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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	13.028	11.549	13.386	-	13.386	31.903	37.087	30.892	19.111	Continuing	Continuing
526: Marine Orien Log Eq Ad	-	2.526	2.368	2.603	-	2.603	13.269	21.856	18.289	3.461	Continuing	Continuing
G11: Adv Elec Energy Con Ad	-	3.512	2.499	4.013	-	4.013	9.559	5.933	3.748	8.218	Continuing	Continuing
G14: Materials Handling Equipment - Ad	-	0.137	0.648	-	-	-	-	-	-	-	-	0.785
K39: Field Sustainment Support Ad	-	2.649	2.160	0.534	-	0.534	0.558	1.155	-	-	Continuing	Continuing
K41: Water And Petroleum Distribution - Ad	-	2.413	2.262	3.545	-	3.545	3.935	3.757	4.465	4.847	Continuing	Continuing
VR8: Combat Service Support Systems - Ad	-	1.791	1.612	2.691	-	2.691	4.582	4.386	4.390	2.585	Continuing	Continuing

The FY 2015 OCO Request will be submitted at a later date.

Note

Change Summary Explanation: Decrease is due to several PROJECTs.

A. Mission Description and Budget Item Justification

This program element supports advanced component development and prototypes of new and improved technologies for combat support and combat service support equipment essential to sustaining combat operations. Advancements in watercraft, bridging, electric power generators, potable water, material-handling, environmental control, shelter systems, cargo aerial delivery, field service systems, mortuary affairs equipment and petroleum equipment are necessary to improve safety and increase the tactical mobility, operational capability, lethality and survivability on the digital battlefield and to provide for greater sustainment while reducing the logistics support burden.

Decrease from FY14 PB to FY15 PB reflects decrease of several projects.

For FY14, Joint Light Tactical Vehicle (JLTV) moved to PE: 655812/Project: VU9

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Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev			
B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	14.605	11.556	14.559	-	14.559
Current President's Budget	13.028	11.549	13.386	-	13.386
Total Adjustments	-1.577	-0.007	-1.173	-	-1.173
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-1.577	-0.007	-1.173	-	-1.173

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) 526 / Marine Orien Log Eq Ad			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
526: Marine Orien Log Eq Ad	-	2.526	2.368	2.603	-	2.603	13.269	21.856	18.289	3.461	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
The FY15 dollars in the amount of \$2.603 million supports project advanced component development, and prototype of equipment and sub-systems supporting the Army Watercraft mission to provide critical capabilities in support of full-spectrum land combat operations, by extending the Commander's available maneuver space into and throughout the littorals, inland waterways and near coastal regions. Army watercraft equipment supports the conduct of riverine, Logistics Over The Shore (LOTS), Joint Logistics Over The Shore (JLOTS), inter and intratheater transport, movement and maneuver, mission command and sustainment, as identified in DODD 5100.01 (Functions of the Department of Defense and its Major Components). Army Watercraft exploit the inland waterways and littoral regions as waterborne maneuver and supply routes, conducting operations through littoral entry points (developed, undeveloped, and austere access points) and in non-permissive, and/or denied access scenarios. The Army uses a spectrum of lighterage and floating craft, from heavy sustainment ocean going landing craft capable of intratheater and ship to shore transport and undeveloped beach or harbor access, to ocean-going and harbor utility tug boats and barge derricks for transport and denied port/salvage operations, and modular causeway systems to support LOTS/JLOTS. The development of the Maneuver Support Vessel-Light (MSV-L) Capabilities Production Document (CPD) will ensure the Army addresses the most glaring capability gaps within the Army Watercraft fleet.												
Funding will also be used to enhance the maturation of equipment, systems and sub-systems into Army Watercraft for the purposes of improved performance, energy efficiency, environmental, and regulatory compliance. The funding supports initiatives to enhance the seaworthiness, safety, survivability, supportability, and reliability of existing systems. Funded efforts will advance critical gaps in these areas for the current fleet, while at the same time researching, developing and testing emergent technologies in a manner to support future acquisitions and future fleet planning, as informed by the Army Watercraft Systems Board of Directors (AWS BOD).												
Fleet wide funding requirements will complete core requirements for development, prototype operational testing, and military unit assessment of several projects. Core requirements include: externally-mounted accommodation units in support of crew and supercargo berthing; integration of Escalation of Force (EoF) force protection enhancements (both lethal and non-lethal); and development of Battle Command on the Move (BCOTM) and Common Operating Picture (COP)/interoperability aspects of existing Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR). The development of environmental and energy efficiency technologies will also be addressed, to ensure continued compliance with increasingly stringent regulatory requirements. Funding also furthers the development of digital technology integration in the areas of near and real time logistics management, area situational awareness, trend analysis, Condition Based Maintenance Plus (CBM+), equipment monitoring and diagnostics/prognostics and related functional areas, as well as development of ship to shore (at sea transfer), Economic Useful Life (EUL) and corrosion technologies.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Landing Craft Mechanized (LCM8)/Maneuver Support Vessel-Light(MSV-L)									0.150	0.125	-	

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Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev		Project (Number/Name) 526 / Marine Orien Log Eq Ad	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)					
			FY 2013	FY 2014	FY 2015
Articles: Description: Landing Craft Mechanized 8 FY 2013 Accomplishments: Watercraft - Landing Craft Mechanized (LCM8) Study Development FY 2014 Plans: Watercraft - Landing Craft Mechanized (LCM8) Development			-	-	-
Title: Maneuver Support Vessels (MSV) Capabilities Production Document (CPD) Capabilities and Feasability Development Articles: Description: VSB - Vessel to Shore Bridging Development FY 2013 Accomplishments: Family Maneuver Support Vessels (FMSV) Initial Capabilities Document (ICD) support. FY 2014 Plans: Maneuver Support Vessels (MSV) Capabilities Production Document (CPD) support.			0.230 -	0.055 -	- -
Title: Heavy Lift Vessel Development Articles: Description: AWS Heavy Lift Vessel FY 2013 Accomplishments: Heavy Lift Vessel Development			0.200 -	- -	- -
Title: Army Watercraft Module Berthing (AWMB) Development Articles: Description: AWS - Army Watercraft Module, Berthing (AWMB) FY 2013 Accomplishments: People Pods Study/Development FY 2014 Plans: People Pod development			0.300 -	0.500 -	- -
Title: Force Protection; lethal and non-lethal Escalation of Force (EoF) Development			0.350	0.600	0.500

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
Articles: Description: AWS - Force Protection FY 2013 Accomplishments: Force Protection Study/Development FY 2014 Plans: Force Protection Development FY 2015 Plans: New Title: Force Protection; lethal and non-lethal Escalation of Force (EoF) Development Old Title: WATERCRAFT - FORCE PROTECTION DEVELOPMENT			-	-	-
Title: C4ISR Improvements Description: AWS - C4ISR FY 2013 Accomplishments: C4ISR Study/Development FY 2014 Plans: C4ISR FY 2015 Plans: New Title: C4ISR Improvements Old Title: WATERCRAFT - C4ISR DEVELOPMENT			0.150 - Articles:	0.150 - Articles:	0.207 - Articles:
Title: Army Watercraft Program Support Description: SALARY SUPPORT FY 2013 Accomplishments: Support FY 2014 Plans: Support FY 2015 Plans:			0.156 - Articles:	0.050 - Articles:	0.062 - Articles:

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
Salary Support					
Title: Watercraft Market Surveys and Business Analysis Description: Funding is provided for the following effort FY 2013 Accomplishments: Continues Watercraft Market Surveys and Business Analysis FY 2014 Plans: Watercraft Market Surveys and Business Analysis			Articles: 0.150 -	0.050 -	- -
Title: Riverine Craft Development Description: Riverine Craft Development FY 2014 Plans: Riverine Craft Development			Articles: - -	0.050 -	- -
Title: Tug and Barge Development Description: Tug and Barge Development FY 2013 Accomplishments: Tug and Barge Study/Development FY 2014 Plans: MEDIUM TUG AND BARGE DEVELOPMENT			Articles: 0.150 -	0.313 -	- -
Title: Terminal Operations and Ship to Shore Development Description: Terminal Operations and Ship to Shore Development FY 2013 Accomplishments: Terminal Operations and Ship to Shore Study/Development FY 2014 Plans:			Articles: 0.040 -	0.075 -	- -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
Terminal Operations and Ship to Shore Development				
Title: Port/Harbor Utility Development Articles: Description: Port/Harbor Utility Development FY 2013 Accomplishments: Port/Harbor Utility and Light Landing Craft Study/Development FY 2014 Plans: Old Title: WATERCRAFT - PORT/HARBOR UTILITY DEVELOPMENT New Title: Port/Harbor Utility Development		0.150 -	0.050 -	- -
Title: Amphibious Craft Development Articles: Description: Amphibious Craft Development FY 2013 Accomplishments: Amphibious Craft Study/Development		0.100 -	- -	- -
Title: Digital Integration Development Articles: Description: Digital Integration Development FY 2013 Accomplishments: Digital Integration Study/Development FY 2014 Plans: Digital Integration Development FY 2015 Plans: Will help with the maintenance of the Digital Intergration. Old Title: WATERCRAFT - DIGITAL INTEGRATION DEVELOPMENT New Title: Digital Integration Development		0.150 -	0.050 -	0.250 -
Title: At Sea Transfer Development Articles:		0.100 -	- -	0.500 -

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Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev		Project (Number/Name) 526 / Marine Orien Log Eq Ad			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							
Description: At Sea Transfer Development FY 2013 Accomplishments: At Sea Transfer Study/Development FY 2015 Plans: New Title: At Sea Transfer Development Old Title: WATERCRAFT - AT SEA TRANSFER DEVELOPMENT					FY 2013	FY 2014	FY 2015
Title: Energy Compliance Articles: Description: Energy Efficiency FY 2013 Accomplishments: Energy Efficiency and Environmental Compliance FY 2014 Plans: New title: Energy Compliance. Old Title: WATERCRAFT - ENERGY EFFICIENCY DEVELOPMENT FY 2015 Plans: New title: Energy Compliance. Old Title: WATERCRAFT - ENERGY EFFICIENCY DEVELOPMENT					0.150	0.300	0.348
					-	-	-
Title: Environmental Compliance Description: Environmental Compliance Development FY 2015 Plans: New Title: Environmental Compliance. Technologies IAW evolving regulatory requirements. Old Title: Energy Efficiency and Environmental Compliance.					-	-	0.736
Accomplishments/Planned Programs Subtotals					2.526	2.368	2.603

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Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>				Project (Number/Name) 526 / <i>Marine Orien Log Eq Ad</i>				
C. Other Program Funding Summary (\$ in Millions)												
	<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
	• MA4500 Modification on In-Service: <i>MA4500 Modification on In-Service Equipment (OPA3)</i>	41.903	31.955	43.268	-	43.268	10.639	9.918	9.924	12.434	Continuing	Continuing
Remarks												
RDTE funds used in FY14/15 for the Mauever Support Vessels (MSV) line support projects Manuever Support Vessel-Light (MSV-L), which has not been included in the POM to date.												
D. Acquisition Strategy												
NA												
E. Performance Metrics												
N/A												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>						Project (Number/Name) 526 / <i>Marine Orien Log Eq Ad</i>			
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Army Watercraft Systems Program Support	SS/LH	Program Management Office : TACOM	3.129	0.156	Oct 2012	0.050	Oct 2013	0.062	Oct 2014	-		0.062	Continuing	Continuing	Continuing
Small Business Incentive Research (SBIR); Technology Transfer Research	TBD	Various : Various	0.072	-		-		-		-		-	-	0.072	0.083
Subtotal			3.201	0.156		0.050		0.062		-		0.062	-	-	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Landing Craft Mechanized (LCM8) Maneuver Support	C/FFPLOE	Various : Various	0.441	0.150	Dec 2012	0.125	Dec 2013	-		-		-	Continuing	Continuing	Continuing
Maneuver Support Vessels (MSV) Capabilities Production Document (CPD)Development	C/FFPLOE	Various : Various	0.502	0.230	Dec 2012	0.055	Dec 2013	-		-		-	Continuing	Continuing	Continuing
Heavy Lift Vessel Development	C/FFPLOE	Various : Various	0.441	0.200	Dec 2012	-		-		-		-	Continuing	Continuing	Continuing
Army Watercraft Module, Berthing (AWMB) Development	C/FFPLOE	PM Force Sustainment Systems : Natick, MA	0.441	0.300	Dec 2012	0.500	Apr 2014	-		-		-	Continuing	Continuing	Continuing
Force Protection, Escalation of Force (EoF) Development	C/FFPLOE	NSWCDD : Crane, IN	0.391	0.350	Dec 2012	0.600	Jul 2014	0.500	Mar 2015	-		0.500	Continuing	Continuing	Continuing
C4ISR Improvements	C/FFPLOE	SPAWAR : Charleston, SC	0.276	0.150	Dec 2012	0.150	May 2013	0.207	Nov 2014	-		0.207	Continuing	Continuing	Continuing
Market Surveys/Business Analysis	C/FP	TBD : TBD	0.000	0.150	Dec 2012	0.050	Dec 2013	-		-		-	Continuing	Continuing	Continuing
Riverine Craft Development	C/FFPLOE	Various : Various	0.000	-		0.050	Dec 2013	-		-		-	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) 526 / Marine Orien Log Eq Ad					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Tug and Barge Development	C/ FFPLOE	ARO - Battelle : Columbus, OH	0.000	0.150	Dec 2012	0.313	Apr 2014	-		-		-	Continuing	Continuing	Continuing
Terminal Operations & Ship to Shore Development	C/ FFPLOE	Various : Various	0.000	0.040	Dec 2012	0.075	Dec 2013	-		-		-	Continuing	Continuing	Continuing
Port/Harbor Utility Development	C/ FFPLOE	Various : Various	0.000	0.150	Dec 2012	0.050	Dec 2013	-		-		-	Continuing	Continuing	Continuing
Amphibious Craft Development	C/ FFPLOE	Various : Various	0.000	0.100	Dec 2012	-		-		-		-	Continuing	Continuing	Continuing
Digital Integration Development	C/ FFPLOE	SPAWAR : Charleston, SC	0.000	0.150	Dec 2012	0.050	Dec 2013	0.250	Jan 2014	-		0.250	Continuing	Continuing	Continuing
At Sea Transfer Development	C/ FFPLOE	Various : Various	0.000	0.100	Mar 2013	-		0.500	Apr 2014	-		0.500	-	0.600	-
Energy Compliance	C/ FFPLOE	Various : Various	0.000	0.150	Dec 2012	0.300	Mar 2014	0.348	Mar 2014	-		0.348	Continuing	Continuing	Continuing
Environmental Compliance	C/ FFPLOE	Various : Various	0.348	-		-		0.736	Apr 2014	-		0.736	-	1.084	-
Subtotal			2.840	2.370		2.318		2.541		-		2.541	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			6.041	2.526		2.368		2.603		-		2.603	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>			Project (Number/Name) 526 / <i>Marine Orien Log Eq Ad</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Landing Craft Mechanized (LCM 8) Development																												
Maneuver Support Vessels (MSV) Cap Prod Doc (CPD) and competitive prototyping																												
Force Protection; Lethal and Non-Lethal Escalation of Force (EoF) Development																												
C4ISR Improvements																												
Army Watercraft Program Support																												
Watercraft Market Surveys and Business Analysis																												
Riverine Craft Development																												
Terminal Operations (Ship to Shore) Development																												
Digital Integration Development																												
At Sea Transfer Development																												
Energy Efficiency																												
Enviromental Compliance																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>	Project (Number/Name) 526 / <i>Marine Orien Log Eq Ad</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Landing Craft Mechanized (LCM 8) Development	1	2010	4	2015
Maneuver Support Vessels (MSV) Cap Prod Doc (CPD) and competitive prototyping	1	2010	4	2019
Force Protection; Lethal and Non-Lethal Escalation of Force (EoF) Development	1	2010	4	2017
C4ISR Improvements	1	2010	4	2016
Army Watercraft Program Support	1	2013	4	2019
Watercraft Market Surveys and Business Analysis	1	2010	4	2015
Riverine Craft Development	1	2013	4	2015
Terminal Operations (Ship to Shore) Development	1	2013	4	2015
Digital Integration Development	1	2013	4	2017
At Sea Transfer Development	1	2013	4	2017
Energy Efficiency	1	2013	4	2019
Enviromental Compliance	1	2013	4	2019

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COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
G11: Adv Elec Energy Con Ad	-	3.512	2.499	4.013	-	4.013	9.559	5.933	3.748	8.218	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note Not Applicable for this item.												
A. Mission Description and Budget Item Justification The Tactical Electric Power (TEP) program was established by the Department of Defense to develop modernized, standard families of mobile electric power sources and power distribution systems for all Services throughout the Department of Defense. Project Manager Mobile Electric Power (PM MEP) derives concept and technology developments that will improve the performance, mobility, readiness and survivability of the next generation of tactical power sources in support of all Services. It supports initiatives that are essential to the development and fielding of modernized TEP sources from Watts to Megawatts level that comply with environmental statues and provide noise and signature-suppressed, energy-efficient, lightweight, deployable and reliable equipment. FY14 and FY15 funding will support the test and evaluation of technologies for Small Tactical Electric Power (STEP), Mobile Electric Hybrid Power Sources (MEHPS), and Intelligent Power Management and Distribution Systems (IPMDS). In addition, FY15 funding will support a holistic approach to the evaluation of Operational Energy (OE)-related impacts, systems, and improvements; with the vision of reducing Army energy dependency and demand, increasing systems and facilities' energy efficiency, seeking alternative energy sources and creating a culture of energy responsibility while sustaining or enhancing operational capabilities. Out years will support investigation of general advancements in engine, power equipment and power distribution equipment that are applicable to current equipment and emerging requirements. Programs include costs for developing concept hardware and executing system evaluations at the Network Integration Evaluation (NIE) events at Ft. Bliss.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Contract Activity Articles: Description: Continue development of technology supporting the STEP program, IPMDS, and MEHPS. FY 2013 Accomplishments: Procure various technologies related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Specific efforts will include STEP components, hybrid/alternative energy power sources, and IPMDS. FY 2014 Plans:									2.000	1.500	0.800	
									-	-	-	

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
Procure various technologies related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Specific efforts will include STEP components, MEHPS components, and IPMDS.				
FY 2015 Plans: Procure various technologies related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Specific efforts will include STEP components, MEHPS components and IPMDS. Develop tools, systems and capability to provide holistic analysis of Operational Energy impacts, systems and improvements.				
Title: Government System Test and Evaluation		0.291	0.350	0.300
Articles:		-	-	-
Description: Continue development of technology supporting the STEP program, IPMDS, and MEHPS. Evaluate systems at Network Integration Evaluation (NIE).				
FY 2013 Accomplishments: Continue evaluation and testing of various technologies related to tactical electric power and power distribution and management across the DoD power spectrum. Efforts will be aimed at resolving technology gaps to meet Army User requirements. Efforts will support the Tactical Electric Power Capabilities Production Document (TEP CPD). Specific efforts will include performance testing of small generator sets, hybrid/alternative energy power sources, and intelligent power distribution/management systems. Program also supports Rapid Equipping Force deployments of alternative energy systems in support of Village Stability Operation. Program supports new equipment and concept demonstrations at NIE 14.1.				
FY 2014 Plans: Continue evaluation and testing of various technologies related to tactical electric power and power distribution and management across the DoD power spectrum. Efforts will be aimed at resolving technology gaps to meet Army User requirements. Efforts will support the TEP CPD. Specific efforts will be limited to small generator system testing due to limited funding. Program supports new equipment and concept demonstrations at NIE 14.2.				
FY 2015 Plans: Continue evaluation and testing of various technologies related to tactical electric power and power distribution and management across the DoD power spectrum. Efforts will be aimed at resolving technology gaps to meet Army User requirements. Efforts will support the TEP CPD. Specific efforts will include performance testing of small generator sets, hybrid/alternative energy power sources, and intelligent power distribution/management systems. Program also supports Rapid Equipping Force deployments of MEHPS concepts in support of Village Stability Operation. Program supports new equipment and concept demonstrations at NIE 15.x.				
Title: Other Contracts and Gov't agencies		0.994	0.400	1.693

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>		Project (Number/Name) G11 / <i>Adv Elec Energy Con Ad</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
<p align="right">Articles:</p> <p>Description: Continue development of technology supporting the STEP program, IPMDS, and MEHPS.</p> <p>FY 2013 Accomplishments: Evaluation and testing of various technologies related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Specific efforts will include development of STEP, and evaluation of MEHPS and intelligent power distribution/management systems as well as support of NIE 14.1.</p> <p>FY 2014 Plans: Evaluation and testing of various technologies related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Specific efforts will be limited to the development of STEP given limited funding and support of NIE 14.2</p> <p>FY 2015 Plans: Evaluation and testing of various technologies related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Specific efforts will include development of STEP, and evaluation of MEHPS and intelligent power systems, as well as support of NIE 15.x. Develop tools, systems and capability to provide holistic analysis of Operational Energy impacts, systems and improvements.</p>			-	-	-
<p>Title: Government Program Management</p> <p align="right">Articles:</p> <p>Description: Continue development of technology supporting the STEP program, IPMDS and MEHPS.</p> <p>FY 2013 Accomplishments: Oversight and management of various technology projects related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Efforts will be aimed at resolving technology gaps to meet Army User requirements. Efforts will support the STEP program and the TEP CPD. Specific efforts will include development of large sets, MEHPS and intelligent power systems.</p> <p>FY 2014 Plans: Oversight and management of various technology projects related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Efforts will be aimed at resolving technology gaps to meet Army User requirements. Efforts will support the STEP program and the TEP CPD. Specific efforts will be limited to small power sources given limited funding.</p> <p>FY 2015 Plans: Oversight and management of various technology projects related to Tactical Electric Power and power distribution/management across the DoD power spectrum. Efforts will be aimed at resolving technology gaps to meet Army User requirements. Efforts</p>			0.227 -	0.249 -	1.220 -

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>				Project (Number/Name) G11 / <i>Adv Elec Energy Con Ad</i>				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
will support the STEP program and the TEP CPD. Specific efforts will include development of small sets, MEHPS and intelligent power systems. Oversight, analysis and management of Operational Energy-related impacts, systems and improvements to reduce Army's energy dependence and improve operational capabilities.												
Accomplishments/Planned Programs Subtotals										3.512	2.499	4.013
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• 654804.194: <i>Logistics and Engineer Equipment - Eng Dev 194</i>	11.195	5.025	5.875	-	5.875	9.785	4.927	4.158	6.552	Continuing	Continuing	
• MA9800: <i>OPA 3, Generators and Associated Eq.</i>	60.223	40.129	115.190	-	115.190	216.293	237.171	341.209	354.470	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
Complete advanced development pre-milestone B technology assessments and analysis, and transition of tactical electric power and power distribution products to Engineering and Manufacturing Development (EMD) phase (Milestone B) and subsequent transition to production (Milestone C).												
E. Performance Metrics												
N/A												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev					Project (Number/Name) G11 / Adv Elec Energy Con Ad				
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Small Tactical Electric Power (STEP) Components	Various	PM-MEP : Fort Belvoir, VA	0.216	0.100	Nov 2012	0.200	Feb 2014	0.100	Nov 2014	-		0.100	Continuing	Continuing	Continuing
Mobile Electric Hybrid Power Sources (MEHPS) Components	Various	PM MEP : Ft. Belvoir, VA	0.146	0.067	Nov 2012	0.049	Feb 2014	0.070	Nov 2014	-		0.070	Continuing	Continuing	Continuing
Intelligent Power Management and Distribution Systems	Various	PM MEP : Ft. Belvoir, VA	0.125	0.060	Nov 2012	-		0.050	Nov 2014	-		0.050	Continuing	Continuing	Continuing
Operational Energy	MIPR	PM-MEP : Fort Belvoir, VA	0.000	-		-		1.000		-		1.000	Continuing	Continuing	Continuing
Subtotal			0.487	0.227		0.249		1.220		-		1.220	-	-	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Small Tactical Electric Power (STEP) Components	Various	CERDEC : Fort Belvoir, VA	0.590	1.091	Mar 2013	1.000	Apr 2014	0.100	Mar 2015	-		0.100	Continuing	Continuing	Continuing
Mobile Electric Hybrid Power Sources (MEHPS) Components	Various	Multiple Vendors : TBD	0.815	0.500	Mar 2013	0.250	Apr 2014	0.100	Mar 2015	-		0.100	Continuing	Continuing	Continuing
Intelligent Power Management and Distribution Systems	Various	CERDEC : Fort Belvoir, VA	0.250	0.409	Mar 2013	0.250	Apr 2014	0.100	Mar 2015	-		0.100	Continuing	Continuing	Continuing
Operational Energy	TBD	TBD (FY15) : TBD (FY15)	0.000	-		-		0.500		-		0.500	-	0.500	-
Subtotal			1.655	2.000		1.500		0.800		-		0.800	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>						Project (Number/Name) G11 / <i>Adv Elec Energy Con Ad</i>			
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Small Tactical Electric Power (STEP) Components	MIPR	CERDEC : Fort Belvoir, VA	0.406	0.500	Nov 2012	0.400	Feb 2014	0.200	Nov 2014	-		0.200	Continuing	Continuing	Continuing
Mobile Electric Hybrid Power Sources (MEHPS) Components	MIPR	CERDEC : Fort Belvoir, VA	0.665	0.300	Nov 2012	-		0.164	Nov 2014	-		0.164	Continuing	Continuing	Continuing
Intelligent Power Management and Distribution Systems	MIPR	CERDEC : Fort Belvoir, VA	0.674	0.194	Nov 2012	-		0.329	Nov 2014	-		0.329	Continuing	Continuing	Continuing
Operational Energy	MIPR	Dept of Energy Sandia National Labs : Washington DC	0.000	-		-		1.000		-		1.000	-	1.000	-
Subtotal			1.745	0.994		0.400		1.693		-		1.693	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Small Tactical Electric Power (STEP) Components	MIPR	CERDEC : Fort Belvoir, VA	0.180	0.200	Nov 2012	0.250	Feb 2014	0.100	Nov 2014	-		0.100	Continuing	Continuing	Continuing
Mobile Electric Hybrid Power Sources (MEHPS) Components	MIPR	CERDEC : Fort Belvoir, VA	0.165	0.050	Nov 2012	0.050	Mar 2014	0.100	Nov 2014	-		0.100	Continuing	Continuing	Continuing
Intelligent Power Management and Distribution Systems	MIPR	CERDEC : Fort Belvoir, VA	0.306	0.041	Nov 2012	0.050	Mar 2014	0.100	Nov 2014	-		0.100	Continuing	Continuing	Continuing
Subtotal			0.651	0.291		0.350		0.300		-		0.300	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army											Date: March 2014					
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev					Project (Number/Name) G11 / Adv Elec Energy Con Ad						
				Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals				4.538	3.512		2.499		4.013		-		4.013	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army

Date: March 2014

Appropriation/Budget Activity

2040 / 4

R-1 Program Element (Number/Name)

PE 0603804A / Logistics and Engineer
Equipment - Adv Dev

Project (Number/Name)

G11 / Adv Elec Energy Con Ad

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
SMALL TACTICAL ELECTRIC POWER (STEP) PROGRAM																												
Assess Technologies to Meet Gaps-STEP																												
Test Technologies to Meet Gaps-STEP																												
Complete Test and Evaluation-STEP																												
Transfer to Engineering and Manufacturing Development-STEP																												
MOBILE ELECTRIC HYBRID POWER SOURCES (MEHPS)																												
Assess Technologies to Meet Gaps--MEHPS																												
Test Technologies to Meet Gaps--MEHPS																												
Coordinate Requirements with USMC; Analyze Field Data																												
Develop Ruggedized Prototypes for Field Evaluations																												
Complete Test and Evaluation--MEHPS																												
Transfer to Engineering and Manufacturing Development--MEHPS																												
INTELLIGEN POWER MANAGEMENT AND DISTRIBUTION SYSTEMS (IPMDS)																												
Assess Technologies to Meet Gaps-IPMDS																												
Test Technologies to Meet Gaps-IPMDS																												
Test Ruggedized IPMDS with AMMPS Microgrid																												
Transfer to Engineering and Manufacturing Development-IPMDS																												
ASSESSMENT OF TECHNOLOGIES																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army																								Date: March 2014													
Appropriation/Budget Activity 2040 / 4										R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev										Project (Number/Name) G11 / Adv Elec Energy Con Ad																	
										FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
										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
Assess Technologies to Meet Gaps and Improve Efficiencies																																					
OPERATIONAL ENERGY (OE)																																					
Evaluation of OE-Related Impacts, Systems and Improvements																																					

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>	Project (Number/Name) G11 / <i>Adv Elec Energy Con Ad</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SMALL TACTICAL ELECTRIC POWER (STEP) PROGRAM	1	2008	4	2015
Assess Technologies to Meet Gaps-STEP	1	2008	1	2015
Test Technologies to Meet Gaps-STEP	1	2008	2	2015
Complete Test and Evaluation-STEP	2	2015	2	2015
Transfer to Engineering and Manufacturing Development-STEP	2	2015	2	2015
MOBILE ELECTRIC HYBRID POWER SOURCES (MEHPS)	1	2010	4	2017
Assess Technologies to Meet Gaps--MEHPS	1	2010	4	2016
Test Technologies to Meet Gaps--MEHPS	1	2010	4	2016
Coordinate Requirements with USMC; Analyze Field Data	1	2013	4	2013
Develop Ruggedized Prototypes for Field Evaluations	1	2014	4	2015
Complete Test and Evaluation--MEHPS	1	2016	4	2016
Transfer to Engineering and Manufacturing Development--MEHPS	1	2017	1	2017
INTELLIGEN POWER MANAGEMENT AND DISTRIBUTION SYSTEMS (IPMDS)	1	2010	4	2015
Assess Technologies to Meet Gaps-IPMDS	1	2010	4	2015
Test Technologies to Meet Gaps-IPMDS	1	2010	4	2015
Test Ruggedized IPMDS with AMMPS Microgrid	1	2013	4	2015
Transfer to Engineering and Manufacturing Development-IPMDS	4	2015	4	2015
ASSESSMENT OF TECHNOLOGIES	1	2017	4	2019
Assess Technologies to Meet Gaps and Improve Efficiencies	1	2017	4	2019
OPERATIONAL ENERGY (OE)	1	2015	4	2019
Evaluation of OE-Related Impacts, Systems and Improvements	1	2015	4	2019

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) G14 / Materials Handling Equipment - Ad			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
G14: Materials Handling Equipment - Ad	-	0.137	0.648	-	-	-	-	-	-	-	-	0.785
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This project supports component development and Material Handling Equipment (MHE) prototyping and stays abreast of emerging and available technologies to be integrated into military MHE to address identified capability gaps and warfighter objectives. This project enables the development of selected technologies and transition to system integration and development or production of MHE products. MHE includes Rough Terrain Forklifts, Rough Terrain Container Handlers (RTCH) and Cranes, as well as ancillary MHE equipment, to support distribution of critical supplies in the theater of operations.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Field Maintenance and Training Aids for Material Handling Equipment (MHE) Articles: Description: Field Maintenance and Training Aids for Material Handling Equipment (MHE) FY 2013 Accomplishments: Evaluate the efficacy of proposed devices to improve diagnostic tasks and to prevent spillage of hazardous materials. FY 2014 Plans: Develop a solution to eliminate the physical insertion of system faults for maintenance training.									0.137	0.400	-	
									-	-	-	
Title: Baseline Fuel Efficiency of Material Handling Equipment (MHE) Articles: Description: Develop standard duty cycles for fielded system, investigate training/technology for improving efficiency and validate performance of proposed changes. FY 2014 Plans: Instrument and Test MHE equipment to baseline fuel consumption during standard operations.									-	0.248	-	
									-	-	-	
Accomplishments/Planned Programs Subtotals									0.137	0.648	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014	
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>				Project (Number/Name) G14 / <i>Materials Handling Equipment - Ad</i>			
C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u> <u>Base</u>	<u>FY 2015</u> <u>OCO</u>	<u>FY 2015</u> <u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• RDT&E: <i>0604804A, Logistics and Engineer Equipment, Engineering Development (H14)</i>	1.265	0.298	0.283	-	0.283	0.972	0.951	0.607	0.627	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
Procure prototype component items for engineering tests and demonstrations with subject matter experts. Conduct trades between cost and improved maintainability and environmental risk reduction. Process engineering change proposals, update technical manuals and training materials, and prepare supporting acquisition documents and data to procure new training aids.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) G14 / Materials Handling Equipment - Ad					
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering/ Program Management	MIPR	TARDEC : Warren, MI	0.000	0.022	Dec 2012	0.185	Dec 2013	-		-		-	-	0.207	-
Subtotal			0.000	0.022		0.185		-		-		-	-	0.207	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Field Maintenance Aids for MHE	SS/FFP	Kalmar RT Center : Cibolo, TX	0.000	0.087	Mar 2013	0.340	Feb 2014	-		-		-	-	0.427	-
Subtotal			0.000	0.087		0.340		-		-		-	-	0.427	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Field Maintenance Aids for MHE	SS/FFP	Kalmar RT Center : Cibolo, TX	0.000	0.028	Mar 2013	-		-		-		-	Continuing	Continuing	-
Baseline Fuel Efficiency of MHE Equipment	TBD	TBD : TBD	0.000	-		0.123	Jan 2014	-		-		-	-	0.123	-
Subtotal			0.000	0.028		0.123		-		-		-	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.137		0.648		-		-		-	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army										Date: March 2014									
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev					Project (Number/Name) G14 / Materials Handling Equipment - Ad									

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Evaluate proposed field maintenance and training aids																												
Develop solution for field maintenance and training aids																												
Baseline fuel efficiency of equipment																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>	Project (Number/Name) G14 / <i>Materials Handling Equipment - Ad</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Evaluate proposed field maintenance and training aids	1	2013	4	2013
Develop solution for field maintenance and training aids	2	2014	2	2014
Baseline fuel efficiency of equipment	1	2014	4	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) K39 / Field Sustainment Support Ad			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
K39: Field Sustainment Support Ad	-	2.649	2.160	0.534	-	0.534	0.558	1.155	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This project supports development of critical soldier support and sustainment systems for cargo aerial delivery capabilities. These systems will fill identified theater distribution and services capability gaps, improve unit sustainability, and increase combat effectiveness. This project supports Advanced Component Development and Prototyping of Critical Distribution Capabilities which provide improved safety and accuracy while increasing survivability of aircraft, personnel, and equipment. This project develops critical enablers that support the Quartermaster (QM) Force Transformation Strategy and The Army's Modular Capabilities by maintaining readiness through fielding and integrating new equipment. This project also ensures Army Expeditionary Forces are capable of rapid deployment through aerial delivery initiatives and reduces sustainment requirements, related Combat Support/Combat Service Support (CS/CSS) demands in lift, combat zone footprint, and costs for logistical support.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Advanced Low Velocity Airdrop System Light and Heavy (ALVADS-L or ALVADS-H) Articles: Description: ALVADS - Light and Heavy are capable of airdrop operations at an altitude of 500-ft Above Ground Level (AGL) with increased aircraft survivability, and improved accuracy. Light Gross rigged weight of 2,520-22,000 pounds (lbs) and Heavy Gross rigged weight of 22,001-42,000 lbs. FY 2013 Accomplishments: Complete ALVADS-L Design Validation (DV), initiate Developmental Testing (DT) and complete Milestone A for ALVADS-H. FY 2014 Plans: Complete ALVADS Design Validation and system downselect.									2.649	2.160	-	
									-	-	-	
Title: Extracted High and Low High Speed Container Delivery System (EHLSCDS) Description: Provides a high speed (250 knot), low altitude (250 ft AGL) capability for up to eight Container Delivery Systems (CDS) containers to enhance aircraft and aircrew safety while improving accuracy and reducing dispersion for receiving ground units. FY 2015 Plans:									-	-	0.534	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army								Date: March 2014				
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>				Project (Number/Name) K39 / <i>Field Sustainment Support Ad</i>				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
Conduct EHLSCDS Design Validation (DV) testing.												
Accomplishments/Planned Programs Subtotals										2.649	2.160	0.534
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• OPA MA7806: <i>Precision Airdrop MA7806</i>	6.577	9.500	2.198	-	2.198	2.208	1.947	2.210	2.217	Continuing	Continuing	
• RDT&E 654804.L39: <i>Field Sustainment Support ED 654804.L39</i>	-	1.788	1.688	-	1.688	2.550	2.237	1.941	2.325	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
Accelerate Joint Precision Aerial Delivery System (JPADS) product improvements to transition to Production.												
E. Performance Metrics												
N/A												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev						Project (Number/Name) K39 / Field Sustainment Support Ad			
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management Support	Various	PM Force Sustainment Sys (FSS), Natick : Natick, MA	4.634	0.470	Apr 2013	0.700	Apr 2014	0.070	Dec 2014	-		0.070	Continuing	Continuing	Continuing
SBIR+STTR	TBD	Various : Various	0.090	-		-		-		-		-	-	0.090	-
Subtotal			4.724	0.470		0.700		0.070		-		0.070	-	-	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Soldier Support Equipment	Various	PM Force Sustainment Sys (FSS), Natick : Natick, MA	15.934	-		-		-		-		-	Continuing	Continuing	Continuing
High Speed Container Delivery System (HSCDS)	Various	Various : Various	1.097	-		-		0.264	Mar 2015	-		0.264	Continuing	Continuing	Continuing
LCADS P3I Effort	Various	Various : Various	1.300	-		-		-		-		-	Continuing	Continuing	Continuing
ALVADS Development	Various	Various : Various	8.450	1.150	Jul 2014	-		-		-		-	Continuing	Continuing	Continuing
JPADS 2K and 10K product improvements	Various	Various : Various	5.900	-		-		-		-		-	Continuing	Continuing	Continuing
RRDAS Development	Various	Various : Various	2.200	-		-		-		-		-	Continuing	Continuing	Continuing
Next Generation Human Remains Transfer Case Development	Various	Various : Various	2.220	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			37.101	1.150		-		0.264		-		0.264	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev						Project (Number/Name) K39 / Field Sustainment Support Ad			
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ALVADS Development	C/FFP	Various : Various	0.000	-		0.060	May 2014	-		-		-	-	0.060	-
Subtotal			0.000	-		0.060		-		-		-	-	0.060	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
ALVADS-Light Testing Design Validation(DV). ALVADS-Heavy S&T Test	Various	YPG, AZ : YPG, AZ	8.002	1.029	Apr 2013	1.400	May 2014	-		-		-	Continuing	Continuing	Continuing
RRDAS Design Validation (DV) Testing	Various	YPG, AZ : YPG, AZ	0.150	-		-		-		-		-	Continuing	Continuing	Continuing
High Speed Container Delivery System (HSCDS)	C/FFP	YPG, AZ : Arizona	0.000	-		-		0.200	Mar 2015	-		0.200	-	0.200	-
ACPRS	Various	Ft Bragg, NC : NC	0.220	-		-		-		-		-	-	0.220	-
LCADS P3I	Various	DTC, YPG, OTC, FT Bragg : Various	4.307	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			12.679	1.029		1.400		0.200		-		0.200	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			54.504	2.649		2.160		0.534		-		0.534	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>			Project (Number/Name) K39 / <i>Field Sustainment Support Ad</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Prepare for MS B and transition of ALVADS																												
Conduct DV on ALVADS																												
Conduct DV for ALVADS (L)																												
Conduct DV for JPADS Block I upgrade to demonstrate emerging technologies																												
Prepare for MS B and transition EHLSCDS																												
Conduct DV on EHLSCDS to evaluate and demonstrate integrated technologies																												
Conduct Milestone A on Autoload Hookup/ Rotary A/C																												
Fabricate DV systems on Autoload Hookup/ Rotary A/C																												
Complete DV on Autoload Hookup/Rotary A/C																												
Prepare for MS B and transition of Autoload Hookup/Rotary A/C																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>	Project (Number/Name) K39 / <i>Field Sustainment Support Ad</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Prepare for MS B and transition of ALVADS	2	2014	2	2014
Conduct DV on ALVADS	4	2014	3	2015
Conduct DV for ALVADS (L)	1	2013	2	2013
Conduct DV for JPADS Block I upgrade to demonstrate emerging technologies	1	2016	4	2016
Prepare for MS B and transition EHLSCDS	1	2016	2	2016
Conduct DV on EHLSCDS to evaluate and demonstrate integrated technologies	3	2015	4	2016
Conduct Milestone A on Autoload Hookup/Rotary A/C	4	2018	4	2018
Fabricate DV systems on Autoload Hookup/Rotary A/C	1	2019	1	2019
Complete DV on Autoload Hookup/Rotary A/C	1	2019	4	2019
Prepare for MS B and transition of Autoload Hookup/Rotary A/C	4	2019	4	2019

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) K41 / Water And Petroleum Distribution - Ad			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
K41: Water And Petroleum Distribution - Ad	-	2.413	2.262	3.545	-	3.545	3.935	3.757	4.465	4.847	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This project develops and demonstrates the potential of prototype equipment and technologies to satisfy petroleum storage, distribution, and quality surveillance system requirements. The Technology Development programs support the development and enhancement of rapidly deployable Petroleum and Water equipment. The mission includes developing onboard fuel quality analysis systems; achieving greater capabilities in the removal of Nuclear, Biological, Chemical (NBC) and other contaminants from water sources; reducing the logistics footprint; developing water reutilization systems to reduce the requirement for transport of water into the theater; and material systems to decrease the logistics footprint and employment time for the transfer of liquid logistics in joint operations area. This vital equipment enables the Army to achieve its mission by providing the Army with the means to be highly mobile and self-sustaining in very hostile joint operations areas. Future Force operations demand that combat systems be rapidly deployable to the theater, rapidly emplaced upon arrival, and rapidly relocated to support a fast moving non-linear battlefield.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Water Systems Capability Improvements Articles: Description: Funding is provided for the following effort FY 2013 Accomplishments: Evaluate water monitoring equipment for insertion into Tactical Water Purification Systems (TWPS) and Lightweight Water Purifier (LWP).									0.300	-	-	
									-	-	-	
Title: 3K Tactical Water Purification System (3K TWPS) Articles: Description: Funding is provided for the following effort FY 2013 Accomplishments: Fabricate and integrate breadboard components for the 3K Tactical Water Purification System (TWPS). FY 2014 Plans: Test 3K TWPS breadboard components and use results to start preparation of detailed system design.									1.719	0.500	-	
									-	-	-	
Title: Fuel System Supply Points (FSSP)									0.394	0.400	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014		
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev	Project (Number/Name) K41 / Water And Petroleum Distribution - Ad		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
<div>Articles:</div> <div>Description: Funding is provided for the following effort</div> <div>FY 2013 Accomplishments: Market investigation for family of meters for fuel dispensing systems and commercial on-board truck meters.</div> <div>FY 2014 Plans: Address the capability gap for automated gauging to capture fuel quantities in collapsible tanks in the FSSP. This includes the development of a data device that will transmit and store the data internally for the system and externally to other command networks and systems. Assist the Army and Capability Developer in the Limited Objective Experiment mission conducted in FY14.</div>		-	-	-
<div>Title: Early Entry Fluid Distribution System (E2FDS)</div> <div>Articles:</div> <div>Description: Funding is provided for the following effort</div> <div>FY 2014 Plans: Complete the development of six performance specifications for the E2FDS; System Level, Command and Control, Hose Reel Assembly, Hose Assembly, Pumping Assembly and Pump Station Accessories. Develop Milestone B documentation and initiate Engineering and Manufacturing Development (EMD) contract action in parallel with Milestone B documentation.</div> <div>FY 2015 Plans: Achieve Milestone B approval. Release Request for Proposal (RFP) for (EMD) contract. Source Selection Evaluation Board (SSEB) for EMD contract. EMD Contract award.</div>		- -	1.362 -	2.795 -
<div>Title: Modular Fuel System (MFS)</div> <div>Description: Funding is provided for the following effort</div> <div>FY 2015 Plans: Conduct Operational Testing on the MFS. Test will include the MFS Pump Rack Module (PRM) and the MFS Tank Rack Module (TRM). Funding provides support for Soldiers to conduct Operational Tests of the MFS system.</div>		-	-	0.750
Accomplishments/Planned Programs Subtotals		2.413	2.262	3.545

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014	
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) K41 / Water And Petroleum Distribution - Ad			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• PM PAWS Project L41 654804: Logistics and Engineer Equipment - Engineering Development	3.418	2.648	3.195	-	3.195	4.013	4.733	4.632	4.622	Continuing	Continuing
• Distribution Sys Petroleum & Water: Distribution Systems Petroleum & Water	36.218	42.288	40.692	-	40.692	38.518	38.875	28.001	26.631	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
Develop engineering prototypes for the 3K TWPS and MTRRS and select Non-Development Item based on market surveys and proposals from industry for the E2FDS and other water and fuel systems. Based on market research, will award either competitive or sole source contracts.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) K41 / Water And Petroleum Distribution - Ad					
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Water System Capability Improvements	Various	TBD : TBD	0.745	0.100	Feb 2013	-		-		-		-	Continuing	Continuing	Continuing
3K Tactical Water Purification System (3K TWPS)	Various	TARDEC : Warren, MI	0.161	0.519	Mar 2013	0.200	Mar 2014	-		-		-	Continuing	Continuing	Continuing
Water Quality Monitoring	Various	TARDEC : Warren, MI	0.270	-		-		-		-		-	Continuing	Continuing	Continuing
Fuel Gauging Improvements	MIPR	NFESC : Port Hueneme, CA	0.424	0.394	Mar 2013	0.237	Dec 2013	-		-		-	Continuing	Continuing	Continuing
Early Entry Fluid Distribution System (E2FDS)	C/FFP	TARDEC & PM, PAWS : Warren, MI	0.000	-		0.972	Jan 2014	2.000	May 2015	-		2.000	Continuing	Continuing	Continuing
3K Tactical Water Purification System (3K TWPS)	Various	NFESC : Port Hueneme, CA	0.689	0.300	Mar 2013	-		-		-		-	Continuing	Continuing	Continuing
Bulk Fuel Distribution	Various	TBD : TBD	1.404	-		-		-		-		-	Continuing	Continuing	Continuing
Expeditionary Water Packaging System (EWPS)	C/FFP	TARDEC : Warren, MI	1.177	-		-		-		-		-	Continuing	Continuing	Continuing
Modular Tactical Refueling System (MTRS)	RO	TARDEC : Warren, MI	0.100	-		-		-		-		-	Continuing	Continuing	-
Subtotal			4.970	1.313		1.409		2.000		-		2.000	-	-	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Water System Capability Improvements	Various	TARDEC : Warren, MI	0.853	0.200	Mar 2013	-		-		-		-	Continuing	Continuing	Continuing
Fuel Gauging Improvements	Various	TARDEC & PM, PAWS : Warren, MI	0.000	-		0.163	Jan 2014	-		-		-	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev						Project (Number/Name) K41 / Water And Petroleum Distribution - Ad			
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Early Entry Fluid Distribution System (E2FDS)	Various	TARDEC & PM, PAWS : Warren, MI	0.000	-		0.390	Jan 2014	0.795	Dec 2014	-		0.795	Continuing	Continuing	Continuing
3K Tactical Water Purification System (TWPS)	Various	TARDEC : Warren, MI	0.000	0.500	Mar 2013	0.100	Feb 2014	-		-		-	Continuing	Continuing	Continuing
Subtotal			0.853	0.700		0.653		0.795		-		0.795	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Water Systems Capability Improvements	Various	TARDEC : Warren, MI	1.181	-		-		-		-		-	Continuing	Continuing	Continuing
Water Quality Monitoring	Various	Aberdeen Proving Ground,MD : APG, MD	0.030	-		-		-		-		-	Continuing	Continuing	Continuing
Water Quality Monitoring	Various	TARDEC : Warren, MI	0.300	-		-		-		-		-	Continuing	Continuing	Continuing
Modular Fuel System (MFS)	Various	Yuma Proving Ground : Yuma, AZ	0.000	-		-		0.750	Mar 2015	-		0.750	Continuing	Continuing	Continuing
3K Tactical Water Purification System (3K TWPS)	RO	TARDEC : Warren, MI	0.422	0.400	Mar 2013	0.200	Apr 2014	-		-		-	Continuing	Continuing	Continuing
Fuel Pumping Assembly Improvements	Various	TARDEC : Warren, MI	0.700	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			2.633	0.400		0.200		0.750		-		0.750	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			8.456	2.413		2.262		3.545		-		3.545	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army							Date: March 2014			
Appropriation/Budget Activity 2040 / 4			R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev			Project (Number/Name) K41 / Water And Petroleum Distribution - Ad				
	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>			Project (Number/Name) K41 / <i>Water And Petroleum Distribution - Ad</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Water Systems Capability Improvements																												
Improvements for Family of Fuel System Supply Points (FSSPs)																												
3K Tactical Water Purification System (3K TWPS)																												
Man Portable Water Purifier																												
Waste Water/Water Recycle Systems																												
Modular Fuel System (MFS)																												
Early Entry Fluid Distribution System (E2FDS)																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>	Project (Number/Name) K41 / <i>Water And Petroleum Distribution - Ad</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Water Systems Capability Improvements	1	2013	4	2013
Improvements for Family of Fuel System Supply Points (FSSPs)	1	2013	4	2014
3K Tactical Water Purification System (3K TWPS)	4	2012	4	2014
Man Portable Water Purifier	1	2018	4	2019
Waste Water/Water Recycle Systems	1	2018	4	2019
Modular Fuel System (MFS)	1	2015	4	2015
Early Entry Fluid Distribution System (E2FDS)	4	2013	4	2019

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) VR8 / Combat Service Support Systems - Ad			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
VR8: Combat Service Support Systems - Ad	-	1.791	1.612	2.691	-	2.691	4.582	4.386	4.390	2.585	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This project supports development of critical soldier support and sustainment systems including shelter systems (rigid and soft wall), base camp subsystems, field service systems, mortuary affairs equipment, heaters, camouflage systems to counter emerging enemy threat technologies, and other combat service support equipment. These systems will fill identified theater distribution and services capability gaps, improve unit sustainability, improve resource and energy efficiency and increase combat effectiveness. This project supports Advanced Component Development and Prototyping of Critical tactical support systems that support mobile Joint Service command and control, medical, and maintenance platforms. This project develops critical enablers that support the Quartermaster (QM) Force Transformation Strategy and The Army's Modular Capabilities by maintaining readiness through fielding and integrating new equipment. This project also ensures Army Expeditionary Forces are capable of rapid deployment and reduces sustainment requirements, related Combat Support/Combat Service Support (CS/CSS) demands in lift, combat zone footprint, and costs for logistical support.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Zero-Footprint Base Camp									-	-	0.482	
Description: Zero-Footprint Base Camp reduces the operational energy and logistics footprint of the expeditionary base camp system, with the goal being a significant reduction in fuel, water, and power requirements to sustain operations in the field. Operating a base camp such as Force Provider requires a significant amount of logistics support and also produces an enormous amount of by products, both of which cost money, human effort (that means a risk in the form of soldiers on the road), and represents a potential vulnerability.												
FY 2015 Plans:												
Conduct evaluation and demonstration of novel technologies with focus on producing suitable technology demonstration prototypes and reducing technical risk. Prepare for transition of Zero-Footprint Base Camp technologies into EMD in support of the OSD Joint Expeditionary Basing Work Group initiative for Joint base camp systems.												
Title: Net-Zero Energy Efficiency Solutions									1.791	0.885	0.964	
Articles:									-	-	-	
Description: Net-Zero Energy Efficiency Solutions reduce the logistics footprint of the expeditionary base camp system, with the goal being a significant reduction in fuel, water, material and power requirements to sustain operations in the field. The effort												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev		Project (Number/Name) VR8 / Combat Service Support Systems - Ad	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
includes reducing site preparation, maintenance and spare parts requirements. Operating a base camp such as Force Provider requires a significant amount of logistics support and also produces an enormous amount of by products, both of which cost money, human effort (that means a risk in the form of soldiers on the road), and represents a potential vulnerability.					
FY 2013 Accomplishments: Continue evaluation of Net-Zero energy efficiency solutions for Force Provider. In early FY 13 transition Energy Efficiency (E2) shelter kit solutions into Engineering and Manufacturing Development (EMD) for Developmental Testing (DT).					
FY 2014 Plans: Conduct evaluation of integrated technologies that are transitioning from the RDECOM 6.3 programs in a realistic operating environment at the Ft Devens Base Camp Integration Laboratory (BCIL). Efforts are focused on proving out subsystem maturity and the potential of these technologies before transitioning into Engineering and Manufacturing Development (EMD) and putting them into operational use within the Army Force Provider base camps as a Pre-Planned Product Improvements (P3I). Focus will be on evaluating technologies that will improve upon the environmental and energy efficiency performance of the base camp. Specifically: 1) Integration and evaluation of micro-grid / smart power / renewable energy/ power storage solutions developed under separate DoD and industry programs that can be incorporated into Force Provider modules to complement existing Tactical Quiet Generators (TQGs) and the Advanced Medium-sized Mobile Power Source (AMMPS) for standard Army Force Provider modules; and 2) Integration and evaluation of energy efficient Expeditionary Rigid Wall Shelters with integrated Environmental Control Units / Heaters that will compliment improved shelter efficiencies and significantly reduce the fuel demand on base camp operations.					
FY 2015 Plans: Conduct evaluation of integrated technologies that are transitioning from the RDECOM 6.3 programs in a realistic operating environment at the Ft Devens Base Camp Integration Laboratory (BCIL). Efforts are focused on proving out subsystem maturity and the potential of these technologies before transitioning into Engineering and Manufacturing Development (EMD) and putting them into operational use within the Army Force Provider base camps as a Pre-Planned Product Improvements (P3I). Focus will be on evaluating technologies that will improve upon the environmental and energy efficiency performance of the base camp. Specifically the Integration and evaluation of energy efficient Expeditionary Rigid Wall Shelters with integrated Environmental Control Units / Heaters and energy saving appliances that will compliment improved shelter efficiencies and significantly reduce the fuel and resource demand on base camp operations.					
Title: Modular Ballistic Protection System (MBPS)			-	0.377	0.200
Articles:			-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>		Project (Number/Name) VR8 / <i>Combat Service Support Systems - Ad</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
Description: MBPS is a lightweight, rapidly deployable and reusable ballistic protection system that can be installed in commonly used military shelters in expeditionary and remote base camps and outposts where more robust forms of ballistic protection (i.e. sandbags, concrete barriers) are not readily available or logistically feasible. FY 2014 Plans: Conduct evaluation/demonstration of advanced ballistics protection technologies to support transition to EMD of MBPS Stand-alone. FY 2015 Plans: Prepare documentation to support Milestone B decision and initiate EMD development of MBPS Stand-alone.					
Title: Black Waste Elimination for Small Base Camps (150 personnel) Description: Provides the capability to reduce/eliminate the black water generated by small base camps. The objective capability will reduce our sustainment requirements for backhauling black water waste as well as our risk of contaminating the environment with biological contaminants. This capability will significantly reduce reliance on external support and is a key capability required to move toward zero footprint base camps. FY 2015 Plans: Transition black water waste elimination technologies from the laboratory and conduct evaluation and demonstration of these technologies to prove out component and subsystem maturity at the BCIL.			-	-	0.250
Title: Solid Waste Disposal for Small Base Camps Description: Provides an integrated waste management (reduction, treatment or disposal process) add-on capability that can safely process 1,000 lbs or more of mixed solid waste in a single day on site. Mixed solid waste produced on a single 150 person site must be properly managed through reduction, reuse, recycling, treatment, or disposal. Most of the waste is nonhazardous solid waste. Provides a substantial improvement over the current practice of burn pits that poses a health risk to Soldiers and/or the backhaul logistics burden. FY 2015 Plans: Complete the evaluation and demonstration of integrated waste management technologies. Prepare for Milestone B for the Small Base Waste Disposal System and transition technologies into EMD.			-	-	0.575
Title: Ultralightweight Camouflage Net System (ULCANS) <div style="text-align: right;">Articles:</div>			-	0.350	0.220
			-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) VR8 / Combat Service Support Systems - Ad				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
<p>Description: ULCANS is durable, robust, snag resistant state of the art camouflage system that provides increased survivability against multi-spectral visual, infrared and radar threats, thermal signature suppression and significant thermal/solar reduction capability. ULCANS utilizes a snag-free design and is capable of use in all types of weather and climatic conditions except in heavy snow and in winds greater than 46 MPH. ULCANS Desert Radar Scattering, Desert Radar Transparent, Woodland Radar Scattering, and Woodland Radar Transparent Variants are integrated systems that are very lightweight, easily deployable, versatile, user friendly and tailored to the equipment meeting the requirements of operations for combat systems, command and control equipment, logistic support sites, tactical facilities, and fixed facilities for mobile systems. RDT&E funding supports formal development of new ULCANS variants (snow, urban, aviation, 2 sided system) and necessary technology/signature enhancements for current ULCANS variants.</p> <p>FY 2014 Plans: Complete development and testing of ULCANS (Two-Sided) and initiate contract planning and Milestone B documentation to support EMD transition for ULCANS technology enhancements/new CDD variants.</p> <p>FY 2015 Plans: Conduct evaluation/demonstration of enhanced signature management technologies and initiate EMD transition. Prepare Milestone B documentation for ULCANS Arctic/Snow Variant.</p>												
Accomplishments/Planned Programs Subtotals										1.791	1.612	2.691
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost	
• RDT&E 654804.VR7: Combat Service Support Systems - RDTE 654804 VR7	5.029	1.193	2.947	-	2.947	4.024	3.892	3.895	2.585	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
Accelerate Base Camp efficiency and safety initiatives to incorporate in deployed camps and/or incorporate during reset of equipment.												
E. Performance Metrics												
N/A												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev				Project (Number/Name) VR8 / Combat Service Support Systems - Ad					
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Management Support	Various	PM Force Sustainment Systems : Natick, MA	0.203	0.199	Dec 2012	0.185	Jan 2014	0.314	Dec 2014	-		0.314	Continuing	Continuing	-
SBIR+STTR	TBD	various : Various	0.062	-		-		-		-		-	-	0.062	-
Subtotal			0.265	0.199		0.185		0.314		-		0.314	-	-	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Soldier Support Equipment	Various	Various : Various	0.780	0.920	Aug 2013	0.578	Apr 2014	1.281	Mar 2015	-		1.281	Continuing	Continuing	-
Subtotal			0.780	0.920		0.578		1.281		-		1.281	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Soldier Support Equipment	Various	Various : Various	0.932	0.672	Jun 2013	0.849	May 2014	1.096	May 2015	-		1.096	Continuing	Continuing	-
Subtotal			0.932	0.672		0.849		1.096		-		1.096	-	-	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			1.977	1.791		1.612		2.691		-		2.691	-	-	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army			Date: March 2014		
Appropriation/Budget Activity 2040 / 4		R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>			Project (Number/Name) VR8 / <i>Combat Service Support Systems - Ad</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	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
Conduct evaluation on Net-Zero energy efficiency solutions																												
Conduct System Integration & Evaluation of Zero-Footprint Base Capability																												
Transition Resource & Operational Energy Efficiency technologies into EMD																												
Evaluate integrated black waste elimination technologies at the BCIL																												
Prepare for MS B and transition black waste elimination technologies into EMD																												
Evaluate integrated ballistic protection technologies																												
Prepare for Milestone B and transition ballistic protection technologies to EMD																												
Conduct technology demonstration on small base solid waste disposal																												
Prepare for MS B and transition small base solid waste disposal technology into																												
Evaluate integrated Waste-to-Energy technologies																												
Prepare for Milestone B and transition Waste-to-Energy technologies into EMD																												
Prove out HTRC2 component and system maturity																												
Prepare for Milestone B and transition HTRC2 technologies into EMD																												
Demonstrate integrated black waste elimination technologies for large base camps																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army																							Date: March 2014														
Appropriation/Budget Activity 2040 / 4										R-1 Program Element (Number/Name) PE 0603804A / Logistics and Engineer Equipment - Adv Dev										Project (Number/Name) VR8 / Combat Service Support Systems - Ad																	
										FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
										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
Prepare for MS B and transition large camp black waste elimination tech to EMD																																					
Conduct technology demonstration on arctic/ snow ULCANS and prepare for MS B																																					
Conduct technology demonstration on urban ULCANS and prepare for MS B																																					

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603804A / <i>Logistics and Engineer Equipment - Adv Dev</i>	Project (Number/Name) VR8 / <i>Combat Service Support Systems - Ad</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Conduct evaluation on Net-Zero energy efficiency solutions	1	2012	4	2021
Conduct System Integration & Evaluation of Zero-Footprint Base Capability	1	2012	4	2018
Transition Resource & Operational Energy Efficiency technologies into EMD	4	2013	4	2021
Evaluate integrated black waste elimination technologies at the BCIL	1	2014	4	2016
Prepare for MS B and transition black waste elimination technologies into EMD	1	2016	4	2016
Evaluate integrated ballistic protection technologies	1	2014	2	2015
Prepare for Milestone B and transition ballistic protection technologies to EMD	3	2014	3	2015
Conduct technology demonstration on small base solid waste disposal	1	2014	2	2015
Prepare for MS B and transition small base solid waste disposal technology into	1	2015	4	2015
Evaluate integrated Waste-to-Energy technologies	1	2016	4	2017
Prepare for Milestone B and transition Waste-to-Energy technologies into EMD	3	2017	2	2018
Prove out HTRC2 component and system maturity	1	2016	4	2016
Prepare for Milestone B and transition HTRC2 technologies into EMD	4	2016	1	2017
Demonstrate integrated black waste elimination technologies for large base camps	1	2018	4	2020
Prepare for MS B and transition large camp black waste elimination tech to EMD	3	2019	4	2019
Conduct technology demonstration on arctic/snow ULCANS and prepare for MS B	1	2015	4	2015
Conduct technology demonstration on urban ULCANS and prepare for MS B	1	2017	4	2017