Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment - Adv Dev

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	42.939	59.662	80.490	0.000	80.490	14.147	11.580	11.963	12.139	Continuing	Continuing
526: MARINE ORIEN LOG EQ AD	2.983	3.017	2.990	0.000	2.990	2.941	2.995	3.046	3.095	Continuing	Continuing
G11: ADV ELEC ENERGY CON AD	3.256	2.622	2.618	0.000	2.618	1.324	0.456	0.643	0.644	Continuing	Continuing
G14: MATERIALS HANDLING EQUIPMENT - AD	0.112	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
K39: Field Sustainment Support AD	10.576	15.911	18.908	0.000	18.908	5.414	5.271	5.365	5.447	Continuing	Continuing
K41: WATER AND PETROLEUM DISTRIBUTION - AD	0.427	3.208	2.586	0.000	2.586	4.468	2.858	2.909	2.953	Continuing	Continuing
K42: MATERIEL SUSTAINMENT SUPPORT AD	5.044	2.936	0.463	0.000	0.463	0.000	0.000	0.000	0.000	Continuing	Continuing
L04: JOINT LIGHT TACTICAL VEHICLE (JLTV) - AD	20.541	31.968	52.925	0.000	52.925	0.000	0.000	0.000	0.000	Continuing	Continuing

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 and batteries, 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. Increase from FY 2009 to FY 2010 reflects additional funds to support the Field Sustainment Support for Advanced Low Velocity Air drop System (ALVADS).

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment - Adv Dev

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	FY 2011 Base	<u>FY 2011 OCO</u>	FY 2011 Total
Previous President's Budget	43.995	56.373	80.915	0.000	80.915
Current President's Budget	42.939	59.662	80.490	0.000	80.490
Total Adjustments	-1.056	3.289	-0.425	0.000	-0.425
 Congressional General Reductions 		0.000			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		3.600			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	0.000	0.000			
 SBIR/STTR Transfer 	-1.056	0.000			
 Adjustments to Budget Years 	0.000	0.000	-0.425	0.000	-0.425
 Other Adjustments 1 	0.000	-0.311	0.000	0.000	0.000

Change Summary Explanation

Change Summary Explanation: FY11 funds of \$425 thousand realigned to higher priority requirements.

Exhibit R-2A, RDT&E Project Justif	ication: PB 2	011 Army							DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTI 2040: Research, Development, Test & I BA 4: Advanced Component Developm		NOMENCLA A: Logistics a		Equipment -	PROJECT 526: MARINE ORIEN LOG EQ AD						
COST (\$ in Millions) FY 2009 FY 2010 Base Actual Estimate Estimate				FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
526: MARINE ORIEN LOG EQ AD	2.983	3.017	2.990	0.000	2.990	2.941	2.995	3.046	3.095	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

FY11 funding supports project advanced component development and prototype equipment for the Army's Logistics-Over-The-Shore (LOTS) missions. The primary mission of Army Watercraft Systems is inherently tied to the required capability to move tonnage/cargo from major sea going vessels to the shore in support of LOTS/Joint Logistic over the Shore (JLOTS) and various watercraft missions. The Army utilizes a combination of Modular Causeway Systems (MCS), Barge Derricks (BD), Barges, Landing Crafts (Landing Crafts Utility (LCUs), Logistic Support Vessels (LSVs), Landing Crafts Mechanized (LCM-8s) and Tug Boats to offload deep draft vessels. The time phased mix of numbers and types of vessels outlined are essential in maintaining a given level of capability to support JLOTS operations. This capability is only as strong as the weakest link and takes the full combination of all assets to accomplish. FY11 Funding for the Joint Enable Theater Access-Sea Ports of Debarkation (JETA-SPOD) Advanced Concept Technology Demonstration (ACTD) will be used to support the Vessel-to-Shore Bridging (VSB) component of the program. This includes funding for VSB core developmental requirements and Operational Testing/Military Utility Assessment (MUA) and follow-on research and development funding to support the transition of VSB to an acquisition program. This funding will provide R&D of the full scale operational prototype in addition to a broader and more robust MUA designed to adequately test and assess the VSB for military utility under the lead of the USPACOM ACTD Operational Manager (OM). Performance risk will be mitigated by ensuring the technology receives optimum test and evaluation to meet the warfighting operational requirements to include an extended user evaluation. Funding will also allow the development of an additional 50-60 foot section that will result in expanded technical development, testing, and utility assessment for the multiple operational uses and employment methods (eg. Army/Service Watercraft, Joint High Speed Vessel (JHSV), dry/wet gap crossings, and aerial delivery). VSB will optimize the throughput capabilities of the JHSV, current Army/USMC watercraft, and bridging requirements across extended mudflats/tidal estuaries by providing a more rapid and increased flow of combat power and sustainment through multiple austere theater access points. VSB is transported on and rapidly employed by these vessels to provide the Joint and Combined force commanders a means to mitigate threat anti-access activities and increases flexibility to conduct operational maneuver from strategic distances. The ACTD complements the JHSV program by optimizing throughput and warfighting operational capabilities not currently available in support of Lines of Communication (LOC) in the theater of operations.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	2.321	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	ch, Development, Test & Evaluation, Army PE 0603804A: Logistics and Engineer Equipment - 526:				PROJECT 526: <i>MARINE ORIEN LOG EQ AD</i>				
B. Accomplishments/Planned Program (\$ in Millions)	'								
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total			
FY09: JETA-SPOD									
FY 2009 Accomplishments: FY 2009									
FY 2010 Plans: FY 2010									
FY 2011 Base Plans: FY 2011 Base									
FY 2011 OCO Plans: FY 2011 OCO									
Program #2		0.000	2.224	0.000	0.000	0.000			
FY10: JETA-SPOD FY 2009 Accomplishments: FY 2009									
FY 2010 Plans: FY 2010									
FY 2011 Base Plans: FY 2011 Base									
FY 2011 OCO Plans: FY 2011 OCO									

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010					
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Eq. Adv Dev	quipment -	PROJECT 526: MARINE ORIEN LOG EQ AD				
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #3		0.000	0.000	2.119	0.000	2.119	
FY11: JETA-SPOD							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #4		0.662	0.000	0.000	0.000	0.000	
FY09: Program Support.							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer I Adv Dev	Equipment -	PROJECT 526: MARIN	E ORIEN LO	G EQ AD	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #5		0.000	0.405	0.000	0.000	0.000
FY10: Program Support						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #6		0.000	0.000	0.371	0.000	0.371
FY11: Program Support						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010					
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Eq Adv Dev	quipment -	PROJECT 526: MARINE ORIEN LOG EQ AD				
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #7		0.000	0.000	0.000	0.000	0.000	
FY09: Watercraft market surveys and business analysis							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #8		0.000	0.304	0.000	0.000	0.000	
FY10: Watercraft market surveys and business analysis							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer E Adv Dev	Equipment -	pment - PROJECT 526: MARINE ORIEN LOG EQ AD					
B. Accomplishments/Planned Program (\$ in Millions)								
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
Program #9		0.000	0.000	0.500	0.000	0.500		
FY11: Watercraft market surveys and business analysis								
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #10		0.000	0.000	0.000	0.000	0.000		
FY09: Small Business Innovative Research/Small Business Technology	Transfer Program							
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	526: <i>MARIN</i>	'E ORIEN LOG EQ AD
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev		

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #11	0.000	0.084	0.000	0.000	0.000
FY10: Small Business Innovative Research/Small Business Technology Transfer Program					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	2.983	3.017	2.990	0.000	2.990

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	<u>OCO</u>	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: MA4500, Modification of	35.405	53.713	103.046	0.000	103.046	85.293	83.674	82.143	76.613	0	519.887
In-Service Equipment (OPA3)											

D. Acquisition Strategy

N/A

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603804A: Logistics and Engineer Equipment -

526: MARINE ORIEN LOG EQ AD

Adv Dev

Product Development (\$ in Millions)

			_										
				FY	2010		2011 ase	FY 2	2011 CO	FY 2011 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
TSV - composite prototype hull design	С	Naval Underwater Warfare Center Newport, R.I.	4.211	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Watercraft market surveys/ business analysis	С	Volpe DOT	0.100	0.304		0.500		0.000		0.500	Continuing	Continuing	0
HCCC Design	С	PEOC3T Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
JETA-SPOD-Vessel to Shore Bridging (VSB)	С	ERDC Vicksburg, MS	3.600	2.224		2.119		0.000		2.119	Continuing	Continuing	0
		Subtotal	7.911	2.528		2.619		0.000		2.619			0.000

Remarks

Support (\$ in Millions)

				FY	2010		2011 Base	FY :	2011 CO	FY 2011 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
TSV/Matrix Support	C	TACOM CBU Warren, MI	4.366	0.000		0.000)	0.000		0.000	Continuing	Continuing	0
TSV - composite prototype hull design	С	CASCOM Ft. Lee, VA	5.240	0.000		0.000)	0.000		0.000	Continuing	Continuing	0
TSV/Matrix Support - 2	C	TARDEC	0.170	0.000		0.000)	0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

526: MARINE ORIEN LOG EQ AD

Support (\$ in Millions)

			Г										
				FY	2010		2011 ase	FY:	2011 CO	FY 2011 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
		Warren, MI/ICI											
TSV/In-house	С	PM Force Projection Warren, MI	2.190	0.000		0.000		0.000		0.000	Continuing	Continuing	0
TSV-Demil	С	TACOM PSID, Warren, MI	0.424	0.000		0.000		0.000		0.000	Continuing	Continuing	0
JETA-SPOD-VSB	С	TACOM PSID, Warren, MI	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	12.390	0.000		0.000		0.000		0.000			0.000

Remarks

Test and Evaluation (\$ in Millions)

				FY :	2010		2011 ase	FY 2	2011 CO	FY 2011 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
TSV	С	DTC/ATEC MD	1.071	0.000		0.000		0.000		0.000	Continuing	Continuing	0
TSV - 2	С	PM WIN-T Location could not be determined.	1.500	0.000		0.000		0.000		0.000	Continuing	Continuing	0
НССС	С	USAFTCFE Ft. Eustis, VA	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

526: MARINE ORIEN LOG EQ AD

Test and Evaluation (\$ in Millions)

,				FY	2010		2011 ase		2011 CO	FY 2011 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
		Subtotal	2.571	0.000		0.000		0.000		0.000			0.000

Remarks

Management Services (\$ in Millions)

				FY 2	2010		2011 ase		2011 CO	FY 2011 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
Program Support	С	PM Force Projection TACOM, Warren, MI	1.392	0.405		0.371		0.000		0.371	Continuing	Continuing	0
JETA-SPOD-VSB	С	PM Force Projection TACOM, Warren, MI	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
SBIR/STTR	С	PM Force Projection TACOM, Warren, MI	0.000	0.084		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	1.392	0.489		0.371		0.000		0.371			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	526: MARINE ORIEN LOG EQ AD
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	

	Total Prior Years Cost	FY 2	2010	FY 2 Ba	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	24.264	3.017		2.990	0.000	2.990			0.000

Remarks

DATE: February 2010

APPROPRIATION/BUDGET ACTIVATION: Research, Development, Test & EBA 4: Advanced Component Development)	R-1 ITEM N PE 0603804 <i>Adv Dev</i>	NOMENCLA A: Logistics a	_	Equipment -	PROJECT G11: ADV ELEC ENERGY CON AD					
COST (\$ in Millions) FY 2009 FY 2010 Base Actual Estimate Estimate				FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
G11: ADV ELEC ENERGY CON AD	3.256	2.622	2.618	0.000	2.618	1.324	0.456	0.643	0.644	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

The Mobile Electric Power (MEP) 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. This Project Office 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 MEP sources from Watts to Megawatts level that comply with environmental statues and provide noise and signature-suppressed, energy-efficient, lightweight, deployable and reliable equipment. FY10 will fund test and evaluation of technologies for Small Tactical Electric Power (STEP), alternative energy, and Intelligent Power Distribution Systems; and initiate market surveys and begin evaluation of components for Large Advanced Mobile Power Sources.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	3.167	0.000	0.000	0.000	0.000
FY09: Evaluation and testing of various technologies related to Tactical Electric Power across the Army power spectrum aimed at technology gaps to meet Army User requirements. These efforts support the Small Tactical Electric Power (STEP) program and the Large Advanced Mobile Power Sources (LAMPS) program. FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev		PROJECT G11: ADV ELEC ENERGY CON AD				
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 OCO Plans: FY 2011 OCO							
Program #2		0.000	2.546	0.000	0.000	0.000	
FY10: Evaluation and testing of various technologies related to Tacti management across the DoD power spectrum. Efforts wil be aimed a User requirements. These efforts support the Small Tactical Electric Mobile Power Sources (LAMPS) program, and the Tactical Electric F (TEP CPD). Specific efforts include evaluation of 1 kW JP-8 fueled g sources, Intelligent Power Distribution systems, and market surveys for FY 2009 Accomplishments:	resolving technology gaps to meet Army Power (STP) program, the Large Advanced Power Capabilities Production Document enerators, hybrid/alternative energy power						
FY 2009 Accomptishments.							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #3		0.000	0.000	2.618	0.000	2.618	
FY11: Evaluation and testing of various technologies related to Tacti management across the DoD power spectrum. Efforts wil be aimed a User requirements. These efforts support the Small Tactical Electric I	t resolving technology gaps to meet Army						

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer E Adv Dev	Equipment -	PROJECT G11: ADV E	LEC ENERG	Y CON AD	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Mobile Power Sources (LAMPS) program, and the Tactical Electric Po (TEP CPD).	ower Capabilities Production Document					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4		0.089	0.076	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technology Trans	sfer Programs					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	G11: ADV ELEC ENERGY CON AD
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals	3.256	2.622	2.618	0.000	2.618

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	<u>oco</u>	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: RDT&E:PE0604804A,	6.190	1.344	7.985	0.000	7.985	3.961	1.544	1.570	1.601	Continuing	Continuing
Logistics and Engineer Equipment -											
Eng Dev 194											
• Ord. #2: OPA 3, Generators and	240.609	212.600	151.052	0.000	151.052	127.919	18.080	10.625	10.778	Continuing	Continuing
Associated Eq. MA9800											

D. Acquisition Strategy

Complete advanced development and transition to system development and demonstration phase (Milestone B) and subsequent transition to production (Milestone C).

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -Adv Dev

PROJECT

G11: ADV ELEC ENERGY CON AD

Product Development (\$ in Millions)

_			_										
				FY	2010	FY 201 Base		FY 2	-	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost A	ward Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
STEP Components	С	CERDEC -APG Location could not be determined.	1.721	0.390		0.200		0.000		0.200	Continuing	Continuing	0
AMMPS Components	С	CERDEC APG Location could not be determined.	3.264	0.000		0.000		0.000		0.000	Continuing	Continuing	0
LAMPS Components	С	CERDEC -APG Location could not be determined.	0.000	0.090		0.050		0.000		0.050	Continuing	Continuing	0
Alternative Energy	С	NREL Boulder CO	0.000	0.690		0.200		0.000		0.200	Continuing	Continuing	0
Power Distribution/ Management	С	Multiple Vendors Location could not be determined.	0.000	0.000		0.336		0.000		0.336	Continuing	Continuing	0
		Subtotal	4.985	1.170		0.786		0.000		0.786			0.000

Remarks

Support (\$ in Millions)

				FY 2	2010		2011 ase		2011 CO	FY 2011 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
STEP Components	C	CERDEC-APG	1.651	0.100		0.200		0.000		0.200	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603804A: Logistics and Engineer Equipment -Adv Dev

G11: ADV ELEC ENERGY CON AD

Support (\$ in Millions)

				FY	2010		2011 ase	FY 2	2011 CO	FY 2011 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
		Location could not be determined.											
AMMPS Components	С	CERDEC-APG Location could not be determined.	0.942	0.050		0.000		0.000		0.000	Continuing	Continuing	0
LAMPS Components	С	CERDEC-APG Location could not be determined.	0.000	0.100		0.200		0.000		0.200	Continuing	Continuing	0
Alternative Energy	С	CERDEC-APG Location could not be determined.	0.000	0.140		0.500		0.000		0.500	Continuing	Continuing	0
Power Distribution/ Management	С	CERDEC-APG Location could not be determined.	0.000	0.140		0.500		0.000		0.500	Continuing	Continuing	0
		Subtotal	2.593	0.530		1.400		0.000		1.400			0.000

Remarks

Test and Evaluation (\$ in Millions)

Test and Lyandation (ψ 111 1411111011	<i>5)</i>											
				FY	2010		2011 ase		2011 CO	FY 2011 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
STEP Components	С	CERDEC-APG	0.789	0.050		0.030		0.000		0.030	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

G11: ADV ELEC ENERGY CON AD

Test and Evaluation (\$ in Millions)

				FY	2010		2011 ase		2011 CO	FY 2011 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
		Location could not be determined.											
AMMPS Components	С	CERDEC-APG Location could not be determined.	0.300	0.474		0.000		0.000		0.000	Continuing	Continuing	0
LAMPS Components	С	CERDEC-APG Location could not be determined.	0.000	0.025		0.000		0.000		0.000	Continuing	Continuing	0
Alternative Energy	С	CERDEC-APG Location could not be determined.	0.000	0.015		0.050		0.000		0.050	Continuing	Continuing	0
Power Distribution/ Management	С	CERDEC-APG Location could not be determined.	0.000	0.036		0.100		0.000		0.100	Continuing	Continuing	0
		Subtotal	1.089	0.600		0.180		0.000		0.180			0.000

Remarks

Management Services (\$ in Millions)

				FY :	2010		2011 ase	FY 2	-	FY 2011 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
STEP Components	C	PM MEP	0.459	0.096		0.080		0.000		0.080	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

G11: ADV ELEC ENERGY CON AD

Management Services (\$ in Millions)

				FY 2	2010		2011 ase		2011 CO	FY 2011 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
		Ft Belvoir VA											
AMMPS Components	С	PM MEP Ft Belvoir VA	0.427	0.065		0.000		0.000		0.000	Continuing	Continuing	0
LAMP Components	С	PM MEP Ft Belvoir VA Location could not be determined.	0.000	0.035		0.070		0.000		0.070	Continuing	Continuing	0
Alternative Energy	С	PM MEP Ft Belvoir VA Location could not be determined.	0.000	0.075		0.050		0.000		0.050	Continuing	Continuing	0
Power Distribution/ Management	С	PM MEP Ft Belvoir VA Location could not be determined.	0.000	0.065		0.052		0.000		0.052	Continuing	Continuing	0
		Subtotal	0.886	0.336		0.252		0.000		0.252			0.000

Remarks

	Total Prior Years Cost	FY 2	2010			2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	9.553	2.636		2.618	0.000		2.618			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

G11: ADV ELEC ENERGY CON AD

	I	F Y 2	2009)	F	Y	201	0	I	Y 2	201	1	I	Y 2	201	2	I	FY 2	201.	3		FY	201	4	I	FY 2	201	5
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Develop Proof of Principle Prototype (Commercial Components)				#	#	#	#	#	#	#	#																	
Complete Proof of Principal Prototype (Comercial Components)										#																		
Complete Test and Evaluation											#																	
Transfer to Systems Development and Demonstartion												#																
Complete Proof of Principle Prototype						#																						
Complete Test and Evaluation - 2							#																					
Transfer to System Development and Demonstration							#																					
Develop Proof of Principle Prototypes									#																			
No label was entered													#															
Complete Proof of Principle Prototype (Commercial Components)													#															
Complete Test and Evaluation - 3																	#											
Transfer to Systems Development and Demonstration																			#									
Develop Proof of Principle Prototypes - 2									#																			
Complete Proof of Principle Prototype (Commercial Components) - 2													#															
Complete Test and Evaluation - 4															#													

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	G11: ADV E	LEC ENERGY CON AD
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev		

		FY	200	9]	FY	201	0]	F Y :	201	1	F	Y 2	201	2	ŀ	Y 20)13		F	Y 2	2014	1	I	Y 2	201	5
	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
Transfer to Systems Development and Demonstration - 2															#													

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment - Adv Dev

PROJECT

G11: ADV ELEC ENERGY CON AD

Schedule Details

	Sta	art	En	d
Event	Quarter	Year	Quarter	Year
Develop Proof of Principle Prototype (Commercial Components)	4	2009	3	2011
Complete Proof of Principal Prototype (Comercial Components)	2	2011	2	2011
Complete Test and Evaluation	3	2011	3	2011
Transfer to Systems Development and Demonstartion	4	2011	4	2011
Complete Proof of Principle Prototype	2	2010	2	2010
Complete Test and Evaluation - 2	3	2010	3	2010
Transfer to System Development and Demonstration	3	2010	3	2010
Develop Proof of Principle Prototypes	1	2011	1	2011
No label was entered	1	2012	1	2012
Complete Proof of Principle Prototype (Commercial Components)	1	2012	1	2012
Complete Test and Evaluation - 3	1	2013	1	2013
Transfer to Systems Development and Demonstration	3	2013	3	2013
Develop Proof of Principle Prototypes - 2	1	2011	1	2011
Complete Proof of Principle Prototype (Commercial Components) - 2	1	2012	1	2012
Complete Test and Evaluation - 4	3	2012	3	2012
Transfer to Systems Development and Demonstration - 2	3	2012	3	2012

Exhibit R-2A, RDT&E Project Justifi	ication: PB 20	J11 Army							DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIV	VITY			R-1 ITEM N	NOMENCLA	TURE		PROJECT			
2040: Research, Development, Test & E	Evaluation, Ar	my		PE 0603804	A: Logistics a	nd Engineer l	Equipment -	G14: <i>MATEI</i>	RIALS HAND	LING EQUIP	PMENT - AD
BA 4: Advanced Component Developme	ent & Prototy	pes (ACD&P))	Adv Dev							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
										•	
G14: MATERIALS HANDLING EQUIPMENT - AD	0.112	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project supports Advanced Component Development and Prototypes of Material Handling Equipment (MHE) and stays abreast of current needs and available technologies to be integrated into military MHE. This program develops selected technologies and transitions to procurement a series of MHE items. Categories of MHE include warehouse forklifts, cranes and tow tractors, rough terrain forklifts, container handlers and cranes as well as ancillary equipment.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.204	0.000	0.000	0.000	0.000
Rough Terrain Container Handler Crew Protection Kit Development.					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	G14: <i>MATE</i>	RIALS HANDLING EQUIPMENT - AD
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev		

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #2	0.006	0.000	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technology Transfer Programs					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Accomplishments/Planned Programs Subtotals	0.210	0.000	0.000	0.000	0.000

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	<u>OCO</u>	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: 0604804A, Logistics and	0.452	0.501	0.000	0.000	0.960	1.068	1.208	1.229	1.249	0	6.667
Engineer Fauinment Engineering											

Engineer Equipment, Engineering

Development (H14)

D. Acquisition Strategy

RDTE - Engineering efforts include: The completion of an engine obsolescence effort/investigation for the All Terrain Lifting Army System (ATLAS) as the system transitions from Tier II to Tier III powertrains; Conduct and complete engine feasibility studies and program support for ATLAS to ensure compatibility and testing of new engine into the existing engine compartment; The development of the Rough Terrain Container Handler Crew Protection Kit.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	G14: MATERIALS HANDLING EQUIPMENT - AD
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	
E. Performance Metrics		
Performance metrics used in the preparation of this justification materi	ial may be found in the FV 2010 Army Performance Rudget I	Justification Rook, dated May 2010
refrommance metrics used in the preparation of this justification materi	far may be found in the FT 2010 Army Ferformance Budget 3	distribution book, dated way 2010.

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Exhibit R-2A, RDT&E Project Justif	ication: PB 2	011 Army							DATE: Febi	ruary 2010	
APPROPRIATION/BUDGET ACTI 2040: Research, Development, Test & I	Evaluation, Ar	•		PE 0603804	NOMENCLA A: Logistics a		Equipment -	PROJECT K39: Field S	ustainment Si	upport AD	
BA 4: Advanced Component Developm	ent & Prototy	pes (ACD&P))	Adv Dev							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
K39: Field Sustainment Support AD	10.576	15.911	18.908	0.000	18.908	5.414	5.271	5.365	5.447	Continuing	Continuing
Quantity of RDT&E Articles											

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), cargo aerial delivery, field service systems, mortuary affairs equipment, heaters, camouflage systems to counter emerging enemy threat technikigies, and other combat service support equipment. These systems will fill identified theater distribution and services capability gaps, improve unit sustainability, and increase combat effectiveness. This project also supports Advanced Component Development and Prototyping of Critical Distribution Capabilities to include cargo aerial delivery systems; which provide improved safety and accuracy while increasing survivability of aircraft, personnel, and equipment. The project supports the development of tactical heater 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 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 Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.757	0.000	0.000	0.000	0.000
FY 09: Execute Low Cost Aerial Delivery System (LCADS) P3I efforts to include Type Classification of the Low Cost Low Altitude (LCLA) capability and transition to sustainment. Execute Low Cost Aerial Delivery System (LCADS) P3I efforts to include evaluating LCADS Hi-V and Low-V parachutes as options for expanded 5-10K pound, high altitude Improved Container Delivery System (CDS) capability. FY 2009 Accomplishments: FY 2009					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engine Adv Dev	eer Equipment -	PROJECT K39: Field S	Sustainment Su	upport AD	
B. Accomplishments/Planned Program (\$ in Millions)						
•		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2		0.000	1.769	0.000	0.000	0.000
FY 11: Continue execution of LCADS P3I effort to expand LCADS/L feedback and CASCOM guidance. (i.e. increased LCLA weights and						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #3		0.000	0.000	1.000	0.000	1.000
FY 11: Continue execution of LCADS P3I effort to expand LCADS/L feedback and CASCOM guidance. (i.e. increased LCLA weights and						

	UNCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	Equipment -	PROJECT K39: Field Sustainment Support AD			
B. Accomplishments/Planned Program (\$ in Millions)			l			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4		4.271	0.000	0.000	0.000	0.000
FY 09: Complete Joint Precision Airdrop System (JPADS) 10K Design Testing (DT).	gn Validation (DV) and Development					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #5		0.000	1.414	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Ed Adv Dev	quipment -	PROJECT K39: Field Sustainment Support AD				
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 10: Complete Joint Precision Airdrop System (JPADS) 10K Desig Testing (DT).	n Validation (DV) and Development						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #6		0.000	2.400	0.000	0.000	0.000	
FY 10: Execute JPADS 2K pre-planned product improvement efforts.							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Ed Adv Dev	quipment -	PROJECT K39: Field Sustainment Support AD				
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #7		0.000	0.000	1.500	0.000	1.500	
FY 11: Execute JPADS 2K pre-planned product improvement efforts.							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #8		2.400	0.000	0.000	0.000	0.000	
FY 09: Obtain Milestone B for Advanced Cargo Parachute Release System development contract.	n (ACPRS) and award competitive						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
			1		J		

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equipment - K39: Field S Adv Dev			T I Sustainment Support AD		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #9		0.000	3.800	0.000	0.000	0.000
FY 10: Conduct ACPRS DV and down-select to single contractor.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #10		0.000	0.000	2.208	0.000	2.208
FY 11: Conduct Developmental Testing (DT) and Operational Testing	for ACPRS.					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equipment Adv Dev	PROJECT K39: Field S	PROJECT K39: Field Sustainment Support AD		
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #11	0.0	00 1.854	0.000	0.000	0.000
FY 10: Obtain MS B for Advanced Low Velocity Airdrop System Light begin prototype fabrication for DV testing. FY 11: Complete ALVADS					
FY 2009 Accomplishments:					
FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans:					
FY 2011 Base					
FY 2011 OCO Plans:					
FY 2011 OCO					
Program #12	0.0	0.000	5.800	0.000	5.800
FY 11: Complete ALVADS-L DV.					
FY 2009 Accomplishments: FY 2009					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Eq Adv Dev	uipment -	PROJECT K39: Field Sustainment Support AD			
B. Accomplishments/Planned Program (\$ in Millions)			I			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #13		0.687	0.000	0.000	0.000	0.000
FY 09: Execute Enhanced Containerized Delivery System (ECDS) P3I of parachute options to include G-11 recovery parachutes and a standard rigarcraft.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #14		0.000	0.484	0.000	0.000	0.000

DATE: February 2010

EM NOMENCLATURE 3804A: Logistics and Engineer Equipment - v FY 2009		Sustainment Su		
FY 2009		FY 2011		
FY 2009	FY 2010		FY 2011	
	FY 2010		FY 2011	TTT 0044
	FY 2010		FY 2011	TT7 0044
	FY 2010		FY 2011	FY 2011
od on ovmanding magaziani		Base	осо	Total
0.86	1 0.000	0.000	0.000	0.000
ne B for Space Heater				
esto	oused on expanding recovery afiguration for C-130 and C-17 0.86 Stone B for Space Heater ded Engineering Manufacturing	offiguration for C-130 and C-17 0.861 0.000 Ostone B for Space Heater	0.861 0.000 0.000 ostone B for Space Heater	0.861 0.000 0.000 0.000 ostone B for Space Heater

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equipment - Adv Dev	PROJECT K39: Field S	ustainment Si	upport AD	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #16 FY 10: Complete system design, fabricate EMD test units and conduct FY 2009 Accomplishments: FY 2009	Developmental Testing for SHC 120K.	1.005	0.000	0.000	0.000
FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #17 FY 11: Initiate Operational Field Evaluation for SHC 120K and transiti Demonstration (SDD). FY 2009 Accomplishments: FY 2009	ion to System Development and	0.000	0.800	0.000	0.800

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	Equipment -	PROJECT K39: Field S	Sustainment Si	upport AD	
B. Accomplishments/Planned Program (\$ in Millions)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equipment - Adv Dev FY 2009					
		FY 2009	FY 2010			FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #18		0.000	1.005	0.000	0.000	0.00
FY 10: Conduct Milestone B and award contract for development of pnext generation Human Remains Transfer Case.	prototypes and related documentation for					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #19		0.000	0.000	1.100	0.000	1.10
FY 11: Fabricate prototypes and initiate DT for next generation Huma	n Remains Transfer Case.					

	UNCLASSIFIED							
Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer I Adv Dev	project Mathematical Project K39: Field Sustainment Support AD						
B. Accomplishments/Planned Program (\$ in Millions)								
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #20		0.000	1.325	0.000	0.000	0.000		
FY 10: Initiate program of record, obtain Milestone B and initiate con Modular Intermodal Container System (JMICS).	npetitive development contract for Joint							
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #21		0.000	0.000	3.300	0.000	3.300		

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer I	Equipment -	PROJECT K39: Field	Sustainment Si	upport AD	
B. Accomplishments/Planned Program (\$ in Millions)						
		Dev FY 2009 In present a large of the present of		FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 11: Award developmental contract, conduct design effort and initiate	e Developmental Testing JMICS variants.					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #22		1.600	0.000	0.000	0.000	0.000
FY 09: Obtained Milestone A and initiated Technology Development Pl Protection System (MBPS).	hase effort for Modular Ballistic					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	Equipment -	PROJECT K39: Field S	ustainment Si	upport AD	
B. Accomplishments/Planned Program (\$ in Millions)			•			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #23		0.000	0.510	0.000	0.000	0.000
FY 10: Conduct Technology Development Efforts focused on maturin Milestone B and EMD.	g MBPS technologies for transitioning to					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #24		0.000	0.000	0.900	0.000	0.900
FY 11: Obtain Milestone B and initate EMD effort for MBPS.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	Equipment -	PROJECT K39: Field S	ustainment Si	upport AD	
B. Accomplishments/Planned Program (\$ in Millions)			'			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #25		0.000	0.000	2.300	0.000	2.300
FY11: Obtain MS B and award competitive contracts for prototype sy System (RRDAS).	stems for Rapid Rigging and Derigging					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #26		0.000	0.345	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technical Transf	Fer Program (SBIR/STTR)					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	K39: Field Sustainment Support AD
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	

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

FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base				
FY 2011 OCO Plans: FY 2011 OCO				
Accomplishments/Planned Programs Subtotals 10.576	15.911	18.908	0.000	18.908

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	<u>oco</u>	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: OPA 3, MA7806 Precision	17.953	19.743	0.000	0.000	21.527	14.970	14.555	14.822	15.072	Continuing	Continuing
Airdrop											

D. Acquisition Strategy

Accelerate Joint Precision Aerial Delivery System (JPADS) product improvements to transition to Production.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0603804A: Logistics and Engineer Equipment - Adv Dev

K39: Field Sustainment Support AD

BA 4: Advanced Component Development & Prototypes (ACD&P)

Product Development (\$ in Millions)

				FY	2010		2011 ase		2011 CO	FY 2011 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
Soldier Support Equipment	С	PM Force Sustainment Sys (FSS) Natick	6.254	2.674		2.866		0.000		2.866	Continuing	Continuing	0
Soldier Support Equipment - 2	С	NSC Natick	1.310	0.635		0.000		0.000		0.000	Continuing	Continuing	0
Soldier Support Equipment - 3	С	Various Location could not be determined.	5.192	0.621		0.000		0.000		0.000	Continuing	Continuing	0
LCADS P31 Effort	С	Various Location could not be determined.	0.000	0.300		0.300		0.000		0.300	Continuing	Continuing	0
JPADS 2K and 10K product improvements	С	Various Location could not be determined.	0.000	2.100		1.200		0.000		1.200	Continuing	Continuing	0
ALVADS/ACPRS Development	С	Various Location could not be determined.	0.000	1.600		4.000		0.000		4.000	Continuing	Continuing	0
RRDAS Development	С	Various Location could not be determined.	0.000	0.000		2.000		0.000		2.000	Continuing	Continuing	0
Next Generation Human Remains Transfer Case Development	С	Various Location could not be determined.	0.000	0.760		0.700		0.000		0.700	Continuing	Continuing	0
JMICS Development	С	Various Location could not be determined.	0.000	0.000		1.097		0.000		1.097	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0603804A: Logistics and Engineer Equipment - Adv Dev

K39: Field Sustainment Support AD

BA 4: Advanced Component Development & Prototypes (ACD&P)

Product Development (\$ in Millions)

				FY	2010	FY Ba	2011 ase	FY 2	2011 CO	FY 2011 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
Improved Environmental Control Unit (IECU)	С	CECOM Ft Belvoir	0.664	0.000		0.000		0.000		0.000	Continuing	Continuing	0
	Subtotal 13.42			8.690		12.163		0.000		12.163			0.000

Remarks

Support (\$ in Millions)

				FY	2010	FY 2 Ba	2011 ase	FY 2	-	FY 2011 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
Improved Environmental Control Unit (IECU)	С	CECOM Ft Belvoir	0.500	0.000		0.000		0.000		0.000	0	.500	0
		Subtotal	0.500	0.000		0.000		0.000		0.000	0.000	0.500	0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

K39: Field Sustainment Support AD

Test and Evaluation (\$ in Millions)

				FY	2010		2011 ase		2011 CO	FY 2011 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
Soldier Support Equipment	С	DTC MD and ATC, MD	0.856	0.901		0.000		0.000		0.000	Continuing	Continuing	0
Soldier Support Equipment - 2	С	Yuma Proving Ground (YPG) AZ, AEC	7.824	0.880		0.200		0.000		0.200	Continuing	Continuing	0
ALVADS/ACPRS Developmental Testing (DT)	С	YPG AZ	0.000	2.600		2.600		0.000		2.600	Continuing	Continuing	0
RRDAS Design Validation (DV) Testing	С	YPG AZ	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
LCADS P3I	С	DTC YPG, OTC, FT Bragg	0.000	1.000		1.500		0.000		1.500	Continuing	Continuing	0
ECDS P3I	С	DTC YPG, OTC, FT Bragg	0.000	0.350		0.350		0.000		0.350	Continuing	Continuing	0
JPADS Testing	С	YPG AZ	0.000	0.350		0.350		0.000		0.350	Continuing	Continuing	0
SHC 120K DT and Operational Field Evaluation	С	ATC MD	0.000	0.000		0.400		0.000		0.400	Continuing	Continuing	0
Human Remains Transfer Case DT	С	ATC MD	0.000	0.000		0.400		0.000		0.400	Continuing	Continuing	0
JMICS DT and OT	С	ATC MD	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
IECU	С	Various	0.643	0.000		0.000		0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603804A: Logistics and Engineer Equipment - Adv Dev

PROJECT

K39: Field Sustainment Support AD

Test and Evaluation (\$ in Millions)

				FY	2010	FY 2 Ba	2011 ase		2011 CO	FY 2011 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
		Location could not be determined.											
	•	Subtotal	9.323	6.081		5.800		0.000		5.800			0.000

Remarks

Management Services (\$ in Millions)

				FY	2010		2011 ase		2011 CO	FY 2011 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
Project Management Support	С	PM Force Sustainment Sys (FSS) Natick	0.589	0.795		0.945		0.000		0.945	Continuing	Continuing	0
Project Management Support - 2	С	PM MEP Ft Belvoir Location could not be determined.	0.557	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Small Business Innovative Research/Small Business Technical Transfer Program (SBIR/STTR)	С	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.345		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	1.146	1.140		0.945		0.000		0.945			0.000

					UNCL	ASSILI	ъD						
Exhibit R-3, RDT&E	Project Cos	t Analysis: PB 20	11 Army							D	ATE: Februa	ary 2010	
APPROPRIATION/E 2040: Research, Develo BA 4: Advanced Comp	opment, Test	& Evaluation, Arm					NCLATURE stics and Engir	neer Equipi		ROJECT 39: Field Sust	ainment Sup	port AD	
Management Services	s (\$ in Millio	ns)		FY	2010		Y 2011 Base		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Da	te Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks													
			Total Prior Years Cost	FY	2010		Y 2011 Base		2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
		Project Cost Totals	24.389	15.911		18.90	8	0.000		18.908			0.000
Remarks													

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

PROJECT

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603804A: Logistics and Engineer Equipment - Adv Dev

K39: Field Sustainment Support AD

	F	Y	200	9	I	Y 2	201	0]	FY	201	1	I	TY 2	2012	2	I	FY 2	201.	3]	FY	201	4	F	Y 2	2015	5
	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
Awarded EMD contract for SHC 120K		#																										
Conduct DT and Operational Field Evaluation for SHC 120K						#	#	#	#																			
Obtain Milestone B on ALVADS-Light						#																						
Milestone B on ACPRS		#																										
Obtain Milestone B on Helicopter External/Internal Cargo Delivery													#															
Conduct DT/OT on Helicopter External/Internal Cargo Delivery																				#	#	#	#					
Execute FP P3I efforts to incorporate Zero-Base Camp capabilities												#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	
Conduct Milestone B on Mobile Integrated Shop Shelter System																#												
Conduct DT/OT on Mobile Integrated Shop Shelter System																			#	#	#	#						
Conduct MS B on RRDAS										#																		
Conduct DV on RRDAS												#	#	#	#													
Conduct MS A for ALVADS (H)																	#											
Conduct MS B for ALVADS (H)																						#						
Conduct DV on ALVADS (H)																								#	#	#	#	
Conduct Milestone B for Next Generation Human Remains Transfer Case					#																							

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

K39: Field Sustainment Support AD

]	FY	2009)	F	Y 2	201	0	J	FY	201	1]	FY	201	2]	FY 2	201	3]	FY :	201	4]	FY 2	201:	5
	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 Developmental Testing for Next Generation Human Remains Transfer Case									#	#																		
Obtain Milestone B for JMICS.							#																					
Conduct DT and OT on JMICS variants										#	#	#	#	#	#	#												
Complete DT for JPADS 10K					#	#	#																					
Execute JPADS P3I efforts	#	#	#	#	#	#	#	#	#	#	#																	
Conduct DV for ALVADS (L)						#	#	#	#	#																		
Complete DV for ACPRS				#	#	#																						
Conduct DT for ACPRS							#	#																				
Obtained Milestone A for MBPS				#																								
Conduct Technology Development Effort for MBPS					#	#	#	#	#																			
Obtain Milestone B for MBPS										#																		
Conduct Milestone B on JMICS IPC													#															

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army **DATE:** February 2010 APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE** PROJECT

2040: Research, Development, Test & Evaluation, Army PE 0603804A: Logistics and Engineer Equipment -K39: Field Sustainment Support AD BA 4: Advanced Component Development & Prototypes (ACD&P) Adv Dev

Schedule Details

	St	art	En	ıd
Event	Quarter	Year	Quarter	Year
Awarded EMD contract for SHC 120K	2	2009	2	2009
Conduct DT and Operational Field Evaluation for SHC 120K	2	2010	1	2011
Obtain Milestone B on ALVADS-Light	2	2010	2	2010
Milestone B on ACPRS	2	2009	2	2009
Obtain Milestone B on Helicopter External/Internal Cargo Delivery	1	2012	1	2012
Conduct DT/OT on Helicopter External/Internal Cargo Delivery	4	2013	3	2014
Execute FP P3I efforts to incorporate Zero-Base Camp capabilities	4	2011	3	2015
Conduct Milestone B on Mobile Integrated Shop Shelter System	4	2012	4	2012
Conduct DT/OT on Mobile Integrated Shop Shelter System	3	2013	2	2014
Conduct MS B on RRDAS	2	2011	2	2011
Conduct DV on RRDAS	4	2011	3	2012
Conduct MS A for ALVADS (H)	1	2013	1	2013
Conduct MS B for ALVADS (H)	2	2014	2	2014
Conduct DV on ALVADS (H)	4	2014	3	2015
Conduct Milestone B for Next Generation Human Remains Transfer Case	1	2010	1	2010
Conduct Developmental Testing for Next Generation Human Remains Transfer Case	1	2011	2	2011
Obtain Milestone B for JMICS.	3	2010	3	2010
Conduct DT and OT on JMICS variants	2	2011	4	2012

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

K39: Field Sustainment Support AD

	Sta	art	E	nd
Event	Quarter	Year	Quarter	Year
Complete DT for JPADS 10K	1	2010	3	2010
Execute JPADS P3I efforts	1	2009	3	2011
Conduct DV for ALVADS (L)	2	2010	2	2011
Complete DV for ACPRS	4	2009	2	2010
Conduct DT for ACPRS	3	2010	4	2010
Obtained Milestone A for MBPS	4	2009	4	2009
Conduct Technology Development Effort for MBPS	1	2010	1	2011
Obtain Milestone B for MBPS	2	2011	2	2011
Conduct Milestone B on JMICS IPC	1	2012	1	2012

Exhibit R-2A, RDT&E Project Justif	ication: PB 20	011 Army							DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIV				R-1 ITEM N		_		PROJECT			
2040: Research, Development, Test & E		•		PE 0603804	A: Logistics a	nd Engineer I	Equipment -	K41: <i>WATEI</i>	R AND PETRO	OLEUM DIST	TRIBUTION
BA 4: Advanced Component Developm	ent & Prototy	pes (ACD&P))	Adv Dev				- AD			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
K41: WATER AND PETROLEUM DISTRIBUTION - AD	0.427	3.208	2.586	0.000	2.586	4.468	2.858	2.909	2.953	Continuing	Continuing
Quantity of RDT&E Articles											

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 Concept and Technology Development program supports the development and enhancement of rapidly deployable Petroleum and Water equipment. The mission includes developing onboard fuels and lubrication quality analysis systems; achieving greater capabilities in the removal of Nuclear, Biological, Chemical (NBC) and other contaminates from water sources; reducing the logistics foot print; developing water reutilization systems to reduce the requirement for transport of water into the theater; and material systems to decrease the logistics foot print and employment time for the transfer of liquid logistics in the theater. The Army fights with clean fuel and drinking water. This vital equipment enables the Army to achieve its transformation vision by providing the Army with the means to be highly mobile and self-sustaining in very hostile theaters of operations. 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 Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.427	0.000	0.000	0.000	0.000
FY09: Evaluate performance and military usefulness of commercial ATG and metering systems and environmental testing. Conduct market investigations and identify design standardization requirements for common pump for both fuel and water distribution systems, conduct market research for automatic tank gauging (ATG)systems and flow volume metering devices, conduct evaluation of methods to extend operational life of collapsible fuel storage tanks and investigate technical and military suitability of portable berms to contain fuel spills. In FY09, evaluate performance and military usefulness of commercial ATG and metering systems and environmental testing.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	Equipment -	PROJECT K41: WATER - AD	R AND PETRO	OLEUM DIST	TRIBUTION
B. Accomplishments/Planned Program (\$ in Millions)	·					
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2		0.000	0.000	0.000	0.000	0.000
FY 09: Small Business Innovative Research/Small Business Technology	ogy Transfer Programs (SBIR/STTR).					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #3		0.000	1.278	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer I	Equipment -	PROJECT K41: WATER - AD	R AND PETR	OLEUM DIST	TRIBUTION
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY10: Continues improvements for the Hippo, Lightweight Water Puri System (TWPS). In FY10 conduct a market investigation for devices to levels in water tankers and evaluate potential candidates for performance Evaluate improved RO elements and media for removal of arsenic from	automatically dose and control chlorine ce and suitability for military environment.					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4		0.000	0.440	0.000	0.000	0.000
FY10: Complete evaluations and begin preparing new performance bas and portable berms.	sed descriptions for ATG, metering devices					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
		1	1	<u>I</u>		

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equal Adv Dev	ipment -	PROJECT K41: WATER AND PETROLEUM DISTRIBUTION - AD			
B. Accomplishments/Planned Program (\$ in Millions)	,		'			
• • • • • • • • • • • • • • • • • • • •	F	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #5		0.000	0.550	0.000	0.000	0.000
FY10: Initiate effort to develop a mobile Water Packaging System. Co documentation and develop Request for Proposal.	onduct market surveys, prepare program					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #6		0.000	0.350	0.000	0.000	0.000
FY10: Develop in-line water monitoring equipment and improved har TWPS, LWP and ROWPUs.	nd-held water monitors for use on the					
FY 2009 Accomplishments: FY 2009						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	project Mater Equipment - K41: WATER AND PETROLEUM DISTRIA - AD					
B. Accomplishments/Planned Program (\$ in Millions)			1				
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #7		0.000	0.090	0.000	0.000	0.00	
FY10:Small Business Innovative Research/Small Business Technolog	y Transfer Programs (SBIR/STTR).						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #8		0.000	0.500	0.000	0.000	0.00	
FY10: Camel II Operational Testing							

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	Equipment -	PROJECT K41: WATEL - AD	T ER AND PETROLEUM DISTRIBUTIO!			
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #9		0.000	0.000	1.425	0.000	1.425	
FY11: Continue Fuel Systems improvements for Family of Fuel Systems	em Supply Points (FSSPs).						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #10		0.000	0.000	0.700	0.000	0.700	

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer I Adv Dev	Equipment -	PROJECT K41: WATE - AD	T ER AND PETROLEUM DISTRIBUTION		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY11:Develop in-line water monitoring equipment and improved hand-l LWP and ROWPUs.	neld water monitors for use on the TWPS,					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #11		0.000	0.000	0.000	0.000	0.000
FY11:Small Business Innovative Research/Small Business Technology	Transfer Programs (SBIR/STTR).					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						

Exhibit R-2A, RDT&E Project Justific	cation: PB 20	11 Army							DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test & Ev BA 4: Advanced Component Developme	valuation, Arn	•		R-1 ITEM N 0 PE 0603804A Adv Dev			'quipment -	PROJECT K41: WATER - AD	R AND PETR	OLEUM DIST	TRIBUTION
B. Accomplishments/Planned Progran	ı (\$ in Millior	ns)	'					1			
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #12							0.000	0.000	0.461	0.000	0.46
FY11: Initiate effort to develop a budocuments and develop RFPs. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO	ılk water purif	ication syster	n. Conduct n	narket surveys	s, prepare pro	gram					
11 2011 000			Δccomr	olishments/Pla	nned Program	ne Subtotale	0.427	3.208	2.586	0.000	2.58
C. Other Program Funding Summary Line Item Ord. #1: RDTE, 0604804.L41,	(\$ in Millions FY 2009 5.699	FY 2010 2.490	FY 2011 Base 2.734	FY 2011 OCO 0.000	FY 2011 Total 2.734	FY 2012 2.104	FY 2013 3.974	FY 2014 3.844	FY 2015	Cost To Complete	Total Cos
Logistics and Engineer Equipment - Engineering Development • Ord. #2: OPA 3, R05600, Water	50.636	10.168	3.597	12.086	15.683	3.539	4.280	4.643	3.904 0.000	Continuing Continuing	
Purification Systems	75.251	142.309	175.069	55.105	230.174	58.962	29.401	33.850	22.575	Continuing	Continuir

UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	K41: WATER	R AND PETROLEUM DISTRIBUTION
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	- AD	

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

 FY 2011
 FY 2011
 FY 2011
 FY 2011
 FY 2011
 FY 2012
 FY 2013
 FY 2014
 FY 2015
 Complete
 Total Cost

• Ord. #3: OPA 3, MA6000,

Distribution Systems, Petroleum &

Water

D. Acquisition Strategy

Develop engineering prototypes or select Non-Developmental Item based on market surveys and proposals from industry. Competitive; sole source contract.

E. Performance Metrics

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

K41: WATER AND PETROLEUM DISTRIBUTION

- AD

Product Development (\$ in Millions)

				FY	2010		2011 ase	FY:	2011 CO	FY 2011 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
Water Purification Components Improvements	С	NFESC Port Hueneme, CA	0.301	0.235		0.000		0.000		0.000	Continuing	Continuing	.551
Water Purification Components Improvements - 2	С	TBD Location could not be determined.	0.408	0.248		0.000		0.000		0.000	Continuing	Continuing	.658
Water Purification Components Improvements - 3	С	TARDEC Warren, MI	0.458	0.235		0.000		0.000		0.000	Continuing	Continuing	.515
Water Purification Components Improvements - 4	C/CPFF	MTC Dayton, OH	0.150	0.000		0.000		0.000		0.000	Continuing	Continuing	.150
Water Quality Monitoring	С	TARDEC Warren, MI	0.000	0.100		0.150		0.000		0.150	Continuing	Continuing	0
Bulk Water Treatment System	С	TARDEC Warren, MI	0.000	0.000		0.050		0.000		0.050	Continuing	Continuing	0
Bulk Water Treatment System - 2	С	NFESC Port Hueneme, CA	0.000	0.000		0.336		0.000		0.336	Continuing	Continuing	0
Packaged Water System	С	TARDEC Warren, MI	0.000	0.100		0.000		0.000		0.000	Continuing	Continuing	0
Packaged Water System - 2	С	NFESC Port Hueneme, CA	0.000	0.300		0.000		0.000		0.000	Continuing	Continuing	0
Advanced Petroleum Test Kit	С	TARDEC Warren, MI	0.829	0.000		0.000		0.000		0.000	Continuing	Continuing	.766
Advanced Petroleum Test Kit - 2	С	Micron Optical Incorporated Portsmouth, VA	0.025	0.000		0.000		0.000		0.000	Continuing	Continuing	.025

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

K41: WATER AND PETROLEUM DISTRIBUTION

 \mid - AD

Product Development (\$ in Millions)

			_										,
				FY	2010		2011 ase	FY 2	2011 CO	FY 2011 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
Advanced Petroleum Test Kit - 3	С	NAV AIR Patuxent River, MD	0.084	0.000		0.000		0.000		0.000	Continuing	Continuing	.175
Petroleum Quality Analysis System Enhanced	С	TARDEC Warren, MI	0.155	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Petroleum Quality Analysis System Enhanced - 2	С	Rock Island Arsenal Rock Island, IL	0.877	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Fuel Systems Components Improvements	С	TARDEC Warren, MI	0.301	0.000		0.200		0.000		0.200	Continuing	Continuing	0
Fuel Systems Components Improvements - 2	С	TBD Location could not be determined.	0.150	0.400		0.000		0.000		0.000	Continuing	Continuing	0
Bulk Fuel Distribution	С	TBD Location could not be determined.	0.000	0.000		0.600		0.000		0.600	Continuing	Continuing	0
Future Fuel Storage System	С	TBD Location could not be determined.	0.000	0.000		0.550		0.000		0.550	Continuing	Continuing	0
		Subtotal	3.738	1.618		1.886		0.000		1.886			2.840

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

K41: WATER AND PETROLEUM DISTRIBUTION

Support (\$ in Millions)

				FY	2010	FY 2 Ba		FY 2	2011 CO	FY 2011 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
Water Purification Components Improvements	С	TARDEC Warren, MI	0.753	0.100		0.000		0.000		0.000	Continuing	Continuing	.853
Water Quality Monitoring	С	TARDEC Warren, MI	0.000	0.150		0.150		0.000		0.150	Continuing	Continuing	0
Bulk Water Treatment System	С	TARDEC Warren, MI	0.000	0.000		0.150		0.000		0.150	Continuing	Continuing	0
Packaged Water System	С	TARDEC Warren, MI	0.000	0.150		0.000		0.000		0.000	Continuing	Continuing	0
Advanced Petroleum Test Kit (PTK)	С	TARDEC Warren, MI	0.110	0.000		0.000		0.000		0.000	Continuing	Continuing	.110
Fuel Systems Components Improvements	С	TARDEC Warren, MI	0.050	0.000		0.000		0.000		0.000	Continuing	Continuing	.100
Bulk Fuel Distribution System	С	TARDEC Warren, MI	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Future Fuel Storage System	С	TARDEC Warren, MI	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	0.913	0.400		0.300		0.000		0.300			1.063

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -

Adv Dev

PROJECT

K41: WATER AND PETROLEUM DISTRIBUTION

- AD

Test and Evaluation (\$ in Millions)

				FY	2010		2011 ase	FY 2	2011 CO	FY 2011 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
Water Purification Components Improvements	C	TARDEC Warren, MI	0.639	0.135		0.000		0.000		0.000	Continuing	Continuing	.889
Water Purification Components Improvements - 2	С	NFESC Port Hueneme, CA	0.305	0.165		0.000		0.000		0.000	Continuing	Continuing	.562
Water Purification Components Improvements - 3	С	Aberdeen Proving Ground Aberdeen, MD	0.000	0.200		0.000		0.000		0.000	Continuing	Continuing	.300
Water Quality Monitoring	С	TARDEC Warren, MI	0.000	0.100		0.100		0.000		0.100	Continuing	Continuing	0
Water Quality Monitoring - 2	С	Aberdeen Proving Ground Aberdeen, MD	0.000	0.000		0.300		0.000		0.300	Continuing	Continuing	0
Advanced Petroleum Test Kit (PTK)	С	TARDEC Warren, MI	0.562	0.000		0.000		0.000		0.000	Continuing	Continuing	.562
Fuel Systems Components Improvements	С	TARDEC Warren, MI	0.100	0.000		0.000		0.000		0.000	Continuing	Continuing	.220
Fuel Systems Components Improvements - 2	С	Yuma Proving Ground Yuma, AZ	0.209	0.000		0.000		0.000		0.000	Continuing	Continuing	0
Unit Water Pod (Camel)	С	Yuma Proving Ground Yuma, AZ	2.049	0.500		0.000		0.000		0.000	Continuing	Continuing	1.939
Bulk Fuel Distribution System	C/TBD	TBD Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P) PE 0603804A: Logistics and Engineer Equipment - Adv Dev K41: WATER AND PETROLEUM DISTRIBUTION - AD

Test and Evaluation (\$ in Millions)

				FY	2010	FY Ba	2011 ase		2011 CO	FY 2011 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
Future Fuel Storage System	C/TBD	TBD Location could not be determined.	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	3.864	1.100		0.400		0.000		0.400			4.472

Remarks

Management Services (\$ in Millions)

	, (+ : :)											
				FY	2010		2011 ase		2011 CO	FY 2011 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
SBIR/STTR	С	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.090		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	0.000	0.090		0.000		0.000		0.000			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 201	1 Army				DATE: Februa	ry 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Arm BA 4: Advanced Component Development & Prototype	•	M NOMENCLATURE 304A: Logistics and Engi		PROJECT K41: WATE - AD	R AND PETROL	LEUM DISTI	RIBUTION
			_				
							Target

	Total Prior Years Cost		2010	FY 2 Ba	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	8.515	3.208		2.586	0.000	2.586			8.375

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	K41: WATER	R AND PETROLEUM DISTRIBUTION
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	- AD	

]	FY:	200	9	I	Y	201	0	I	Y 2	201	1	I	Y 2	2012	2	I	TY 2	2013	3	F	Y	201	4	I	ΥY	201	5
	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
Bulk Water Treatment and System								#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#					
Camel II Operational Testing						#	#	#	#																			
Water Packaging System				#	#	#	#																					

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	K41: WATE	R AND PETROLEUM DISTRIBUTION
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	- AD	

Schedule Details

	Sta	art	E	nd
Event	Quarter	Year	Quarter	Year
Bulk Water Treatment and System	4	2010	3	2014
Camel II Operational Testing	2	2010	1	2011
Water Packaging System	4	2009	3	2010

Exhibit R-2A, RDT&E Project Justi	fication: PB 2	011 Army							DATE: Febr	uary 2010				
APPROPRIATION/BUDGET ACT	IVITY			R-1 ITEM N	NOMENCLA	TURE	PROJECT							
2040: Research, Development, Test &	Evaluation, Ar	my		PE 0603804	A: Logistics a	nd Engineer l	Equipment -	K42: <i>MATEI</i>	RIEL SUSTAI	NMENT SUP	PORTAD			
BA 4: Advanced Component Developm	nent & Prototy	Adv Dev												
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost			
K42: MATERIEL SUSTAINMENT SUPPORT AD	5.044	2.936	0.463	0.000	0.463	0.000	0.000	0.000	0.000	Continuing	Continuing			
Quantity of RDT&E Articles														

A. Mission Description and Budget Item Justification

This project supports Advanced Component Development and Prototypes of new and reformulated paints, paint removers, cleaners and other surface coating materials and processes for weapon systems production and maintenance operations. The project increases operational sustainment and warfighter training capabilities by reducing soldier health risks, environmental impacts and compliance enforcement actions against installations while increasing coatings performance and standardization across the Army. Materials and processes demonstrated under this project are inherently compliant with all applicable National Emissions Standards for Hazardous Air Pollutants that regulate surface coating activities, thereby eliminating the need for Army installations to incur hundreds of millions of dollars in expenses to purchase, install and operate air pollution control devices. Together with project 0603779A, Environmental Quality Technology Dem/Val (E21), this project transitions advanced technologies developed under 0603728A, Environmental Quality Technology Demonstrations (025). The project tests and evaluates Sustainable Painting Operations for the Total Army (SPOTA) at facilities that produce and maintain Combat Support/Combat Service Support systems, Ground Combat Vehicles and other Army equipment. The project expedites technology transition from the laboratory to operational use by demonstrating the capabilities of new materials and processes to fulfill the performance requirements outlined in Material Specifications, Depot Maintenance Work Requirements, Technical Manuals and other technical data. Test and evaluation activities are executed by Research, Development and Engineering Command (RDECOM) centers and laboratories in cooperation with the affected Life Cycle Management Commands, Program Executive Offices and Program Managers. Materials are being demonstrated at ten different Army facilities in order to minimize the disruption of material maintenance operations at any one facility.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	3.340	0.000	0.000	0.000	0.000
Qualify, validate and approve reformulated Chemical Agent Resistant Coating (CARC) systems and other non-CARC paints and surface coatings. In FY09 issued draft specifications for improved CARC primers, topcoats and powder coatings.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment	- K42: <i>MATI</i>	RIEL SUSTAL	NMENT SUP	PORT AD
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev				
B. Accomplishments/Planned Program (\$ in Millions)					
			FY 2011	FY 2011	FY 2011
	FY 200	FY 2010	Base	осо	Total
FY 2009 Accomplishments:					
FY 2009					
FY 2010 Plans:					
FY 2010 Filans: FY 2010					
1.1 2010					
FY 2011 Base Plans:					
FY 2011 Base					
FY 2011 OCO Plans:					
FY 2011 OCO					
Due 2000 #2	0.0	0 1.671	0.000	0.000	0.000
Program #2	0.0	00 1.671	0.000	0.000	0.000
Qualify, validate and approve reformulated CARC systems and other nor					
FY10: Complete qualification testing for improved CARC products and	populate qualified products database.				
FY 2009 Accomplishments:					
FY 2009					
EV 2010 DI					
FY 2010 Plans: FY 2010					
1.1 2010					
FY 2011 Base Plans:					
FY 2011 Base					
FY 2011 OCO Plans:					
FY 2011 OCO Flans. FY 2011 OCO					
112011000					
Program #3	0.0	0.000	0.251	0.000	0.251

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equip. Adv Dev	ment -	PROJECT K42: MATE	RIEL SUSTAL	NMENT SUP	PORT AD
B. Accomplishments/Planned Program (\$ in Millions)						
	FY	2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Qualify, validate and approve reformulated CARC systems and other n FY11 Base: Will validate and approve non-chromate, low volatile orga						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4		0.317	0.000	0.000	0.000	0.000
Qualify, validate and approve hazardous air pollutant (HAP) free solver. Completed demonstrations of alternative products in multiple cleaning						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE		PROJECT						
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer	Equipment -	K42: <i>MATEI</i>	RIEL SUSTAI.	NMENT SUP	PORTAD			
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev								
B. Accomplishments/Planned Program (\$ in Millions)									
				FY 2011	FY 2011	FY 2011			
		FY 2009	FY 2010	Base	осо	Total			
FY 2011 OCO Plans:									
FY 2011 OCO									
Program #5		0.000	0.213	0.000	0.000	0.000			
Qualify, validate and approve HAP free solvents, thinners and cleaner joint, HAP-free cleaning specification to encompass all successfully d									
FY 2009 Accomplishments: FY 2009									
FY 2010 Plans: FY 2010									
FY 2011 Base Plans: FY 2011 Base									
F1 2011 base									
FY 2011 OCO Plans:									
FY 2011 OCO									
Program #6		0.000	0.000	0.120	0.000	0.120			
Qualify, validate and approve HAP free solvents, thinners and cleaner products in approved applications.	s. FY11 Base - Implement alternative								
FY 2009 Accomplishments: FY 2009									
FY 2010 Plans: FY 2010									

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer I Adv Dev	Equipment -	PROJECT K42: MATE	ROJECT 42: <i>MATERIEL SUSTAINMENT SUPPO</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #7		0.657	0.000	0.000	0.000	0.000
Qualify, validate and approve chemical paint strippers containing not a Completed demonstration/validation of alternative paint removers in the FY 2009 Accomplishments: FY 2019 Plans: FY 2010 Plans: FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #8		0.000	0.485	0.000	0.000	0.000
Qualify, validate and approve chemical paint strippers containing no a Down select and demonstrate alternative products in remaining vat de						
FY 2009 Accomplishments: FY 2009						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer I Adv Dev	Equipment -	PROJECT - K42: MATERIEL SUSTAINMENT SUPPORT				
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #9		0.000	0.000	0.071	0.000	0.071	
Qualify, validate and approve chemical paint strippers containing no a Approve and implement alternative products for all ground vehicle de							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #10		0.730	0.000	0.000	0.000	0.000	

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equipment Adv Dev	PROJECT K42: MATE	RIEL SUSTAI	INMENT SUPPORT AD	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Qualify, validate and approve reformulated sealants and adhesives for hig and implemented HAP-free torque sealants and demonstrated HAP-free applications.					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #11	0.00	0.485	0.000	0.000	0.000
Qualify, validate and approve reformulated sealants and adhesives for hig Demonstrate HAP-free adhesives for communications / electronics applie for low HAP rubber-to-metal bonding products.					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	PE 0603804A: Logistics and Engineer Equipment - K42: MA			ROJECT 42: MATERIEL SUSTAINMENT SUPPO			
B. Accomplishments/Planned Program (\$ in Millions)			1					
•		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #12		0.000	0.000	0.021	0.000	0.02		
Qualify, validate and approve reformulated sealants and adhesives for and implement all demonstrated alternative adhesives and sealants. FY 2009 Accomplishments: FY 2009	high-use applications. In FY11: Approve							
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #13		0.000	0.082	0.000	0.000	0.00		
Small Business Innovation Research/Small Business Technology Trans	nsfer							
FY 2009 Accomplishments: FY 2009								

DATE: E.1

Exhibit R-2A, RDT&E Project Justifi	R-2A, RDT&E Project Justification: PB 2011 Army								DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test & E BA 4: Advanced Component Developme	Evaluation, Arm]	R-1 ITEM N 0 PE 0603804A Adv Dev			Equipment -	PROJECT K42: MATER	PROJECT K42: MATERIEL SUSTAINMENT SUPPOR		
B. Accomplishments/Planned Program	m (\$ in Millior	<u>ns)</u>									
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010											
FY 2011 Base Plans: FY 2011 Base											
FY 2011 OCO Plans: FY 2011 OCO											
			Accomp	olishments/Pla	anned Prograi	ns Subtotals	5.044	2.936	0.463	0.000	0.463
C. Other Program Funding Summary	y (\$ in Million :	<u>s)</u>									
			FY 2011	FY 2011	FY 2011					Cost To	
Line Item • Ord. #1: 0603728A, Environmental Quality Technology Demonstrations (025)	FY 2009 0.070	FY 2010 0.000	<u>Base</u> 0.000	<u>OCO</u> 0.000	<u>Total</u> 0.000	FY 2012 0.000	FY 2013 0.000	FY 2014 0.000	FY 2015 0.000	Complete 0	.070

D. Acquisition Strategy

• Ord. #2: 0603779A, Environmental

Quality Technology Dem/Val (E21)
• Ord. #3: 0605857A, Environmental

Quality Technology Mgmt Support

1.251

0.267

0.510

0.274

0.000

0.042

The project transitions demonstrated technology directly into the Army supply system by having National Stock Numbers assigned/reassigned and immediately made available for procurement by the Defense Logistics Agency and the General Services Administration. As acquisition managers approve the new materials and processes for use on their systems, technical writers are specifying them in the appropriate technical publications. The project is managed by the Director of the Environmental Acquisition and Logistics Sustainment Program at the Headquarters, U.S. Army Research Development and Engineering Command (RDECOM).

0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	· · · · · · · · · · · · · · · · · · ·				
APPROPRIATION/BUDGET ACTIVITY					
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	K42: MATERIEL SUSTAINMENT SUPPORT AD			
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev				
E. Performance Metrics Performance metrics used in the preparation of this justification material	may be found in the EV 2010 Amory Danformson of Dudget I	notification Peak dated May 2010			
Performance metrics used in the preparation of this justification material	may be found in the FY 2010 Army Performance Budget J	usification Book, dated May 2010.			

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army									DATE: February 2010		
2040: Research, Development, Test & B	PPROPRIATION/BUDGET ACTIVITY 40: Research, Development, Test & Evaluation, Army A 4: Advanced Component Development & Prototypes (ACD&P) R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equipment - Adv Dev Adv Dev PROJECT L04: JOINT LIGHT TACTICAL VEHICLE (Adv Dev)							CLE (JLTV) -			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
L04: JOINT LIGHT TACTICAL VEHICLE (JLTV) - AD	20.541	31.968	52.925	0.000	52.925	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Joint Light Tactical Vehicles (JLTV): Funding supports the development and testing of the JLTV Family of Vehicles (FoV), which is being developed as a joint and international system between the Army and Marine Corps, and the Australian Army, participating under a Project Arrangement. The JLTV goal is a FoVs with companion trailers capable of performing multiple mission roles that will be designed to provide protected, sustained, networked mobility for personnel and payloads across the full Range of Military Operations (ROMO). JLTV objectives include increased protection and performance over the current fleet; minimizing ownership costs by maximizing commonality, fuel efficiency and other means; and maintaining effective competition throughout the lifecycle. The JLTV FoV includes ten (10) sub-configurations (and companion trailers) in three payload categories. Commonality of components, maintenance procedures, training, etc., between vehicles and trailers is expected to be inherent in FoV solutions within and across Payload Categories to minimize FoV total ownership cost. Unique service requirements have been minimized. During FY10, major budget activities will support completion of ballistic hull testing, vehicle performance testing, user evaluations, reliability testing and prototype live fire evaluations. FY11 funds complete the Technology Development phase testing and test report submissions and the initiation of Engineering and Manufacturing Development (EMD) phase. As the program progresses towards EMD, major budget activities will support staffing of the Capabilities Development Document, MS B document preparation, source selection activities, ballistic hulls to support source selection, MS B decision, and award multiple Engineering and Manufacturing Development contracts.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	4.283	0.000	0.000	0.000	0.000
JLTV Program Management					
FY 2009 Accomplishments: FY 2009					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equipment Adv Dev	PROJECT - L04: JOINT AD	LIGHT TACT	TICAL VEHIC	'LE (JLTV) -
B. Accomplishments/Planned Program (\$ in Millions)		'			
	FY 200	9 FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #2	0.0	00 4.590	0.000	0.000	0.000
JLTV Program Management					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #3	0.0	0.000	5.100	0.000	5.100
JLTV Program Management					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Adv Dev	Equipment -	PROJECT L04: JOINT AD	LE (JLTV) -		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2010 Plans: FY 2010 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO						
Program #4 JLTV Variant Prototype Contract Design, Development and Fabrication		11.562	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans:						
FY 2011 OCO						
Program #5		0.000	17.483	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Equipment Adv Dev	PROJECT L04: JOINT AD	L04: <i>JOINT LIGHT TACTICAL VEHICLE</i>				
B. Accomplishments/Planned Program (\$ in Millions)		I					
•	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
JLTV Variant Prototype Contract Design, Development and Fabrication							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #6	0.00	0.000	43.225	0.000	43.225		
JLTV Variant Prototype Contract Design, Development and Fabrication							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army								
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer Eq Adv Dev	PROJECT Equipment - L04: JOINT LIGHT TACTICAL VEHICLE (JLT) AD						
B. Accomplishments/Planned Program (\$ in Millions)								
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
Program #7		4.696	0.000	0.000	0.000	0.00		
JLTV Developmental Test and Evaluation								
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #8		0.000	9.000	0.000	0.000	0.00		
JLTV Developmental Test and Evaluation								
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603804A: Logistics and Engineer I Adv Dev	Equipment -	PROJECT L04: JOINT AD	T LIGHT TACTICAL VEHICLE (JLTV)			
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #9		0.000	0.000	4.600	0.000	4.600	
JLTV Developmental Test and Evaluation							
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #10		0.000	0.895	0.000	0.000	0.000	
Small Business Innovative Research/Small Business Technology Trans	sfer Programs						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							

Exhibit R-2A, RDT&E Project Justific	cation: PB 20	11 Army							DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test & Ev BA 4: Advanced Component Development	aluation, Arn	•		R-1 ITEM N O PE 0603804A <i>Adv Dev</i>		_	Equipment -	PROJECT L04: JOINT I	ICAL VEHIC	LE (JLTV) -	
B. Accomplishments/Planned Program	ı (\$ in Million	<u>ıs)</u>	,								
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
			Accom	plishments/Pla	anned Program	ns Subtotals	20.541	31.968	52.925	0.000	52.925
C. Other Program Funding Summary	(\$ in Million	<u>s)</u>	FY 2011	FY 2011	FY 2011					Cost To	
Line Item	FY 2009	FY 2010	Base	<u>oco</u>	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: Joint Light Tactical Vehicle 0604804A, RDTE Project L50	0.000	0.000	0.000	0.000	0.000	66.824	51.508	52.472	53.341	0	224.145
• Ord. #2: Joint Light Tactical Vehicle D15603A, OPA 1	0.000	0.000	0.000	0.000	0.000	0.000	153.029	478.081	858.362	0	1,489.472
• Ord. #3: Marine Corps Ground Combat/Support Systems, JLTV RDTE 0603635M	38.688	57.680	31.762	0.000	31.762	130.261	73.925	31.864	35.636	0	399.816
• Ord. #4: Marine Corps Ground Combat/Support Systems, JLTV Prod	0.000	0.000	0.000	0.000	0.000	0.000	33.828	516.752	713.794	0	1,264.374

D. Acquisition Strategy

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The JLTV Acquisition Strategy for the Technology Demonstration (TD) phase, FY08-11, is to competitively award multiple contracts. During this phase, the contractors will be required to design the JLTV Family of Vehicles (FoV) to the Preliminary Design Review level and fabricate and test selected prototypes and trailers for payload Categories A, B, and C. The TD phase contracts were awarded on October 29, 2008 under the full and open competition process to BAE Systems Land & Armament Systems-Ground Systems Division; General Tactical Vehicles (A Joint Venture of General Dynamics Land Systems, Inc. and AM General, LLC); and Lockheed Martin Systems Integration. The fabricated prototypes will undergo developmental testing, as well as limited user assessments, in a relevant environment at Government test facilities. The addition of Australian prototypes to the program will further reduce the risk. The goal is to ensure the family of prototypes is mature in terms of supporting technologies and full system integration for MS B approval and entry into Engineering and Manufacturing Development (EMD) phase. The program transitions from TD phase to EMD phase in FY11. During the EMD phase, FY11-13, two full and open competition contracts will be awarded to design, fabricate and test the full range of payload categories and sub-configurations in sufficient quantities to validate all Capability Development Document requirements. International participation will be offered during this phase. Technology Readiness Level (TRL) 6 or higher is required. The fabricated prototypes will undergo Developmental Test, RAM, Limited User Test and Live Fire Testing. Funding will be provided under a new Program Element - 654804A, Project L50 for FY12 and out years.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	L04: JOINT LIGHT TACTICAL VEHICLE (JLTV) -
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	AD
E. Performance Metrics		
Performance metrics used in the preparation of this justification materia	al may be found in the EV 2010 Army Performance Budget I	Justification Rook, dated May 2010
refrontiance metrics used in the preparation of this justification materia	at may be found in the FT 2010 Army Ferformance Budget 3	ustification book, dated way 2010.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603804A: Logistics and Engineer Equipment -Adv Dev

PROJECT

L04: JOINT LIGHT TACTICAL VEHICLE (JLTV) -

Product Development (\$ in Millions)

				FY	2010	FY 2 Ba	2011 ase	FY 2		FY 2011 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
JLTV Technology Demonstration	С	BAE Systems Santa Clara CA	30.998	0.000		0.000		0.000		0.000	Continuing	Continuing	0
JLTV Technology Deomonstration	С	General Tactical Vehicles Sterling Heights MI	35.567	0.000		0.000		0.000		0.000	Continuing	Continuing	0
JLTV Technology Demonstration - 2	C/CPFF	Lockheed Martin Owego NY	26.447	0.000		0.000		0.000		0.000	Continuing	Continuing	0
JLTV Systems Engineering Design & Development / GFE	С	Nothing entered for Activity and Location. Location could not be determined.	1.124	11.996		0.000		0.000		0.000	Continuing	Continuing	0
JLTV Engineering & Manufacturing Development Contract/ GFE	С	TBD Location could not be determined.	0.000	0.000		15.175		0.000		15.175	Continuing	Continuing	0
JLTV Source Selection and Ballistic Hulls to support the evaluation process	С	TBD Location could not be determined.	0.000	0.000		21.400		0.000		21.400	Continuing	Continuing	0
JLTV Program Management	С	TACOM Warren, MI	3.980	4.590		5.100		0.000		5.100	Continuing	Continuing	0
SBIR/STTR	С	Nothing entered for Activity and Location.	0.000	0.895		0.000		0.000		0.000	Continuing	Continuing	0

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army

PE 0603804A: Logistics and Engineer Equipment -

L04: JOINT LIGHT TACTICAL VEHICLE (JLTV) -

BA 4: Advanced Component Development & Prototypes (ACD&P)

Adv Dev

Product Development (\$ in Millions)

				FY	2010	FY :	2011 ase		2011 CO	FY 2011 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
		Location could not be determined.											
		Subtotal	98.116	17.481		41.675		0.000		41.675			0.000

Remarks

Support (\$ in Millions)

				FY	2010		2011 ase		2011 CO	FY 2011 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
JLTV Variant Prototype Design	С	TACOM Warren MI	1.962	1.785		2.950		0.000		2.950	Continuing	Continuing	0
JLTV Variant Prototype Design - 2	С	TARDEC Warren MI	3.010	2.180		2.500		0.000		2.500	Continuing	Continuing	0
JLTV Variant Prototype Design - 3	С	Defense Technical Information Center Ft. Belvoir, VA	1.305	0.774		0.700		0.000		0.700	Continuing	Continuing	0
JLTV Variant Prototype Design - 4	С	Other Government Agencies Location could not be determined.	1.269	0.748		0.500		0.000		0.500	Continuing	Continuing	0
		Subtotal	7.546	5.487		6.650		0.000		6.650			0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	L04: JOINT	LIGHT TACTICAL VEHICLE (JLTV) -
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	AD	

Support (\$ in Millions)

				FY	2010		2011 ase		2011 CO	FY 2011 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

Remarks

Test and Evaluation (\$ in Millions)

				FY :	2010		2011 ase		2011 CO	FY 2011 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
JLTV Developmental Test and Evaluation	С	APG/ATC MD	0.474	7.285		3.785		0.000		3.785	Continuing	Continuing	0
JLTV Developmental Test and Evaluation Support Costs	С	Various Location could not be determined.	0.298	1.315		0.515		0.000		0.515	Continuing	Continuing	0
JLTV Developmental Test and Evaluation - 2	С	YPG AZ	0.000	0.400		0.300		0.000		0.300	Continuing	Continuing	0
		Subtotal	0.772	9.000		4.600		0.000		4.600			0.000

Remarks

	Total Prior Years Cost	FY 2	2010	FY 2011 Base	FY 2	2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	106.434	31.968		52.925	0.000		52.925			0.000

Exhibit R-3, RDT&E Project Cost Analysis: PB 2			DA	TE: Februa	ry 2010					
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, A BA 4: Advanced Component Development & Protot				M NOMENCLATURI 804A: Logistics and Eng		PROJI L04: JO AD		HT TACTIC	CAL VEHICL	E (JLTV) -
	Total Prior Years Cost	FY 20	FY 2011 2010 Base		FY 2011 OCO]	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Remarks										

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army
BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603804A: Logistics and Engineer Equipment - Adv Dev

Adv Dev

DATE: February 2010

PROJECT

L04: JOINT LIGHT TACTICAL VEHICLE (JLTV) - AD

	FY 2009		9	FY 2010			FY 2011			FY 2012			FY 2013			FY 2014			4	FY 2015								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Prototype Development Design / Fabrication	#	#	#	#	#	#																						
JLTV Developmental Test and Evaluation / Reports			#	#	#	#	#	#	#	#																		
CDD Joint Req Oversight Com										#																		
Source Selection Process										#	#																	
MS B (Eng & Man Dvlpmnt)											#																	
EMD Contract Award											#																	
EMD Design and Fabrication											#	#	#	#	#													
EMD Test and Validation													#	#	#	#	#	#										
CPD Joint Req Oversight Com																		#										
MS C (Production & Deployment)																			#									
Low Rate Initial Production (LRIP)																				#	#	#	#	#	#	#	#	#
Full-Rate Production Decision Review																												#

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0603804A: Logistics and Engineer Equipment -	L04: JOINT	LIGHT TACTICAL VEHICLE (JLTV) -
BA 4: Advanced Component Development & Prototypes (ACD&P)	Adv Dev	AD	

Schedule Details

	Sta	art	En	d
Event	Quarter	Year	Quarter	Year
Prototype Development Design / Fabrication	1	2009	2	2010
JLTV Developmental Test and Evaluation / Reports	3	2009	2	2011
CDD Joint Req Oversight Com	2	2011	2	2011
Source Selection Process	2	2011	3	2011
MS B (Eng & Man Dvlpmnt)	3	2011	3	2011
EMD Contract Award	3	2011	3	2011
EMD Design and Fabrication	3	2011	3	2012
EMD Test and Validation	1	2012	2	2013
CPD Joint Req Oversight Com	2	2013	2	2013
MS C (Production & Deployment)	3	2013	3	2013
Low Rate Initial Production (LRIP)	4	2013	4	2015
Full-Rate Production Decision Review	4	2015	4	2015