

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Logistics Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>							
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	45.482	21.798	23.103	-	23.103	26.762	24.554	24.925	25.337	Continuing	Continuing
1: <i>Combat Rations (CORANET)</i>	1.720	1.924	1.766	-	1.766	2.047	2.089	2.122	2.157	Continuing	Continuing
2: <i>Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)</i>	3.735	4.220	3.873	-	3.873	4.488	4.578	4.656	4.733	Continuing	Continuing
3: <i>Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)</i>	2.322	2.607	2.369	-	2.369	2.728	2.784	2.830	2.877	Continuing	Continuing
4: <i>Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)</i>	1.083	1.230	1.129	-	1.129	1.308	1.335	1.358	1.380	Continuing	Continuing
5: <i>Material Acquisition Electronics (MAE)</i>	9.830	10.839	12.205	-	12.205	14.183	11.760	11.958	12.157	Continuing	Continuing
6: <i>Battery Network (BATNET)</i>	0.927	0.978	1.761	-	1.761	2.008	2.008	2.001	2.033	Continuing	Continuing
7: <i>Other Congressional Adds (OCAs)</i>	25.865	-	-	-	-	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Logistics Agency (DLA) Industrial Preparedness Manufacturing Technology (IP ManTech) Program supports the development of a responsive, world-class manufacturing capability to affordably meet the warfighters' needs throughout the defense system life cycle. IP 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 Department of Defense (DoD) facilities, e.g. depots and shipyards. 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) and Battery Network (BATNET). As well as, Other Congressional Add (OCA) programs that are Congressionally Directed efforts.

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Logistics Agency	DATE: February 2011
---	----------------------------

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>
---	---

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	20.514	21.798	25.612	-	25.612
Current President's Budget	45.482	21.798	23.103	-	23.103
Total Adjustments	24.968	-	-2.509	-	-2.509
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.058	-			
• FY 2010 Congressional General Reductions	-0.274	-	-	-	-
• FY 2010 Congressional Additions	26.300	-	-	-	-
• FY 2012 Departmental Fiscal Guidance	-	-	-3.443	-	-3.443
• FY 2012 Defense Efficiency - Service	-	-	-0.066	-	-0.066
Support Contractors					
• FY 2012 Industrial Preparedness	-	-	1.000	-	1.000
Manufacturing Technology Supply Chain Enhancements					

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 7: Other Congressional Adds (OCAs)

Congressional Add: *Copper Based Casting Technology Applications (CBCT)*

Congressional Add: *Industrial Base Innovation Fund*

Congressional Add: *Northwest Defense Manufacturing Initiative*

Congressional Add: *Ultra-high Strength Steele for Landing Geer*

Congressional Add: *Vet-Biz Initiative for National Sustainment (VINS)*

Congressional Add Subtotals for Project: 7

Congressional Add Totals for all Projects

FY 2010	FY 2011
1.592	-
19.896	-
1.989	-
1.592	-
0.796	-
25.865	-
25.865	-

Change Summary Explanation

FY 2010 Congressional General Reductions: \$.274M

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Defense Logistics Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)
FY 2010 Congressional Additions: \$26.300M		
FY2012 Departmental Fiscal Guidance Reductions: \$3.443M		
FY 2012 Defense Efficiency - Service Support Contractors: \$.066		
FY 2012 Industrial Preparedness Manufacturing Technology Supply Chain Enhancements: \$1.000M		

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>				PROJECT 1: <i>Combat Rations (CORANET)</i>			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
1: <i>Combat Rations (CORANET)</i>	1.720	1.924	1.766	-	1.766	2.047	2.089	2.122	2.157	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>In FY 2009, DLA Troop Support Subsistence sold \$4.75 billion in subsistence goods and services to the Department of Defense, making it the largest supply chain managed by DLA Troop Support. Sales in subsistence continue to grow, largely due to requirements for overseas contingency operations. 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 (UGR). The objectives are increased readiness, improved quality, and better ration variety. CORANET research efforts also help control the cost of the combat rations. The CORANET program engages all elements of the supply chain including producers, military Services, Army Natick Soldier Center, United States Department of Agriculture (USDA), US Army Veterinary Command, US Army Public Health Command, DLA Logistics R&D, DLA Troop Support Subsistence and academia to research and transition improved technologies for operational rations.</p>											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012	
Title: Combat Rations Accomplishments/Plans FY 2010 Accomplishments: Improved MRE packaging. Determine the manufacturability of non-hydrogen ration heaters. Infusion of antioxidants into MRE fruits. Extended shelf life grade A shell eggs. FY 2011 Plans: Explore continuous retort processing. Transition knurled seal technology for retort pouches. Develop a dimensional tear test for MREs. FY 2012 Plans: Develop new short term projects.								1.720	1.924	1.766	
Accomplishments/Planned Programs Subtotals								1.720	1.924	1.766	
C. Other Program Funding Summary (\$ in Millions) N/A											
D. Acquisition Strategy N/A											

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 1: <i>Combat Rations (CORANET)</i>

E. Performance Metrics

Performance metrics include improved quality, decreased cost and improved acceptance of military combat rations. The performance objective is to transition 50% of completed projects to the industrial base. Cost benefit analysis is performed on the CORANET portfolio annually.

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Logistics Agency										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				PROJECT 1: Combat Rations (CORANET)					
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Clemson University:Clemson, South Carolina	0.020	0.010	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	Dairy Management Incorporated:Des Plaines, Illinois	0.020	0.010	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	Master Packaging:Tampa, Florida	0.020	0.010	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/CPFF	Michigan State University:East Lansing, Michigan	0.397	0.065	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Rutgers State University of New Jersey Division of Grants & Contract Accounting:New Brunswick, New Jersey	2.767	0.550	Dec 2010	0.550	Dec 2011	-		0.550	Continuing	Continuing	Continuing
f. Manufacturing Process Support Costs	C/CPFF	SOPAKO, Incorporated:Mullins, South Carolina	0.173	0.040	Dec 2010	0.050	Dec 2011	-		0.050	Continuing	Continuing	Continuing
g. Manufacturing Process Support Costs	C/CPFF	University of Illinois:Urbana, Illinois	0.035	0.060	Dec 2010	0.050	Dec 2011	-		0.050	Continuing	Continuing	Continuing
h. Manufacturing Process Support Costs	C/CPFF	University of Tennessee:Knoxville, Tennessee	0.723	0.361	Dec 2010	0.360	Dec 2011	-		0.360	Continuing	Continuing	Continuing
i. Manufacturing Process Support Costs	C/CPFF	Texas Engineering Experiment Station, Office of Sponsored Research, Texas A&M University:College Station, Texas	1.126	0.350	Dec 2010	0.360	Dec 2011	-		0.360	Continuing	Continuing	Continuing
j. Manufacturing Process Support Costs	C/CPFF		0.035	0.040	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	Continuing

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Logistics Agency										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				1: Combat Rations (CORANET)					
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Cadillac Products Incorporated:Troy, Michigan											
k. Manufacturing Process Support Costs	C/CPFF	Ohio State University Research Foundation:Columbus, Ohio	0.035	0.010	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	Continuing
l. Manufacturing Process Support Costs	C/CPFF	Oregon Freeze Dry Incorporated:Albany, Oregon	0.035	0.010	Dec 2010	0.010	Dec 2010	-		0.010	Continuing	Continuing	Continuing
m. Manufacturing Process Support Costs	C/CPFF	Research and Development Associates:San Antonio, Texas	0.183	0.150	Dec 2010	0.150	Dec 2011	-		0.150	Continuing	Continuing	Continuing
n. Manufacturing Process Support Costs	C/CPFF	Sterling Foods, Limited:San Antonio, Texas	0.035	0.010	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	Continuing
o. Manufacturing Process Support Costs	C/CPFF	Virginia Polytechnic Institute and State University:Blacksburg, Virginia	0.217	0.100	Dec 2010	0.043	Dec 2011	-		0.043	Continuing	Continuing	Continuing
p. Manufacturing Process Support Costs	C/CPFF	Washington State Universtiy:Pullman, Washington	0.051	0.100	Dec 2010	0.050	Dec 2011	-		0.050	Continuing	Continuing	Continuing
q. Manufacturing Process Support Costs	C/CPFF	Logistics Management Institute:McLean, Virginia	0.151	0.028	Dec 2010	0.053	Dec 2011	-		0.053	Continuing	Continuing	Continuing
r. Manufacturing Process Support Costs	C/CPFF	Ameriquial, Inc.:Evansville, Indiana	0.020	0.010	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	
s. Manufacturing Process Support Costs	C/CPFF	Wornick:McAllen, Texas	0.080	0.010	Dec 2010	0.010	Dec 2011	-		0.010	Continuing	Continuing	
Subtotal			6.123	1.924		1.766		-		1.766			

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Logistics Agency										DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				PROJECT 1: Combat Rations (CORANET)						
				Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals				6.123	1.924		1.766		-		1.766			

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Logistics Agency			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 1: <i>Combat Rations (CORANET)</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Vitamin Encapsulation Cheese Spread																												
Transition Projects																												
New Short Term Projects																												
Oxygen Absorbing Packaging Materials																												
Knurled Seal Heat Bar Technology																												
New Formula MRE Shelf Stable Pocket Sandwich																												
Technology Transition Retort Racks																												
Acceptance Test for Retort Pouch Material																												
Ultra High Pressure infused Fruit																												
Identify, Define, Review and Implement Research Activities																												

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Logistics Agency	DATE: February 2011
---	----------------------------

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 1: <i>Combat Rations (CORANET)</i>
---	---	--

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Vitamin Encapsulation Cheese Spread	1	2011	2	2011
Transition Projects	1	2011	4	2015
New Short Term Projects	1	2011	4	2015
Oxygen Absorbing Packaging Materials	1	2011	4	2011
Knurled Seal Heat Bar Technology	1	2011	4	2011
New Formula MRE Shelf Stable Pocket Sandwich	1	2011	4	2011
Technology Transition Retort Racks	1	2011	4	2011
Acceptance Test for Retort Pouch Material	1	2011	3	2011
Ultra High Pressure infused Fruit	1	2011	4	2011
Identify, Define, Review and Implement Research Activities	1	2011	4	2015

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency									DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)	3.735	4.220	3.873	-	3.873	4.488	4.578	4.656	4.733	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
The Department of Defense, through the Defense Logistics Agency, purchased \$2.5 billion of clothing and textile items in FY 2009. The lead-time is up to 15 months and the current inventory acquisition value is over \$1.4 billion. The current focus of DLA military clothing research is Customer Driven Uniform Manufacturing (CDUM). CDUM explores the application of advanced technologies and process reengineering to the end-to-end management of clothing and individual equipment (CIE). CDUM is focusing on three thrust areas:											
1. Supply Chain Process Reengineering and Advanced Technology for Military Clothing											
2. Central Issue Facility (CIF) Process Reengineering and Shared Visibility											
3. Manufacturing Methods for Product Performance and Quality Improvement											
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2010	FY 2011	FY 2012
Title: Customer Driven Uniform Manufacturing Accomplishments/Plans									3.735	4.220	3.873
FY 2010 Accomplishments: Radio Frequency Identification (RFID) Item Level Technology for End-item Manufacturers and Third Party Logistics Providers Shade Study											
FY 2011 Plans: RFID Item Level Technology for Component Manufacturers, Fabric Manufacturers and Individual Equipment											
FY 2012 Plans: CDUM 2 New Initiatives											
Accomplishments/Planned Programs Subtotals									3.735	4.220	3.873

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 2: <i>Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

The CDUM program focus is on clothing and individual equipment (CIE). The cost benefit analysis for the RFID initiative has demonstrated improvements in inventory accuracy through reductions in adjustments.

Cost benefit analyses are performed on CDUM initiatives on an ongoing basis.

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Logistics Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 2: <i>Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)</i>
---	---	---

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Production Data Integration Technologies:Long Beach, California	6.800	1.600	Jan 2010	0.846	Jan 2011	-		0.846	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	AdvanTech:Annapolis, Maryland	5.267	1.300	Jan 2010	1.737	Jan 2011	-		1.737	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	Human Solutions NA, Incorporated:Dearborn, Michigan	0.750	-		-		-		-	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/BPA	Logistics Management Institute:McLean, Virginia	2.600	1.320	Jan 2010	1.290	Jan 2011	-		1.290	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Atlantic Diving Supply:Virginia Beach, VA	0.129	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			15.546	4.220		3.873		-		3.873			
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			15.546	4.220		3.873		-		3.873			

Remarks

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Logistics Agency			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 2: <i>Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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
Supply Chain Process Reengineering and AIT for Military Clothing																												
Shared Army and DSCP Asset Visibility and CIF Process Reengineering																												
Manufacturing Methods for Product Performance and Quality Improvement																												
Transition to CDUM II Prototype Implementations																												
CDUM II New Initiatives																												

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Logistics Agency			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 2: <i>Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Supply Chain Process Reengineering and AIT for Military Clothing	1	2011	4	2012
Shared Army and DSCP Asset Visibility and CIF Process Reengineering	1	2011	4	2012
Manufacturing Methods for Product Performance and Quality Improvement	1	2011	4	2012
Transition to CDUM II Prototype Implementations	4	2012	4	2014
CDUM II New Initiatives	4	2012	4	2015

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)	PROJECT 3: Procurement Readiness Optimization- Advanced System Technology (PRO-ACT)
---	---	--

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)	2.322	2.607	2.369	-	2.369	2.728	2.784	2.830	2.877	Continuing	Continuing
Quantity of RDT&E Articles											

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 10% 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 Programs (\$ in Millions)

	FY 2010	FY 2011	FY 2012
Title: Procurement Readiness Optimization-Advanced Casting Technology Accomplishments/Plans FY 2010 Accomplishments: Develop technology to predict service life performance of steel castings. Develop statistical properties for E357 sand cast aluminum for aerospace castings. FY 2011 Plans: Completed digital radiography standard for investment steel castings. Develop high strength cast steels that can substituted for titanium casting with no weight penalty with substantial cost savings. FY 2012 Plans: Awaiting award of new casting contract(s) in order to determine new projects. Award is anticipated 2nd quarter FY11.	2.322	2.607	2.369
Accomplishments/Planned Programs Subtotals	2.322	2.607	2.369

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 3: <i>Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)</i>

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

Competitive Broad Agency Announcement (BAA) evaluations completed and this contract awarded competitively. The current contract reaches its funding ceiling October 2010, but the ceiling will be raised so work to continue through FY11. A Broad Agency Announcement (BAA) was issued on 29 July 2010, with proposals due 22 September 2010. Award is expected 2nd quarter FY11.

E. Performance Metrics

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

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Logistics Agency	DATE: February 2011
---	----------------------------

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 3: <i>Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)</i>
---	---	---

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Advanced Technologies International:North Charleston, South Carolina	8.113	2.607	Mar 2011	2.369	Mar 2012	-		2.369	Continuing	Continuing	Continuing
Subtotal			8.113	2.607		2.369		-		2.369			
Project Cost Totals			8.113	2.607		2.369		-		2.369			

Remarks

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Logistics Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 3: <i>Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)</i>
---	---	---

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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 Procurement Tools and technical Support																												
Metal Matrix Composites																												
Rapid Tooling																												
Yield Improvement																												
A201 Statistical Properties																												
Rapid Tooling for Short Run Metal Mold Applications																												
High Performance Casting Alloys																												
Self-Propagating High Temp Synthesis (SHS) for Metal Matrix Composite Components																												
Casting Metal Mold Production Improvements																												
Short Run Insert Production and Improved Yield																												
E357 Statistical Properties																												
Optimizing Corrosion Performance on Stainless Steel Castings & Welds																												
Solidification Under pressure and Digital Radiography Standard for Investment Steel Castings																												
Cast Part Performance in the Presence of Discontinuities																												
Casting Standards and Specifications																												
Procurement Solutions Network																												
Rapid Prototyping																												

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Logistics Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 3: <i>Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)</i>
---	---	---

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
DoD Procurement Tools and technical Support	2	2011	4	2015
Metal Matrix Composites	2	2011	4	2015
Rapid Tooling	2	2011	4	2015
Yield Improvement	2	2011	4	2015
A201 Statistical Properties	2	2011	4	2015
Rapid Tooling for Short Run Metal Mold Applications	1	2011	4	2011
High Performance Casting Alloys	1	2011	3	2011
Self-Propagating High Temp Synthesis (SHS) for Metal Matrix Composite Components	1	2011	3	2011
Casting Metal Mold Production Improvements	1	2011	3	2011
Short Run Insert Production and Improved Yield	1	2011	3	2011
E357 Statistical Properties	1	2011	3	2011
Optimizing Corrosion Performance on Stainless Steel Castings & Welds	2	2011	4	2015
Solidification Under pressure and Digital Radiography Standard for Investment Steel Castings	2	2011	4	2015
Cast Part Performance in the Presence of Discontinuities	2	2011	4	2015
Casting Standards and Specifications	2	2011	4	2015
Procurement Solutions Network	2	2011	4	2015
Rapid Prototyping	2	2011	4	2015

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				PROJECT 4: Procurement Readiness Optimization- Forging Advanced System Technology (PRO- FAST)			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)	1.083	1.230	1.129	-	1.129	1.308	1.335	1.358	1.380	Continuing	Continuing
Quantity of RDT&E Articles											
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 up to 10% of unfilled orders. 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 Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012	
Title: Procurement Readiness Optimization-Forging Advanced System Technology Accomplishments/Plans								1.083	1.230	1.129	
FY 2010 Accomplishments: Projects are still in process. The projects include: 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. Investigate best practices and models for Multi-Material, Multi-Method Evaluations; develop an affordable, easy-to-use, and effective model; demonstrate the model; and transition the model.											
FY 2011 Plans: Develop and deploy a web based tool that links forging customers to forging suppliers; lean six sigma process improvements at forges; re-evaluate and develop multi-material, multi-method evaluation tool. Address vexing forging supply chains to improve forging design and acquisition processes. Exploit the strength and toughness of “the Atlas of Metal Products” in old and new weapon systems. Begin planning for acquisition to solicit for next forging program.											
FY 2012 Plans:											

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency		DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 4: <i>Procurement Readiness Optimization- Forging Advanced System Technology (PRO-FAST)</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
Finalize a web based tool that links forging customers to forging suppliers; begin implementation of lean six sigma process improvements at forges; develop multi-material, multi-method evaluation tool. Address vexing forging supply chains to improve forging design and acquisition processes.			
Accomplishments/Planned Programs Subtotals		1.083	1.230
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.			

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Logistics Agency											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>				PROJECT 4: <i>Procurement Readiness Optimization- Forging Advanced System Technology (PRO-FAST)</i>					

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
a. Manufacturing Process Support Costs	C/CPFF	Advanced Technologies International:North Charleston, South Carolina	4.499	1.230	Jan 2011	1.129	Jan 2012	-		1.129	Continuing	Continuing	Continuing	
Subtotal			4.499	1.230		1.129		-		1.129				

			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			4.499	1.230		1.129		-		1.129			

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Logistics Agency			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 4: <i>Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)</i>	

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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 Procurement Tools and Technical Support																												
Simulation of Heat Treat Distortion																												
Simulation and Workforce Development																												
Rapid Low Cost Data Generation for Simulation																												
Next Generation Low Cost Aluminum Alloys																												
National Forging Tooling Database (NFTD)																												
Metal and Process Optimization (MPO)																												
Laser Deposition of Tooling																												
Dynamic Partnering (DP)																												
SmartChart™ Intelligent Process Tools for Forges																												

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Logistics Agency			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 4: <i>Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
DoD Procurement Tools and Technical Support	1	2011	4	2015
Simulation of Heat Treat Distortion	1	2013	4	2015
Simulation and Workforce Development	1	2011	4	2012
Rapid Low Cost Data Generation for Simulation	1	2013	4	2015
Next Generation Low Cost Aluminum Alloys	1	2013	4	2015
National Forging Tooling Database (NFTD)	1	2011	4	2015
Metal and Process Optimization (MPO)	1	2011	4	2012
Laser Deposition of Tooling	1	2011	4	2012
Dynamic Partnering (DP)	1	2011	4	2012
SmartChart™ Intelligent Process Tools for Forges	1	2011	4	2015

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				PROJECT 5: Material Acquisition Electronics (MAE)			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
5: Material Acquisition Electronics (MAE)	9.830	10.839	12.205	-	12.205	14.183	11.760	11.958	12.157	Continuing	Continuing
Quantity of RDT&E Articles											
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 the capability to manufacture needed IC devices.											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012	
Title: Material Acquisition Electronics Accomplishments/Plans								9.830	10.839	12.205	
FY 2010 Accomplishments: MAE advanced our 0.5 micron design, test, and fabrication technologies, the 0.5 micron silicon-on-insulator process is nearly complete and will enter qualification later this calendar year, expanding our capabilities for high circuit density and radiation hardened ICs. The IC characterization tool continued development, increasing the image capture speed by a factor of ten (10) and recognizing feature sizes to 110 nanometers, thereby accommodating more complex DoD IC requirements and providing critical missing technical specifications. MAE focused its IC requirements assessment on the linear Emulation market segment, laying the framework for linear development roadmap.											
FY 2011 Plans: MAE will continue to develop additional capability and expand it to succeeding generations of obsolete ICs through successive technology nodes. These technologies will be demonstrated through performance based specification and Weapons System IC insertions. In addition, there has been increased DoD concern over trusted sourcing issues, as most IC design and production has migrated to overseas suppliers.											
FY 2012 Plans: MAE will formulate specific device family targets and initiate a Linear Emulation thrust. It will initiate 250 nanometer Emulation fabrication process (High Performance (speed) and Density) development providing additional FSC 5962 coverage. It will initiate implementation of a Trusted Design capability, responding to Agency, Customer, and DoD concerns. It will continue 350											

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency		DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 5: <i>Material Acquisition Electronics (MAE)</i>
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
nanometer Emulation fabrication process development, bringing new capabilities to the Customers and Agency. It will integrate the Integrated Circuit Characterization tool advancements into Emulation flow, enabling supply for non-procurables.			
Accomplishments/Planned Programs Subtotals		9.830	10.839
C. Other Program Funding Summary (\$ in Millions) N/A			
D. Acquisition Strategy N/A			
E. Performance Metrics Transition of one technology implementation (base array) to low-rate initial production or full-scale production.			

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Logistics Agency											DATE: February 2011		
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>				PROJECT 5: <i>Material Acquisition Electronics (MAE)</i>					

Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Sarnoff Corporation:Princeton, New Jersey	39.527	10.839	Oct 2011	12.205	Oct 2012	-		12.205	Continuing	Continuing	Continuing
Subtotal			39.527	10.839		12.205		-		12.205			

	Total Prior Years Cost	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	39.527	10.839		-	12.205			

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Logistics Agency						DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>			R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>			PROJECT 5: <i>Material Acquisition Electronics (MAE)</i>

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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)																												
Implement Process Improvements																												
Plan required Process Improvements																												
Perform Process Review																												
Transition New Microcircuit Designs to LRIP																												
Develop Low Rate Initial Production (LRIP) Capability																												
Develop Prototypes for Test and Insertion																												
Update Design Library																												
Perform Base Array Designs Required to Fill GA																												
Monitor and Adjust Process Improvements																												

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Logistics Agency			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 5: <i>Material Acquisition Electronics (MAE)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Perform Gap Analysis (GA)	1	2011	4	2016
Implement Process Improvements	1	2011	4	2016
Plan required Process Improvements	1	2011	4	2016
Perform Process Review	1	2011	4	2016
Transition New Microcircuit Designs to LRIP	1	2011	4	2016
Develop Low Rate Initial Production (LRIP) Capability	1	2011	4	2016
Develop Prototypes for Test and Insertion	1	2011	4	2016
Update Design Library	1	2011	4	2016
Perform Base Array Designs Required to Fill GA	1	2011	4	2016
Monitor and Adjust Process Improvements	1	2011	4	2016

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency								DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				PROJECT 6: Battery Network (BATTNET)			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
6: Battery Network (BATTNET)	0.927	0.978	1.761	-	1.761	2.008	2.008	2.001	2.033	Continuing	Continuing
Quantity of RDT&E Articles											
A. 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. Batteries exhibit dynamic challenges for military logistics. BATTNET is a community of practice of battery supply chain members, engineering support activities, researchers, and users. BATTNET conducts R&D to address sustainment gaps and bridge technical solutions into higher MRLs for specific groups of batteries. For FY09, DLA received 135K Orders for 5.9M batteries at \$301M Net Value, a substantial increase from FY08 (\$272M) and FY07 (\$221M).											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012	
Title: BATTNET Accomplishments/Plans								0.927	0.978	1.761	
FY 2010 Accomplishments: DLA identified and developed charters for five projects totaling \$1.9M submitted by BATTNET partners to achieve various program objectives. DLA analyzed supply chain data, available industry data on DMSMS, sustainment issues identified from the JDMTP's Power Sources Roadmap, and collaborated with military services to identify additional R&D requirements. DLA provided data for the 2010 NDAA Section 243, GAO assessment of Defense-wide coordination of energy storage device requirements, investments and procurements.											
FY 2011 Plans: BATTNET R&D will continue to be done through awards of identified Short Term Projects (STP) to assure the prompt and sustained availability, quality, and affordability of military batteries. STPs have an expected duration of 18-24 months and an average funding of \$100K-\$500K per year. STP proposals are required to include a business case with specific metrics for success and a predicted return on investment (ROI).											
FY 2012 Plans: BATTNET R&D will continue to be performed through identification and awards of new Short Term Projects (STP).											
Accomplishments/Planned Programs Subtotals								0.927	0.978	1.761	

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	PROJECT 6: <i>Battery Network (BATTNET)</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy The BATTNET R&D partners were established by contract September 2009 through a competitive Broad Area Announcement (BAA) allowing for maximum competition. Partner Contracts were based upon proposals that demonstrated knowledge, experience, and expertise in the following areas of interest: Automation, Battery Maintenance, Competition & Contracting Requirements, Diminishing Manufacturing & Supply, Lithium Battery Safety, Reducing Acquisition Costs, Shelf Life, Supply Chain Logistics, Surge/Sustainment, and Technology Transition/Insertion. The BATTNET, which includes a Government Steering Group (GSG) of power source technical experts from the military services R&D groups, is informed of general R&D requirements for supply chain improvement. The partners develop among themselves related R&D projects, which are then formally evaluated by the GSG. Selected projects are then chartered within DLA and planned for contract STP awards when funds are available.		
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 versus costs.		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Defense Logistics Agency										DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT					
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				6: Battery Network (BATTNET)					
Support (\$ in Millions)				FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Quallion LLC:Sylmar, CA	0.025	0.275	Dec 2010	0.225	Dec 2011	-		0.225	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	Yardney Technical Products:Pawcatuck, CT	0.025	0.025	Dec 2010	0.025	Dec 2011	-		0.025	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	EaglePicher Technologies:Joplin, MO	0.025	0.025	Dec 2010	0.025	Dec 2011	-		0.025	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/CPFF	Eskra Technical Products:Saukville, WI	0.425	0.025	Dec 2010	0.300	Dec 2011	-		0.300	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Lockheed Martin Corporation:Grand Prairie, TX	0.025	0.025	Dec 2010	0.325	Dec 2011	-		0.325	Continuing	Continuing	Continuing
f. Manufacturing Process Support Costs	C/CPFF	Redblack Communications:Hollywood, MD	0.025	0.025	Dec 2010	0.225	Dec 2011	-		0.225	Continuing	Continuing	Continuing
g. Manufacturing Process Support Costs	C/CPFF	Saft America:Cockeysville, MD	0.025	0.275	Dec 2010	0.225	Dec 2011	-		0.225	Continuing	Continuing	Continuing
h. Manufacturing Process Support Costs	C/CPFF	Spectrum Brands:Madison, WI	0.025	0.025	Dec 2010	0.025	Dec 2011	-		0.025	Continuing	Continuing	Continuing
i. Manufacturing Process Support Costs	C/CPFF	Innovative Battery Consulting:Southport, NC	0.025	0.025	Dec 2010	0.125	Dec 2011	-		0.125	Continuing	Continuing	Continuing
j. Manufacturing Process Support Costs	C/CPFF	Alion Science & Technology:Rome, NY	0.356	0.253	Dec 2010	0.261	Dec 2011	-		0.261	Continuing	Continuing	Continuing
Subtotal			0.981	0.978		1.761		-		1.761			
			Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.981	0.978		1.761		-		1.761			
Remarks													

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Defense Logistics Agency																DATE: February 2011			
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>								R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>								PROJECT 6: <i>Battery Network (BATTNET)</i>			

	FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015				FY 2016			
	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																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Defense Logistics Agency

DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

PROJECT

6: Battery Network (BATTNET)

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Battery Network Program	1	2011	4	2015

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency **DATE:** February 2011

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development				PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)				7: Other Congressional Adds (OCAs)			
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
7: Other Congressional Adds (OCAs)	25.865	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

DLA oversees the management of Congressional Add programs assigned to program element 0708011S, Industrial Preparedness.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2010	FY 2011
Congressional Add: Copper Based Casting Technology Applications (CBCT)	1.592	-
FY 2010 Accomplishments: The objectives of this program are to leverage the successes of the DLA-led CBCT program into deployable applications and to develop lighter/smaller pump/motor applications that are more efficient, run cooler, & last longer. The program will 1) develop and test high efficiency cast copper rotor motors for land based & aerospace systems and 2) incorporate advanced material processing for motor housings, pump bodies, and other fluid handling components.		
Congressional Add: Industrial Base Innovation Fund	19.896	-
FY 2010 Accomplishments: On behalf of the Department of Defense. DLA has been instructed to execute the fund in coordination with the Joint Defense Manufacturing Technology Panel (JDMTP) and with the Office of the Deputy Under Secretary of Defense for Industrial Policy (ODUSD IP). The objective of the program is to ensure that investments are made to address shortfalls in manufacturing processes and technologies in support of the Department's long-term and short-term needs.		
Congressional Add: Northwest Defense Manufacturing Initiative	1.989	-
FY 2010 Accomplishments: Northwest Manufacturing Initiative has several thrusts. Half the funding goes toward training activities for subject matter experts (SMEs) that include lean, outreach, workforce development and capability mapping. The other half of the funding goes to Portland State University to develop and complete technology transfer in advanced welding technologies. The program will 1) develop a capability database searchable by DoD and defense prime contractors, 2) support training activities and outreach programs to ensure a capable workforce, and 3) test and develop new and innovative welding technologies and materials.		
Congressional Add: Ultra-high Strength Steele for Landing Geer	1.592	-

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2012 Defense Logistics Agency		DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0708011S: <i>Industrial Preparedness Manufacturing Technology (IP ManTech)</i>	
		PROJECT 7: <i>Other Congressional Adds (OCAs)</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2010	FY 2011
FY 2010 Accomplishments: The objective of this program is to develop and deploy a corrosion resistant ultrahigh strength steel equal to or better than 300M and 4340 for the Department of Defense weapon system components that will reduce development time and weapon system life-cycle maintenance costs. The program will 1) use S53 corrosion resistant steel to replace the current ultrahigh strength steels used in landing gear and other structural systems and 2) produce first articles for testing at Ogden Air Logistics Center.			
Congressional Add: Vet-Biz Initiative for National Sustainment (VINS) FY 2010 Accomplishments: The objective of this program is to provide strategic consulting and hands on training to help Service Disabled Veteran Owned Business (SDVOSB). The program is expected to 1) increase supplier/manufacturing base and 2) reduce production lead time (PLT) for original equipment manufacturers (OEMs) that supply DLA and DoD.		0.796	-
Congressional Adds Subtotals		25.865	-
C. Other Program Funding Summary (\$ in Millions) N/A			
D. Acquisition Strategy N/A			
E. Performance Metrics N/A			

UNCLASSIFIED