Exhibit R-2, PB 2010 Defense Logistics Agency RDT&E Budget Item Justification								DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness					
COST ($ in Millions)	**FY 2008 Actual**	**FY 2009 Estimate**	**FY 2010 Estimate**	**FY 2011 Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	56.057	55.130	20.514						Continuing	Continuing
1: Combat Rations (CR)	1.908	1.952	1.826						Continuing	Continuing
2: Customer Driven Uniform Manufacturing (CDUM) (Preciously called Apparel Reseach Network)	3.796	4.030	3.967						Continuing	Continuing
3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)	2.527	2.608	2.466						Continuing	Continuing
4: Procurement Readiness Optimizatino-Forging Advanced System Technology (PRO-FAST)	1.175	1.213	1.151						Continuing	Continuing
5: Material Acquisition: Electronics (MAE)	10.131	10.622	10.118						Continuing	Continuing
6: BattNet	0.000	0.000	0.986						Continuing	Continuing
7: Congressional Adds	36.520	34.705	0.000						Continuing	Continuing

Note

BATNET is an FY 2010 new start program. Resourced within the FY 2010 budget.

A. Mission Description and Budget Item Justification

The Defense Logistics Agency (DLA) Manufacturing Technology (ManTech) Program supports the development of a responsive, world-class manufacturing capability to affordably meet the warfighters' needs throughout the defense system life cycle. ManTech:

- Provides the crucial link between invention and product application to speed technology transitions.
- Matures and validates emerging manufacturing technologies to support low-risk implementation in industry and DoD facilities, e.g. depots and shipyards.

Exhibit R-2, PB 2010 Defense Logistics Agency RDT&E Budget Item Justification	DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development	**R-1 ITEM NOMENCLATURE** PE 0708011S Industrial Preparedness

- Addresses production issues early by providing timely solutions.
- Reduces risk and positively impacts system affordability by providing solutions to manufacturing problems before they occur.

DLA ManTech includes Combat Rations Network for Technology Implementation (CORANET), Customer Driven Uniform Manufacturing (CDUM), Procurement Readiness Optimization—Advanced Casting Technology (PRO-ACT), Procurement Readiness Optimization—Forging Advance System Technology (PRO-FAST), and Material Acquisition: Electronics (MAE). DLA is not involved with execution of this program. Other Congressional Adds (OCA) programs are Congressionally Directed efforts.

B. Program Change Summary ($ in Millions)

	FY 2008	FY 2009	FY 2010	FY 2011
Previous President's Budget	57.347	20.480	20.514	
Current BES/President's Budget	56.057	55.130	20.514	
Total Adjustments	-1.290	34.650	0.000	
Congressional Program Reductions				
Congressional Rescissions				
Total Congressional Increases	0.000	34.705		
Total Reprogrammings				
SBIR/STTR Transfer	-1.290			

Congressional Increase Details ($ in Millions)

	FY 2008	FY 2009
Project: 7, **Congressional Additions**	36.520	34.705
Congressional Additions-		
FY 2009 SBIR amount for Congressional Adds is included in the $34.800M		

Change Summary Explanation

FY 2008: Reduction of $1.290 million for Small Business Innovative Research (SBIR), PE 0605502S.

BATNET is an FY 2010 new start program. Resourced within the FY 2010 budget.

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification								DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness					PROJECT NUMBER 1	
COST ($ in Millions)	**FY 2008 Actual**	**FY 2009 Estimate**	**FY 2010 Estimate**	**FY 2011 Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
1: Combat Rations (CR)	1.908	1.952	1.826						Continuing	Continuing

A. Mission Description and Budget Item Justification

In FY 2005 the Defense Supply Center Philadelphia (DSCP) sold $3.9B in subsistence goods and services to the Department of Defense, making it DSCP's largest supply chain. Sales in subsistence continue to grow, largely due to requirements for operations Iraqi Freedom and Enduring Freedom. The Combat Rations Program is focused on improving the manufacturing technologies related to the production and distribution of the combat rations that are at the forefront of these operations, including Meals Ready to Eat (MREs) as well as unitized group rations. The objectives are increased readiness, improved quality, increased ration variety, decreased cost. The CORANET program engages all elements of the supply chain including producers, military services, Army Natick, USDA, FDA, DLA, DSCP and academia to research and transition improved technologies for operational rations. To insure technology validation and transition, the CORANET program also maintains a demonstration site.

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Combat Rations Accomplishments/Plans	1.908	1.952	1.826	
FY 2008 Accomplishments: - Partner support, identify, define, review and transition research activities. - Demonstration site. - Bakery Shelf Life Extension-Improved formulations, processes and packaging for increased shelf life and improved acceptance. - Wet Pack Fruit Quality Improvement-Process and formulation improvement for increased shelf life. - Addition of Antioxidants to Combat Rations-Improved nutritional quality, reduced production costs and processing time. - Improving Insulated Beverage Dispenser-Improved process and materials for increased production, decreased cost and reduced lead-time.				
FY 2009 Plans: - Transition to CORANET 3. - Improved thermo processing for Polymeric trays. - First Strike Ration (FSR) improved menu variety. - Infusion of Antioxidants to improve vitamin delivery.				

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness	PROJECT NUMBER 1

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
- Vitamin Encapsulation to expand vitamin variety. - Transition project funding and other program support. *FY 2010 Plans:* - Identify, define, review and implement research activities. - New Short Term Projects and Partner support				

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

CORANET is a community-of- practice, which includes all military and federal organizations involved in the development, procurement and oversight of combat rations, multiple university research partners, and the combat ration manufacturers themselves. The major objective of this program is to perform short term projects that ensure surge production capability, maintain food safety, improve the quality and producibility of combat rations, and/or help make combat rations affordable. As a result the anticipated Percent of completed demonstration programs transitioning per year would be 50%.

-Strategic Plan Long-term Performance Targets – The average technical readiness level of a CORANET project is 6.5. The likelihood of maintaining the 50% is good.

- Annual Performance Targets – FY 2010: 50% of programs transitioning.

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Project Name and Number - Combat Rations (CR), Project 1

A. Project Cost Breakdown

Combat Rations

Project Cost Categories	FY 2008	FY 2009	FY 2010
a. Manufacturing Process Support Costs	1.908	1.957	1.852

B. Budget Acquisition History and Planning Information

Performing Organizations

Contractor or Government	Contractor Method/Type	Award or Obligation	Performing Project	FY 2008	FY 2009	FY 2010	Budget to Complete	Total Program
				Performing Activity	Or Funding Vehicle		Date	Activity BAC
Ameriqual	Cost, No Fee	12/2001	Partner					
Georgia, Univ of	Cost, No Fee	12/2001	Partner, STP *					
NCFST	Cost, No Fee	12/2001	Partner, STP					
Ohio State Univ	Cost, No Fee	12/2001	Partner, STP	Cont	Cont	Cont.	Cont.	
R&D Associates	Cost, No Fee	12/2001	Partner, STP					
Rutgers	Cost, No Fee	12/2001	Partner, STP, Demo					
SOPAKCO	Cost, No Fee	12/2001	Partner, STP					
Sterling	Cost, No Fee	11/2001	Partner,					
TEES (TAMU)	Cost, No Fee	12/2001	Partner, STP					
Tennessee, Univ of	Cost, No Fee	12/2001	Partner, STP					
Wornick	Cost, No Fee	12/2001	Partner					
Washi. State U	Cost, No Fee	12/2001	Partner, STP					
Michigan State U	Cost, No Fee	7/2006	Partner					
Virginia Tech	Cost, No Fee	7/2006	Partner					
Diversapak	Cost, No Fee	7/2006	Partner					
Truitt	Cost, No Fee	7/2006	Partner					
Oregon Freeze Dry	Cost, No Fee	7/2006	Partner					
				1.908	1.957	1.852		

Government Furnished Property: None.

*STP = "Short Term Project

Exhibit R-4, Schedule Profile																																
Date: May 2009																																
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology																Project Name and Number - Combat Rations (CR), Project 1															
Fiscal Year	**2008**				**2009**				**2010**				**2011**				**2012**				**2013**				**2014**				**2015**			
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Quality Improvement Cheese Spread																																
Ultra High Pressure Processing Eggs																																
Acceptance Test for Retort Pouch Material																																
Technology Transition Retort Racks	x	x																														
Microbial Studies MRE Shelf Stable Pocket Sandwich	x	x																														
Knurled Seal Heat Bar Technology	x	x																														
Oxygen Absorbing Packaging Materials	x	x																														
New Short Term Projects	x	x	x	x	x	x	x	x	x	x	x	x																				
Demonstration Site	x	x	x	x	x	x	x	x	x	x	x	x																				
Identify, define, review and implement research activities	x	x	x	x	x	x	x	x	x	x	x	x																				

Exhibit R-4a, Schedule Detail			Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology	Project Name and Number - Combat Rations (CR), Project 1	

Schedule Profile	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Quality Improvement Cheese Spread								
Ultra High Pressure Processing Eggs								
Acceptance Test for Retort Pouch Material								
Technology Transition Retort Racks	1-2Q							
Microbial Studies MRE Shelf Stable Pocket Sandwich	1-2Q							
Knurled Seal Heat Bar Technology	1-2Q							
Oxygen Absorbing Packaging Materials	1-2Q							
New Short Term Projects	1-4Q	1-4Q	1-4Q					
Demonstration Site	1-4Q	1-4Q	1-4Q					
Identify, define, review and implement research activities	1-4Q	1-4Q	1-4Q					

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification								DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness					PROJECT NUMBER 2	
COST ($ in Millions)	**FY 2008 Actual**	**FY 2009 Estimate**	**FY 2010 Estimate**	**FY 2011 Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
2: Customer Driven Uniform Manufacturing (CDUM) (Preciously called Apparel Reseach Network)	3.796	4.030	3.967						Continuing	Continuing

A. Mission Description and Budget Item Justification

The Department of Defense, through the Defense Logistics Agency, purchased $2.04 billion of clothing and textile items in FY 2007. The lead-time is up to 15 months and the current inventory acquisition value is over $1 billion. The current focus of DLA military clothing research is Customer Driven Uniform Manufacturing (CDUM). CDUM explores the application of advanced manufacturing and information technologies to the end-to-end management of non-recruit clothing and individual equipment (NRCIE). Each NRCIE supply chain has unique requirements not typically found in apparel industrial operations. CDUM will experiment with ways to help manufacturers meet the requirements specific to NRCIE (i.e. raw material tracking). It will also explore ways to account for NRCIE after it has left the wholesale system. The benefits will include improved asset visibility, accountability, and shelf-life management throughout an items' life cycle, reduced item cost, reduced operational costs, and improved readiness. Experimentation will identify promising technical solutions, prototype alternative solutions, and validate user requirements.

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Customer Driven Uniform Manufacturing Accomplishments/Plans	3.796	4.030	3.967	
FY 2008 Accomplishments: - RFID/AIT pilots for the NRC supply chain including Joint Service Lightweight Integrated Suite Technology (JSLIST), Individual Body Armor, and the Advanced Combat Uniform (ACU) at Lackland AFB and Travis VPVSC. - NRCIE Prototype Demonstrations for items at Army Ft. Carson. - Expanded 3D Body scanning demonstration for NRCIE. - Explore RFID alternatives for Individual Protective Equipment (IPE) including near field technologies, active RFID, sensory networks, motes.				
FY 2009 Plans: - Expanded RFID/AIT Prototype Demonstrations. - Expanded NRCIE Prototype Demonstrations. - Extend from end-item manufacturers to fabric suppliers.				

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness	PROJECT NUMBER 2

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
FY 2010 Plans: - Transition to CDUM II. - Roadmap New Initiatives. - Prototype Implementations for NRCIE. - Prototype Implementations for RFID/AIT.				

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

The CDUM program focus is on Non-recruit clothing and individual equipment (NRCIE). Based on the CDUM business case analysis the estimated reduction in Army-owned Organizational Clothing and Individual Equipment (OCIE) inventory due to the CDUM program will be $65.7M by FY 2012. This represents a net present value for the program, at current funding levels, of $31.5M with a Return on Investment of $2.47M. The CDUM business case is updated on a regular basis to monitor program performance.

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Project Name and Number - Customer Driven Uniform Manufacturing (CDUM), Project 2

A. Project Cost Breakdown:
Customer Driven Uniform Manufacturing

Project Cost Categories:	FY 2008	FY 2009	FY 2010
a. Manufacturing Process Support Costs	3.796	4.041	4.023

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 2008	FY 2009	FY 2010	Budget to Complete	Total Program
				3.796	4.041	4.023		
PDIT	Cost Plus Fixed Fee/Contractor		03/2002					
AdvanTech	Cost Plus Fixed Fee/Contractor		03/2002					
Human Solutions	Cost Plus Fixed Fee/Contractor		03/2002					

Government Furnished Property: None.

Exhibit R-4, Schedule Profile			Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology	Project Name and Number - Customer Driven Uniform Manufacturing (CDUM), Project 2	

Fiscal Year	2008				2009				2010				2011				2012				2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
RFID/AIT pilots for the NRCIE supply chain including JSLIST, Individual Body Armor and the ACU	x	x	x	x	x	x	x	x																								
NRCIE Prototype Demonstrations for items at Army Ft. Carson	x	x	x	x	x	x	x	x																								
Expanded 3D Body Scanning Demonstration for NRCIE	x	x	x	x	x	x	x	x																								
Explore RFID alternatives for Individual Protective Equipment (IPE)	x	x	x	x	x	x	x	x	x	x	x	x																				
Expanded RFID Prototype Demonstrations					x	x	x	x	x	x	x	x																				
Expanded NRCIE Prototype Demonstrations					x	x	x	x	x	x	x	x																				
Extend from end-item manufacturers to fabric suppliers							x	x	x	x	x	x																				
Transition to CDUM II Prototype Implementations									x	x	x	x																				
CDUM II New Initiatives											x	x																				

Exhibit R-4a, Schedule Detail							Date: May 2009	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology				Project Name and Number - Customer Driven Uniform Manufacturing (CDUM), Project 2			
Schedule Profile	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**
RFID/AIT pilots for the NRCIE supply chain including JSLIST, Individual Body Armor and the ACU	1-4Q	1-4Q						
NRCIE Prototype Demonstrations for items at Army Ft. Carson	1-4Q	1-4Q						
Expanded 3D Body Scanning Demonstration for NRCIE	1-4Q	1-4Q						
Explore RFID alternatives for Individual Protective Equipment (IPE)	1-4Q	1-4Q	1-4Q					
Expanded RFID Prototype Demonstrations		1-4Q	1-4Q					
Expanded NRCIE Prototype Demonstrations		1-4Q	1-4Q					
Extend from end-item manufacturers to fabric suppliers		3-4Q	1-4Q					
Transition to CDUM II Prototype Implementations		3-4Q	1-4Q					
CDUM II New Initiatives			1-4Q					

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification								DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness					PROJECT NUMBER 3	
COST ($ in Millions)	**FY 2008 Actual**	**FY 2009 Estimate**	**FY 2010 Estimate**	**FY 2011 Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)	2.527	2.608	2.466						Continuing	Continuing

A. Mission Description and Budget Item Justification

Weapon system spare parts which use castings are responsible for a disproportionate share of backorders. Cast parts are 2% of National Stock Numbered parts but represent 4% of all backorders, and when only the oldest backorders are considered, up to 19% of them are castings. This program develops innovative technology and processes to improve the procurement, manufacture, and design of weapon system spare parts which use castings. The Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT) program takes a systems view and considers not only the Defense Logistics Agency (DLA) perspective but also the Military Service Engineering Support Activities (ESA) which DLA works with to solve technical issues, as well as the industrial supply base. The program has three components: Rapid Acquisition, Quality, and Cost Effectiveness

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Procurement Readiness Optimization-Advanced Casting Technology Accomplishments/Plans	2.527	2.608	2.466	
FY 2008 Accomplishments: - 16,000 tools in Defense Tooling Database Pushing $1 million per month of solicitations to foundries with tooling Completed re-engineering of - 120 castings that had producibility issues Completed digital radiography standard for aluminum castings.				
FY 2009 Plans: - Develop working document for new radiography standard for investment steel castings - Push $1.2 million per month of solicitations to foundries with tooling Develop technology to increase productivity of short run die castings.				
FY 2010 Plans: - Develop technology to predict service life performance of steel castings. - Develop statistical properties for E357 sand cast aluminum for aerospace castings				

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness	PROJECT NUMBER 3

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

Competitive Broad Agency Announcement (BAA) evaluations complete.

E. Performance Metrics

This program has a business case which justifies the investment in terms of economic and readiness benefits.

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: May 2009
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 2008	FY 2009	FY 2010
a. Manufacturing Process Support Costs	2.527	2.615	2.501

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 2008	FY 2009	FY 2010	Budget to Complete	Total Program
				2.527	2.615	2.501		
AdvanTech, Inc	Cost Share Contract	06/2000	12.585					
AdvanTech, Inc	Cost share	10/2005	14.442					

Government Furnished Property: None.

Exhibit R-4, Schedule Profile			Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (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	

Fiscal Year	2008				2009				2010				2011				2012				2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
New Program - will demonstrate readiness improvements by developing and applying innovative methods of designing, manufacturing and buying weapon systems spares through advanced casting technology.	x	x	x	x	x	x	x	x	x	x	x	x																				

Exhibit R-4a, Schedule Detail							Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (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	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**
New Program - will demonstrate readiness improvements by developing and applying innovative methods of designing, manufacturing and buying weapon systems spares through advanced casting technology.	1-4Q	1-4Q	1-4Q					

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification								DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness					PROJECT NUMBER 4	
COST ($ in Millions)	**FY 2008 Actual**	**FY 2009 Estimate**	**FY 2010 Estimate**	**FY 2011 Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
4: Procurement Readiness Optimizatino-Forging Advanced System Technology (PRO-FAST)	1.175	1.213	1.151						Continuing	Continuing

A. Mission Description and Budget Item Justification

Weapon system spare parts which use forgings are responsible for a disproportionate share of DLA backorders. Forged parts are 3% of National Stock Numbers (NSNs) but 6% of backorders. This program develops methods and technology to improve the supply of forged parts. This program takes a holistic view of the problem and attacks root causes inside DLA, at DLA's engineering support activity partners in the Services, and at DLA forging suppliers. The program has three thrusts: Business Enterprise Integration to improve supply support approaches; FORGE-IT to develop and improve technical problems; and R&D which develops new technology for forging suppliers, including new methods for making forge dies (typically the longest lead time item) and for simulation of metal flow inside the forge die (to eliminate trial and error development of the die).

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Procurement Readiness Optimization-Forging Advanced System Technology Accomplishments/Plans	1.175	1.213	1.151	
FY 2008 Accomplishments: - 50,000 tools in National Forging Tooling Database Completed lean manufacturing demonstration projects at 8 small forges and one prime (Sikorsky) - Developed spray metal tooling machine to reduce die production lead time from 12 weeks to 1 week - Kick off new forging program jointly with Army				
FY 2009 Plans: - Investigation, development, and deployment of new and innovative tools, technologies and techniques to address forging design and acquisition for weapon systems. Projects include forming simulation; system performance prediction, new forging materials, and rapid tooling. - Develop dynamic partnering (sourcing tool) for forgings; lean six sigma process improvements at forges; develop multi-material, multi-method evaluation tool.				

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness	PROJECT NUMBER 4

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
FY 2010 Plans: - Investigation, development, and deployment of new and innovative tools, technologies and techniques to address forging design and acquisition for weapon systems. Projects include forming simulation; system performance prediction, new forging materials, and rapid tooling. - Develop dynamic partnering (sourcing tool) for forgings; lean six sigma process improvements at forges; develop multi-material, multi-method evaluation tool.				

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

A Broad Agency Announcement (BAA) evaluations complete.

E. Performance Metrics

This program has a business case which justifies the investment in terms of economic and readiness benefits.

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (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 2008	FY 2009	FY 2010
a. Manufacturing Process Support Costs	1.175	1.216	1.167

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 2008	FY 2009	FY 2010	Budget to Complete	Total Program
AdvanTech, Inc	Contract	10/2005	13.006	1.175	1.216	1.167		
AdvanTech, Inc	Cost-Share Contract	07/2008						

Government Furnished Property: None.

Exhibit R-4, Schedule Profile																																			
																																	Date: May 2009			
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (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	**2008**				**2009**				**2010**				**2011**				**2012**				**2013**				**2014**				**2015**							
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**				
New Forging Program	x	x	x	x	x	x	x	x	x	x	x	x																								

Exhibit R-4a, Schedule Detail							Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (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	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**
New Forging Program	1-4Q	1-4Q	1-4Q					

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification								DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness					PROJECT NUMBER 5	
COST ($ in Millions)	**FY 2008 Actual**	**FY 2009 Estimate**	**FY 2010 Estimate**	**FY 2011 Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
5: Material Acquisition: Electronics (MAE)	10.131	10.622	10.118						Continuing	Continuing

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 $2.9 billion is spent every five years redesigning circuit card assemblies. Many of these circuit card redesigns are performed to mitigate IC obsolescence. Commercial ICs have short Product Life Cycles (often only 18 months). IC Manufacturers subsequently move on to later generations of ICs, leaving little to no sources for their previous IC products.

DoD maintains weapons systems much longer than IC lifecycles, resulting in an obsolescence problem. In order to avoid costs and potential readiness issues associated with buying / carrying excess inventories acquired before commercial availability ceases, or redesigning the next higher assembly to mitigate the obsolete IC, DLA (as the manager of 88% of the IC Federal Stock Class) must have a capability to manufacture needed IC devices. This project develops that capability and expands it to succeeding generations of obsolete ICs through the Advanced Microcircuit Emulation Program. In addition, there has been increased DoD concern over trusted sourcing issues, as most IC design and production has migrated to overseas suppliers. The Agency is taking measures to address IC Trust issues in accordance with OSD direction.

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Material Acquisition: Electronics Accomplishments/Plans	10.131	10.622	10.118	
The Material Acquisition Electronics Program continues to perform development and expansion of IC design & fabrication technology to emulate succeeding generations of discontinued or otherwise non-available commercial technology. Effort includes transitioning technologies to Low Rate Initial Production capability. MAE is expanding our design system capability, enhancing design models, and advancing fabrication technologies to accommodate both in-house and third-party (principally Original Equipment Manufacturer) IC device requirements. MAE has developed an IC characterization tool/capability to mitigate missing technical data frequently encountered while emulating obsolete devices. In FY 2008 MAE completed development of Deep Trench Isolation processing capability to support high fan-out and transceiver applications. The Program also developed several other devices applicable to a wide range of DoD weapons systems. To support critical DoD trusted IC requirements, MAE achieved final				

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness	PROJECT NUMBER 5

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Trusted Foundry Certification from the National Security Agency. The previous certification was an interim approval. To date in FY 2009, MAE has shipped new IC types supporting multiple Services. Additionally, the Program has made yield and fabrication process improvements expanding our IC device capabilities. For the balance of FY 2009 & FY 2010, MAE will continue focus advancing our 0.5 micron design, test, and fabrication technologies, expanding our capabilities for high circuit density and radiation hardened ICs. The IC characterization tool will continue development to accommodate more complex DoD IC requirements, providing critical missing design specifications. MAE will continue an IC requirements assessment and evaluate the feasibility of an analog Emulation capability. The Program will continue proving new technologic capabilities via MAE produced military quality and trusted ICs employed on multiple weapons systems. These efforts will include progressively more complex Application Specific Integrated Circuits (ASICs). Future MAE devices will have an increased Radiation Tolerance.				

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Transition of technologies implementation (base arrays) to low-rate initial production or full-scale production.

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Project Name and Number - Material Acquisition: Electronics (MAE), Project 5

A. Project Cost Breakdown

Material Acquisition: Electronics (MAE)

Project Cost Categories	FY 2008	FY 2009	FY 2010
a. Manufacturing Process Support Costs	10.131	10.651	10.260

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 2008	FY 2009	FY 2010	Budget to Complete	Total Program
Sarnoff Corp.		TBD		10.131	10.651	10.260		
SPAWARSYSCEN		TBD						

Government Furnished Property: None.

Exhibit R-4, Schedule Profile																																Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7					Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology																Project Name and Number - Material Acquisition: Electronics (MAE), Project 5														
Fiscal Year	**2008**				**2009**				**2010**				**2011**				**2012**				**2013**				**2014**				**2015**			
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Perform Gap Analysis (GA) of Commercial Technology.	x	x	x	x	x	x	x	x	x	x	x	x																				
Perform Base array designs required to fill GA.	x	x	x	x	x	x	x	x	x	x	x	x																				
Update design Library	x	x	x	x	x	x	x	x	x	x	x	x																				
Develop prototypes for test and insertion.	x	x	x	x	x	x	x	x	x	x	x	x																				
Develop Low Rate Initial Production (LRIP) capability.	x	x	x	x	x	x	x	x	x	x	x	x																				
Transition new microcircuit designs to LRIP.	x	x	x	x	x	x	x	x	x	x	x	x																				
Perform process review	x	x	x	x	x	x	x	x	x	x	x	x																				
Plan required process improvements.	x	x	x	x	x	x	x	x	x	x	x	x																				
Implement process improvements.	x	x	x	x	x	x	x	x	x	x	x	x																				
Monitor and adjust process improvements.	x	x	x	x	x	x	x	x	x	x	x	x																				

Exhibit R-4a, Schedule Detail							Date: May 2009	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - Material Acquisition: Electronics (MAE), Project 5				
Schedule Profile	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**
Perform Gap Analysis (GA)of Commercial Technology.	1-4Q	1-4Q	1-4Q					
Perform base array designs required to fill GA.	1-4Q	1-4Q	1-4Q					
Update design library.	1-4Q	1-4Q	1-4Q					
Develop prototypes for test and insertion.	1-4Q	1-4Q	1-4Q					
Develop Low Rate Initial Production (LRIP) capability	1-4Q	1-4Q	1-4Q					
Transition new microcircuit designs to LRIP	1-4Q	1-4Q	1-4Q					
Perform process review	1-4Q	1-4Q	1-4Q					
Plan required process improvements.	1-4Q	1-4Q	1-4Q					
Implement process improvements.	1-4Q	1-4Q	1-4Q					
Monitor and adjust process improvements	1-4Q	1-4Q	1-4Q					

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification								DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness					PROJECT NUMBER 6	
COST ($ in Millions)	**FY 2008 Actual**	**FY 2009 Estimate**	**FY 2010 Estimate**	**FY 2011 Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
6: BattNet	0.000	0.000	0.986						Continuing	Continuing

A. Mission Description and Budget Item Justification

Mission Description and Budget Item Justification BattNet is focused on improving the supply and reducing the cost of batteries used in fielded weapon systems, such as communication radios and armored vehicles. Battnet is a community of practice of battery supply chain members, including materials and components suppliers, assemblers, engineering support activities, battery maintenance activities, researchers, and users.

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
BattNet Accomplishments/Plans	0.000	0.000	0.986	
FY 2008 Accomplishments: Preliminary Planning Activities. DLA has held meetings with Military Service Engineering Support Activities (ESAs) to determine requirements for the BattNet program. DLA also issued a Broad Area Announcement for the BattNet.				
FY 2009 Plans: Preliminary Planning Activities. DLA has held meetings with Military Service Engineering Support Activities (ESAs) to determine requirements for the BattNet program. DLA also issued a Broad Area Announcement for the BattNet.				
FY 2010 Plans: DLA contemplates awarding up to 10 Partner Contracts as the result of the BAA. BATTNET research is done through the award of Short Term Projects (STPs) that develop and adapt modern processes to be implemented within the battery supply chain to assure the prompt and sustained availability, quality, and affordability of batteries. STPs have an expected duration of 18-24 months and an average funding level of $100K-$250K per year. All STP proposals are required to include a business case, developed in advance, with specific metrics for success as well as a predicted return on investment (ROI).				

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness	PROJECT NUMBER 6

D. Acquisition Strategy

A competitive Broad Area Announcement (BAA) will allow for maximum competition. To continue the competition throughout the life of the program, up to 10 contracts will be awarded to research partners. These research partners will continue to compete among themselves for particular resarch tasks. Additional partners will be sought as the need arises.

E. Performance Metrics

Each Short Term Project (STP) will have performance metrics appropriate to its scope. Also all STPs will include a business case to demonstrate return on investment, or a readiness case to calculate warfighter impact vs costs.

Exhibit R-3, RDT&E Program Element/Project Cost Breakdown	Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Project Name and Number - BattNet Project 6

A. Project Cost Breakdown

BattNet

Project Cost Categories	FY 2008	FY 2009	FY 2010
a. Manufacturing Process Support Costs	0.000	0.000	0.986

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 2008	FY 2009	FY 2010	Budget to Complete	Total Program
TBD				0.000	0.000	0.986		

Government Furnished Property: None.

Exhibit R-4, Schedule Profile																																Date: May 2009
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7					Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology												Project Name and Number - BattNet Project 6																
Fiscal Year	**2008**				**2009**				**2010**				**2011**				**2012**				**2013**				**2014**				**2015**			
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Battery Network Program									x	x	x	x																				

Exhibit R-4a, Schedule Detail							Date: May 2009	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 7	Program Element Number and Name PE 0708011S Industrial Preparedness Manufacturing Technology			Project Name and Number - BattNet Project 6				
Schedule Profile	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**
Battery Network Program			1-4Q					

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification								DATE: May 2009		
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness					PROJECT NUMBER 7	
COST ($ in Millions)	**FY 2008 Actual**	**FY 2009 Estimate**	**FY 2010 Estimate**	**FY 2011 Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
7: Congressional Adds	36.520	34.705	0.000						Continuing	Continuing

A. Mission Description and Budget Item Justification

This R2 is for all the Congressionally added programs to the DLA Manufacturing Technology Program.

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Other Congressional Addtion Accomplishments/Plans	36.520	34.705	0.000	
- Castings for Improved Defense Readiness (CID) –				
- Corrosion Resistant Ultrahigh-Strength Steel for Landing Gear (ULG) - Execute Corrosion Resistant Ultrahigh-Strength Steel for Landing Gear program. Prototype material development.				
- Military High Pressure Packaging Project (MHP) - The Defense Logistics Agency (DLA) intends to utilize funding from the FY 2008 Department of Defense Appropriations Act to have AmeriQual conduct research and development to improve the quality, texture, taste, food safety and shelf life of various high-acid products, including certain fruits and vegetables, so that they may become more readily available through the Combat Rations Program, as well as other channels in the military. The objective of this project is to determine the feasibility of using HHP technology to produce high quality products. It is expected that, as a result of this project, one or more high quality HHP processed products will be developed and that all costs associated with this product or products will be clearly identified. A major component of the effort will be obtaining Food and Drug Administration (FDA) or U.S. Department of Agriculture (USDA) approval for the newly formulated or processed products.				
- Northwest Manufacturing Initiative (NMI) - Funds are provided for the FY08 Northwest Manufacturing Initiative in support of the Defense Industrial Base Development.				
-Technology Roadmapping and Strategic Investment Planning (TIP) - Develop Customer driven Technology Roadmaps and Strategic Investment Plans for Critical DoD Programs. Provide and Apply				

Exhibit R-2a, PB 2010 Defense Logistics Agency RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY 0400 - Research, Development, Test & Evaluation, Defense-Wide/BA 7 - Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S Industrial Preparedness	PROJECT NUMBER 7

B. Accomplishments/Planned Program ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2011
Tools and Methods for Technology Management. Funds will be applied to a new contract via a Missile Defense Agency Broad Area Announcement to fund the DLA plus-up in the Industrial Preparedness Program Element entitled “Technology Road mapping and Strategic Investment Planning” - Advanced Microcircuit Emulation (AME) - The full amount of this congressionally directed funding will be utilized for improving the AME emulation and fabrication process capability at the Sarnoff Corporation, Princeton NJ. - Industrial Base Innovation Fund (IBI) - - Collapsible Urethane Fuel Storage Tanks (UFS) - The objective of this effort is to improve polyurethane storage tank performance by developing improved tank construction materials, fabrication techniques and quality control procedures.				

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

Funds are provided to executing agencies and placed on existing contracts with the intended recipient of the Congressional Addition.

E. Performance Metrics

NA