Control Systems																												
Parametric Estimating Models for Rapid Cost Estimates																												

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - Customer Value Industrial Plant Equipment (CV:IPE), Project 5		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
Baselining Current Processes	1-4Q	1-4Q	1-4Q			
Develop Standard Templates		1-4Q	1-4Q			
New Methods for Project Initiation & Risk Management Plans		1-4Q	1-4Q	1-4Q		
Rapid Design of Control Systems		1-4Q				
Parametric Estimating Models for Rapid Cost Estimates		1-4Q	1-4Q	1-4Q		

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Classified Programs (CP), Project 6			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 6: CP	2.357	4.660	-----	-----	-----	-----	-----
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: N/A

B. Accomplishments/Planned Program:

	FY 2003	FY 2004	FY 2005
Accomplishment/ Effort/Subtotal Cost	2.357	4.660	-----
RDT&E Articles Quantity – N/A			

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Laser Additive Manufacturing (LAM), Project 7			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 7: LAM	5.902	2.375	-----	-----	-----	-----	-----
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 2003	FY 2004	FY 2005
Accomplishment/ Effort/Subtotal Cost	5.902	2.375	-----
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

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Laser Additive Manufacturing (LAM), Project 7

A. Project Cost Breakdown

Laser Additive Manufacturing (LAM)

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	5.902	2.375	-----

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
				5.902	2.375		8.277	8.277
Aeromet Corp	Section 845 Prototype Agreement	27 Sep 02						

Government Furnished Property: None.

Exhibit R-4, Schedule Profile			Date: February 2004
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology	Project Name and Number - Laser Additive Manufacturing (LAM), Project 7	

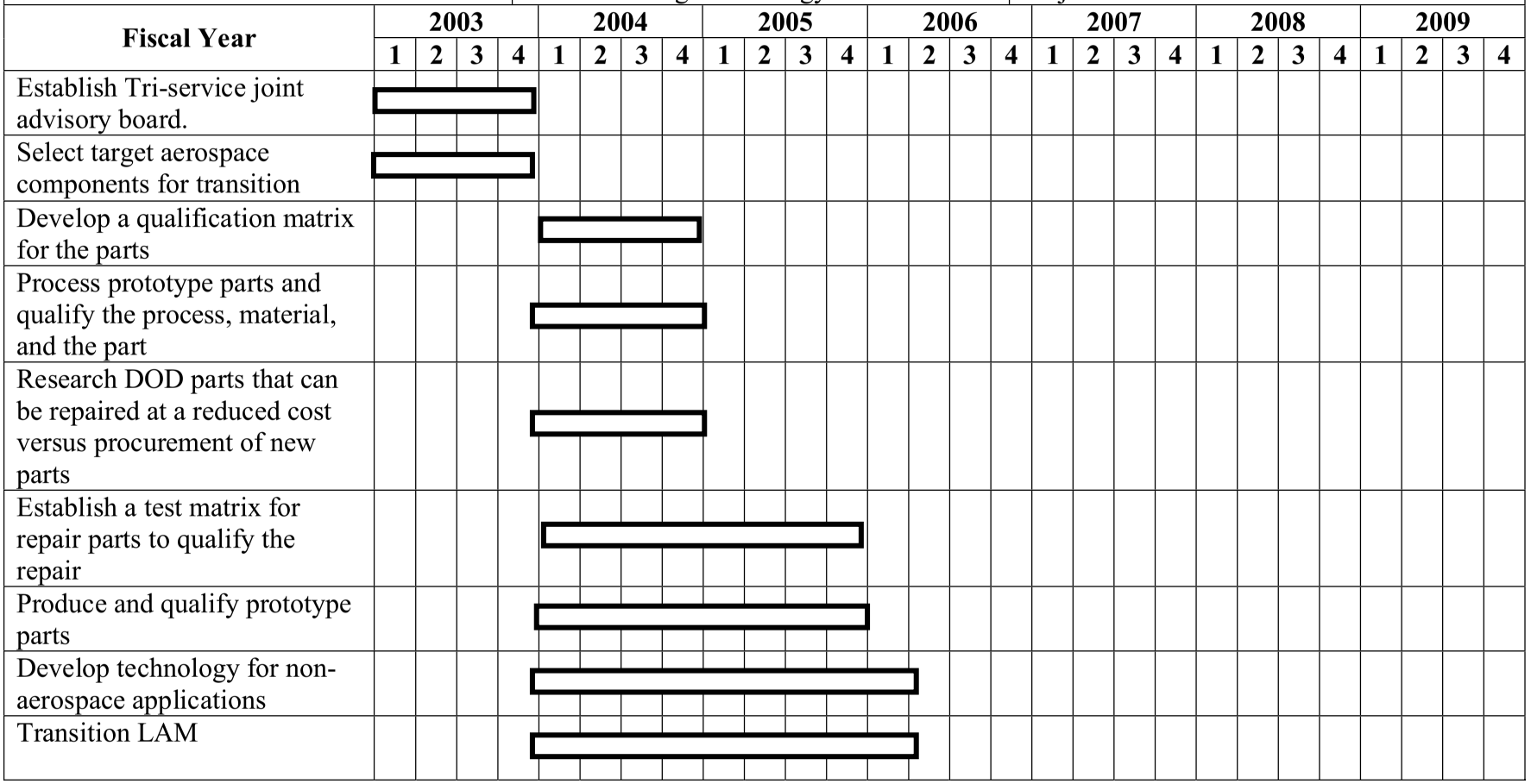

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - Laser Additive Manufacturing (LAM), Project 7		
Schedule Profile	**FY2003**	**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	1-4Q			
Produce and qualify prototype parts		1-4Q	1-4Q			
Develop technology for non-aerospace applications		1-4Q	1-4Q			
Transition the LAM process for as many parts as possible		1-4Q	1-4Q			

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Twelve Screw Extruder for Fuel Cell Technology (FCT), Project 8			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 8: Twelve Screw Extruder for Fuel Cell Technology (FCT)	1.968	1.484	-----	-----	-----	-----	-----
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: A critical part of the organization mission focuses on the leveraging of commercial technology to develop advanced manufacturing technology to support military ground vehicle alternative propulsion technology development and advanced materials design and applications. Enhancements in materials alloying technology are critical to efficient and economical production of 'Fuel Cell' alternative propulsion technology, and to the development and application of light weight, fuel efficient and durable materials structures and components.

B. Accomplishments/Planned Program:

	FY 2003	FY 2004	FY 2005
Accomplishment/ Effort/Subtotal Cost	1.968	1.484	-----
RDT&E Articles Quantity – N/A			

Under FY03 funding, the program demonstrated the capability of the 12 Screw Extrusion material alloying process to efficiently, effectively and economically alloy materials necessary to manufacture critical components of Fuel Cell alternative propulsion power generation equipment. Under FY04 program funding, the Twelve Screw Extrusion process will be used to fabricate Fuel Cell power generation 'stacks' to provide the electro-chemical reaction necessary to convert fuel into emission free electrical power for ground vehicle applications. In addition, the program will leverage other technology initiatives to demonstrate the capability to alloy/mix developmental materials for fabrication into lightweight, durable ground vehicle and material transport structures. We are executing the FY03 contract and scoping the FY04 phase with the additional funds.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Twelve Screw Extruder for Fuel Cell Technology (FCT), Project 8

A. Project Cost Breakdown

Twelve Screw Extruder for Fuel Cell Technology (FCT)

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	1.968	1.484	-----

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
				1.968	1.484		1.484	3.452
U.S. Army TACOM	MIPR	July 03						

Government Furnished Property: None.

Exhibit R-4, Schedule Profile			Date: February 2004
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology	Project Name and Number - Twelve Screw Extruder for Fuel Cell Technology (FCT), Project 8	

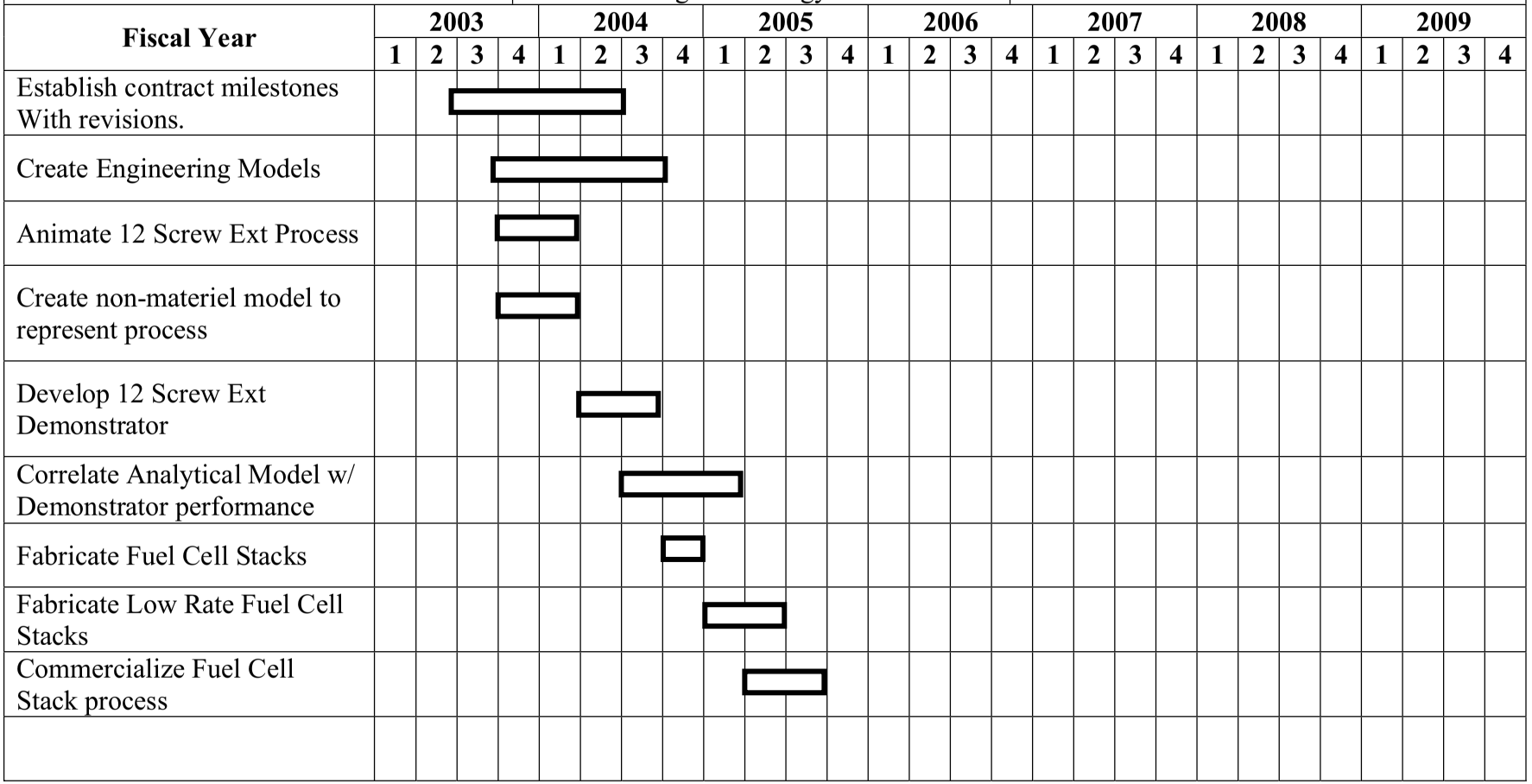

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - Twelve Screw Extruder for Fuel Cell Technology (FCT), Project 8		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
Establish contract milestones With revisions.	3-4Q	1-2Q				
Create Engineering Models	4Q	1-2Q				
Animate 12 Screw Ext Process		1-4Q				
Create non-materiel model to represent process		1-4Q				
Develop 12 Screw Ext Demonstrator		1-4Q				
Correlate Analytical Model with Demonstrator performance		3-4Q				
Fabricate Fuel Cell Stacks		4Q	1Q			
Fabricate Low Rate Fuel Cell Stacks			1-3Q			
Commercialize Fuel Cell Stack process			2-4Q			

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Supply Chain Management (SCM), Project 9			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 9: Supply Chain Management (SCM)	-----	4.749	-----	-----	-----	-----	-----
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 principles and techniques that will improve the supply availability of DLA-managed items by optimizing supply chains to shorten lead times and reduce costs. The Agency must ensure that outsourcing strategies are coordinated, that performance metrics are in place to measure effectiveness, that the organizational structure promotes successful supply chain management and that the latest electronic commerce initiatives are incorporated into its supply chain.

B. Accomplishments/Planned Program:

	FY 2003	FY 2004	FY 2005
Accomplishment/ Effort/Subtotal Cost	-----	4.749	-----
RDT&E Articles Quantity – N/A			

Concurrent Technologies Corporation (CTC) has initiated some 33 Supply Chain Management projects for DLA and the Services since the inception of this program in FY 2002.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Supply Chain Management (SCM), Project 9

A. Project Cost Breakdown

Supply Chain Management (SCM)

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	-----	4.749	-----

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
TBD	TBD	TBD			4.749		4.749	4.749

Government Furnished Property: None.

Exhibit R-4, Schedule Profile			Date: February 2004
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology	Project Name and Number - Supply Chain Management (SCM), Project 9	

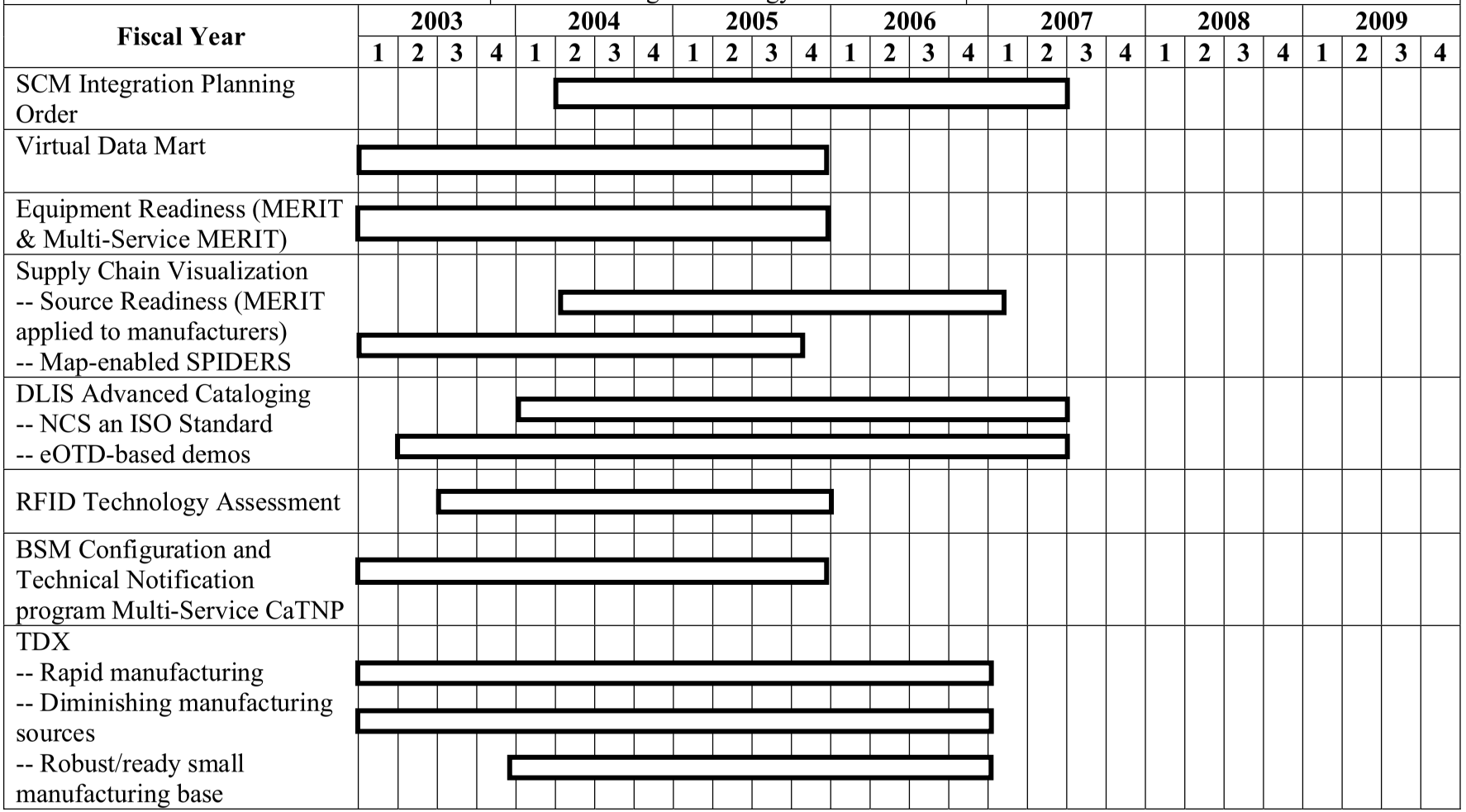

Exhibit R-4a, Schedule Detail				Date: February 2004		
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - Supply Chain Management (SCM), Project 9		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
SCM Integration Planning Order		2-4Q	1-4Q	1-4Q	1-2Q	
Virtual Data Mart	1-4Q	1-4Q	1-4Q			
Equipment Readiness (MERIT & Multi-Service MERIT)	1-4Q	1-4Q	1-4Q			
Supply Chain Visualization	1-4Q	1-4Q	1-4Q	1-4Q		
DLIS Advanced Cataloging	2-4Q	1-4Q	1-4Q	1-4Q	1-2Q	
RFID Technology Assessment	3-4Q	1-4Q	1-4Q			
BSM Configuration and Technical Notification program Multi-Service CaTNP	1-4Q	1-4Q	1-4Q			
TDX	1-4Q	1-4Q	1-4Q	1-4Q		

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Other Congressionally Added Programs (OCAs), Project 10			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 10: Other Congressionally Added Programs (OCAs)	-----	3.462	-----	-----	-----	-----	-----
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: Congressional add. Meetings with the prospective contractor and potential DOD stakeholder still underway.

B. Accomplishments/Planned Program:

	FY 2003	FY 2004	FY 2005
Accomplishment/ Effort/Subtotal Cost	-----	3.462	-----
RDT&E Articles Quantity – N/A			

FY 2004:
These programs are in the Requirements Definition Phase and final details have not been developed:

- Next Generation Manufacturing Technology ($2.226)
- Small Business Technical Procurement ($1.236)

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Other Congressionally Added Programs (OCAs), Project 10

A. Project Cost Breakdown

Other Congressionally Added Programs (OCAs)

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	-----	3.462	-----

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
TBD					3.462		3.462	3.462

Government Furnished Property: None.

Exhibit R-2a, RDT&E Project Justification							Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7				Project Name and Number - Defense Microelectronics Activity (DMEA), Mfg Engineering of Spray Cooling, Project 11			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project 11: Mfg Engineering of Spray Cooling	-----	16.819	-----	-----	-----	-----	-----
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 2003	FY 2004	FY 2005
Accomplishment/ Effort/Subtotal Cost	-----	16.819	-----
RDT&E Articles Quantity – N/A			

Spray Cooling Manufacturing Engineering efforts are to develop manufacturing engineering and process tools to support the Department's transition of spray cooling technology from laboratory prototypes to production and to standardize advanced spray cooling technology components and products to facilitate cross-platform migrations.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number - Defense Microelectronics Activity (DMEA), Mfg Engineering of Spray Cooling, Project 11

A. Project Cost Breakdown

Manufacturing Engineering of Spray Cooling

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	-----	16.819	-----

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
					16.819		16.819	16.819
Isothermal Systems Research	COST PLUS FIXED FEE		Mar 04					

Government Furnished Property: None.

Exhibit R-4, Schedule Profile																												Date: February 2004
Appropriation/Budget Activity RDT&E, Defense Wide BA 7							Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology										Project Name and Number - Defense Microelectronics Activity (DMEA), Mfg Engineering of Spray Cooling, Project 11												
Fiscal Year	**2003**				**2004**				**2005**				**2006**				**2007**				**2008**				**2009**			
	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**
Develop key manufacturing processes and engineering design tools needed for low cost, high volume fabrication and assembly																												
Analyze vendor base and qualification activities necessary to establish a solid supplier base for all key system components																												
Implement the above into a pilot line and develop the processes needed to enable transition into a low-cost manufacturing base to ensure a reliable supply																												
Develop tools needed to support rapid in-field maintenance and logistics																												

Exhibit R-4a, Schedule Detail					Date: February 2004	
Appropriation/Budget Activity RDT&E, Defense Wide BA 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - Defense Microelectronics Activity (DMEA), Mfg Engineering of Spray Cooling, Project 11		
Schedule Profile	**FY2003**	**FY2004**	**FY2005**	**FY2006**	**FY2007**	**FY2008**
Develop key manufacturing processes and engineering design tools needed for low cost, high volume fabrication and assembly		3-4Q	1-4Q			
Analyze vendor base and qualification activities necessary to establish a solid supplier base for all key system components		3-4Q	1-4Q			
Implement the above into a pilot line and develop the processes needed to enable transition into a low-cost manufacturing base to ensure a reliable supply			1-4Q			
Develop tools needed to support rapid in-field maintenance and logistics		3-4Q	1-4Q			

Exhibit R-2, RDT&E Budget Item Justification						Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7			R-1 Item Nomenclature: Logistics Support Activities, 0708012S			
Cost ($ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	28.182	35.401	11.389	6.901	6.900	7.118	7.147
Logistics Support Activities	28.182	35.401	11.389	6.901	6.900	7.118	7.147

A. Mission Description and Budget Item Justification: This is a classified program.

B. Program Change Summary

	FY 2003	FY 2004	FY 2005
Previous President's Budget	28.182	35.781	11.457
Current President's Budget	28.182	35.401	11.389
Total Adjustments	N/A	-0.380	-0.068
Program Adjustments		-0.380	-0.068

Change Summary Explanation: FY 2004 reflects (-$0.380 million) pro-ration of FY 2004 Appropriations Act Defense-wide (DW) adjustments for DW savings from management improvements per Section 8094 (-$0.076 million); and savings from outsourcing, management efficiencies, and economic assumptions per Section 8126 (-$0.304 million). FY 2005 reflects (-$0.068 million) for inflation adjustment.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: February 2004
Appropriation/Budget Activity RDT&E, Defense-wide BA 7	Project Name and Number Logistics Support Activities, Project 1

A. Project Cost Breakdown

Logistics Support Activities

Project Cost Categories	FY 2003	FY 2004	FY 2005
a. Manufacturing Process Support Costs	28.182	35.401	11.389

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government Performing Activity	Contractor Method/Type Or Funding Vehicle	Award or Obligation Date	Performing Project Activity BAC	FY 2003	FY 2004	FY 2005	Budget to Complete	Total Program
				28.182	35.401	11.389	Cont	Cont
	N/A							

Government Furnished Property: N/A.

DEFENSE LOGISTICS AGENCY
SUMMARY OF FY 2005 DESCRIPTIVE SUMMARIES

Defense Logistics Agency
($ in Thousands)

Appropriation Title	Direct Budget Plan (TOA) FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	Budget Authority FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate
RDT&E						
DLA Direct Program	185,250	210,428	52,281	185,250	210,428	52,281
Defense Technology Analysis	6,625	5,035	7,279	6,625	5,035	7,279

Exhibit PB-1

FY 2005 DESCRIPTIVE SUMMARIES
ADVISORY AND ASSISTANCE SERVICES
DEFENSE LOGISTICS AGENCY
(Dollars in Thousands)

	FY 03 Actual	FY 04 Estimate	FY 05 Estimate
Appropriation: RDT&E,DW			
I. Management & Professional Support Services			
FFRDC Work	0	0	0
Non-FFRDC Work	0	0	0
Subtotal	0	0	0
II. Studies, Analysis, & Evaluation			
FFRDC Work	160	2,000	2,000
Non-FFRDC Work	0		0
Subtotal	160	2,000	2,000
III. Engineering & Technical Services			
FFRDC Work	0	0	0
Non-FFRDC Work	0	0	0
Subtotal	0	0	0
TOTAL			
FFRDC Work	160	2,000	2,000
Non-FFRDC Work	0	0	0