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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2017 Army **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	0.000	45.757	72.117	-	72.117	73.095	77.094	86.394	92.076	Continuing	Continuing
606: <i>Cntrmn/Barrier Adv Dev</i>	-	0.000	0.000	3.757	-	3.757	3.809	2.820	12.114	15.825	0.000	38.325
EK7: <i>Area Denial Capability Development</i>	-	0.000	45.757	68.360	-	68.360	69.286	74.274	74.280	76.251	Continuing	Continuing

**Note**

Project EK7, Area Denial Capability Development is a new start in FY 2016.

Project 606, Cntrmn/Barrier Adv Dev is a new start in FY 2017.

**A. Mission Description and Budget Item Justification**

This Program Element (PE) provides for the Concept Exploration and Refinement of a Deep-Range employed Networked Obstacle. This PE develops alternatives to the aging inventory of the Family of Scatterable Mines systems.

Project 606 enables component development of a new detection capability for explosive hazards, improvised explosive devices (IED), and components in support of route clearance operations. These capabilities will enhance the effectiveness of the Route Clearance Platoon within the Engineer Company, the Brigade Combat Team as well as other related Army missions.

Project EK7 Area Denial Capability Development will evaluate integrated technologies and prototype systems in a realistic operating environment to expedite technology transition for a Deep-Range employed Networked Obstacle that denies the enemy terrain and freedom of action while allowing friendly forces to maneuver freely within the same battlespace. Area Denial Capability Development provides Man-in-the-Loop (MITL) controlled scalable effects against mounted and dismounted enemy forces that disrupt, turn, fix or block their ability to maneuver. Area Denial Capability Development enables the Combatant Commander to establish early Situational Awareness of an area without exposing friendly forces to enemy engagement, and to actively detect, identify, discriminate, and engage the enemy in order to shape the battlespace at deep operational ranges. Area Denial Capability Development will utilize an open system, modular architecture to facilitate future development, maintenance, repair, and product improvements.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2017 Army	<b>Date:</b> February 2016
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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
Previous President's Budget	0.000	49.636	69.477	-	69.477
Current President's Budget	0.000	45.757	72.117	-	72.117
Total Adjustments	0.000	-3.879	2.640	-	2.640
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-3.879			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	2.640	-	2.640

**Change Summary Explanation**

FY 2016: Budget supports Project EK7, Area Denial Capability Development.

FY 2017: Budget supports Project 606, Cntrmn/Barrier Adv Dev, and Project EK7, Area Denial Capability Development.

PB 2016 Base Request for FY 2017 was \$69.477 million. Total adjustment for Base FY 2017 is \$2.640 million.

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**Exhibit R-2A, RDT&E Project Justification:** PB 2017 Army **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / Landmine Warfare and Barrier - Adv Dev	<b>Project (Number/Name)</b> 606 / Cntrmn/Barrier Adv Dev
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
606: Cntrmn/Barrier Adv Dev	-	0.000	0.000	3.757	-	3.757	3.809	2.820	12.114	15.825	0.000	38.325
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

This project is a new start in FY 2017.

**A. Mission Description and Budget Item Justification**

This project evaluates integrated technology for detection of explosive hazard in support of route clearance operations.

The FY 2017 Base RDTE dollars in the amount of \$3.757 million supports Explosive Hazard Detection technology analysis, system analysis, test design and evaluation. It also funds system engineering and program management.

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

	FY 2015	FY 2016	FY 2017
<b>Title:</b> System Engineering and Program Management	-	-	0.400
<b>Description:</b> Supports System Engineering and Program Management			
<b>FY 2017 Plans:</b> Supports System Engineering and Program Management			
<b>Title:</b> Explosive Hazard Detection Technology Analysis	-	-	2.850
<b>Description:</b> Explosive Hazard Detection Technology Analysis			
<b>FY 2017 Plans:</b> Explosive Hazard Detection technology analysis, system analysis, and test design.			
<b>Title:</b> Explosive Hazard Detection Test and Evaluation	-	-	0.507
<b>Description:</b> Explosive Hazard Detection Test and Evaluation			
<b>FY 2017 Plans:</b> Explosive Hazard Detection Test and Evaluation			
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	3.757

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Army	<b>Date:</b> February 2016
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<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>	<b>Project (Number/Name)</b> 606 / <i>Cntrmn/Barrier Adv Dev</i>
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**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• PE 0604808A Proj 415 RDTE: <i>PE 0604808A Proj 415</i> <i>Mine Neutralization/Detection</i>	43.314	49.296	36.858	-	36.858	31.464	32.025	46.636	41.533	Continuing	Continuing
• R64001 OPA: <i>R64001 OPA Husky</i> <i>Mounted Detection System (HMDS)</i>	18.545	13.565	0.274	-	0.274	26.578	51.645	67.044	71.133	Continuing	Continuing

**Remarks**

PE 0604808 Project 415 Mine Neutralization and Detection is the engineering development follow-on to this funding line. The above profile represents the total line, not only the follow on tasks within this program.

**D. Acquisition Strategy**

The Acquisition Strategy for Route Clearance Operations will be developed in conjunction with program initiation.

**E. Performance Metrics**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / Landmine Warfare and Barrier - Adv Dev	<b>Project (Number/Name)</b> 606 / Cntrmn/Barrier Adv Dev
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<b>Management Services (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Management	MIPR	PM CCS : Picatinny Arsenal, NJ	0.000	-		-		0.400	Jan 2017	-		0.400	Continuing	Continuing	0
<b>Subtotal</b>			0.000	-		-		0.400		-		0.400	-	-	0.000

<b>Support (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Explosive Hazard Detection - Technology Analysis	MIPR	TRADOC : Ft. Eustis, VA	0.000	-		-		2.000	Jan 2017	-		2.000	Continuing	Continuing	0
Explosive Hazard Detection - Engineering Support	MIPR	CERDEC NVESD : Ft. Belvoir, VA	0.000	-		-		0.600	Jan 2017	-		0.600	Continuing	Continuing	0
Explosive Hazard Detection - System Analysis and Test Design	FFRDC	IDA : Alexandria, VA	0.000	-		-		0.250	Jan 2017	-		0.250	Continuing	Continuing	0
<b>Subtotal</b>			0.000	-		-		2.850		-		2.850	-	-	0.000

<b>Test and Evaluation (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Explosive Hazard Detection	MIPR	A TEC : Alexandria, VA	0.000	-		-		0.507	Jan 2017	-		0.507	Continuing	Continuing	0
<b>Subtotal</b>			0.000	-		-		0.507		-		0.507	-	-	0.000

			Prior Years	FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
<b>Project Cost Totals</b>			0.000	-		0.000		3.757		-		3.757	-	-	0.000



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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>	<b>Project (Number/Name)</b> 606 / <i>Cntrmn/Barrier Adv Dev</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
(1) Explosive Hazard Detection - MDD Approval												▲ MDD Approval																
Explosive Hazard Detection - Analysis of Alternatives (AOA)																												
Explosive Hazard Detection - System Characterization																												
(2) Explosive Hazard Detection - Milestone B (MS B)																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2017 Army		<b>Date:</b> February 2016
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>	<b>Project (Number/Name)</b> 606 / <i>Cntrmn/Barrier Adv Dev</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Explosive Hazard Detection - MDD Approval	4	2017	4	2017
Explosive Hazard Detection - Analysis of Alternatives (AOA)	2	2018	4	2018
Explosive Hazard Detection - System Characterization	4	2018	4	2019
Explosive Hazard Detection - Milestone B (MS B)	4	2019	4	2019

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Army										<b>Date:</b> February 2016		
<b>Appropriation/Budget Activity</b> 2040 / 4					<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>				<b>Project (Number/Name)</b> EK7 / <i>Area Denial Capability Development</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
<i>EK7: Area Denial Capability Development</i>	-	0.000	45.757	68.360	-	68.360	69.286	74.274	74.280	76.251	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

This project is a new start in FY16.

**A. Mission Description and Budget Item Justification**

This project provides for the Development of a Deep-Range employed Networked Obstacle. This project develops alternatives to the aging inventory of the Family of Scatterable Mines systems.

Area Denial Capability Development will evaluate integrated technologies and prototype systems in a realistic operating environment to expedite technology transition for a Deep-Range employed Networked Obstacle that denies the enemy terrain and freedom of action while allowing friendly forces to maneuver freely within the same battlespace. Area Denial Capability Development provides Man-in-the-Loop (MITL) controlled scalable effects against mounted and dismounted enemy forces that disrupt, turn, fix or block their ability to maneuver. Area Denial Capability Development enables the Combatant Commander to establish early Situational Awareness of an area without exposing friendly forces to enemy engagement, and to actively detect, identify, discriminate, and engage the enemy in order to shape the battlespace at deep operational ranges. Area Denial Capability Development will utilize an open system, modular architecture to facilitate future development, maintenance, repair, and product improvements.

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

	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Title:</b> Area Denial Capability Development	-	26.643	52.254
<b>Description:</b> Develop and build system and sub-system level concepts that will be evaluated for affordability, feasibility, and technical maturity. Complete competitive development of systems and perform initiatives to mature technical feasibility and reduce risk.			
<b>FY 2016 Plans:</b> Award up to 5 contract agreements to build prototypes that represent system and sub-system level concepts. The prototypes will be evaluated for technical maturity and potential operational effectiveness, suitability, and affordability			
<b>FY 2017 Plans:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Army		<b>Date:</b> February 2016		
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>	<b>Project (Number/Name)</b> EK7 / <i>Area Denial Capability Development</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
Award two Technology Maturation and Risk Reduction contracts/agreements to develop competing system prototypes, perform technical/engineering analysis of preferred materiel solution, inform the Capability Development Document (CDD) requirements, reduce program technical risk, and program cost risk.				
<p><b>Title:</b> Engineering Support</p> <p><b>Description:</b> Provide Engineering Support.</p> <p><b>FY 2016 Plans:</b> Engineering support for Analysis of Alternatives, Concept Prototype Contract/Agreement Award, initial development of Models and Simulations, Milestone A Documentation, and Technology Readiness Assessment of Concept Prototypes.</p> <p><b>FY 2017 Plans:</b> Engineering support for Technology Maturation and Risk Reduction contracts/agreements and execution. Develop models and simulations, develop Milestone A documentation, conduct technology readiness assessment, and support requirements development.</p>		-	12.556	9.660
<p><b>Title:</b> Test and Evaluation</p> <p><b>Description:</b> Provide support to Contractor/Government test Activities.</p> <p><b>FY 2016 Plans:</b> Technical Demonstration and Evaluation of system and sub-system level prototypes.</p>		-	1.500	-
<p><b>Title:</b> Program Management and Oversight</p> <p><b>Description:</b> Program Management and Support</p> <p><b>FY 2016 Plans:</b> Program Management support for Analysis of Alternatives, Test and Evaluation, Modeling and Simulation, Milestone A planning, and Concept Prototype contracts/agreements.</p> <p><b>FY 2017 Plans:</b> Program Management support for technical/engineering analysis of materiel solution, Modeling and Simulation, Capability Development Document requirements development, competitive prototype contracts/agreements, and Milestone A preparation.</p>		-	5.058	6.446
<b>Accomplishments/Planned Programs Subtotals</b>		-	45.757	68.360
<b>C. Other Program Funding Summary (\$ in Millions)</b>				
N/A				

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603619A / Landmine Warfare and Barrier - Adv Dev	Project (Number/Name) EK7 / Area Denial Capability Development

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

**Remarks**

**D. Acquisition Strategy**

An Analysis of Alternatives (AoA) was initiated in September 2015 and the study will assess the technical feasibility, operational feasibility, technical risk, and affordability of various potential materiel solutions. The AoA will be informed by previously executed studies and input from Government, Industry and Academia. In parallel to the AoA, up to 5 Concept Prototype contracts/agreements will be provided to industry to develop representative prototypes (hardware and/or models) that will be used to assess the technology risks and costs associated with multiple system level concepts. The results of the AoA and evaluation of representative prototypes will support a Milestone A Decision. The Army will award two Technology Maturation and Risk Reduction (TMRR) contracts/agreements to develop competing prototypes of the selected materiel solution. Technologies that support the selected system level concepts will be matured during TMRR, and a Capability Development Document (CDD) will be developed. At the end of TMRR, and after a successful Milestone B Decision, the Army will competitively award an Engineering and Manufacturing Development (EMD) contract to complete development of the system, complete system integration, develop manufacturing processes, and conduct testing before entering the Production and Deployment phase.

**E. Performance Metrics**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / Landmine Warfare and Barrier - Adv Dev	<b>Project (Number/Name)</b> EK7 / Area Denial Capability Development
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<b>Management Services (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Program Mgmt	MIPR	PM-CCS : Picatinny Arsenal, NJ	0.000	-		3.290		4.700		-		4.700	Continuing	Continuing	0
SBIR/STTR/FFRDC	TBD	PM CCS : Picatinny Arsenal, NJ	0.000	-		1.769		1.746		-		1.746	Continuing	Continuing	0
<b>Subtotal</b>			0.000	-		5.059		6.446		-		6.446	-	-	0.000

<b>Product Development (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Prototype Development A	SS/TBD	TBD : TBD	0.000	-		7.214	Mar 2016	-		-		-	0.000	7.214	0
Prototype Development B	SS/TBD	TBD : TBD	0.000	-		7.214	Mar 2016	-		-		-	0.000	7.214	0
Prototype Development C	SS/TBD	TBD : TBD	0.000	-		7.214	Mar 2016	-		-		-	0.000	7.214	0
Prototype Development D	SS/TBD	TBD : TBD	0.000	-		2.500	Mar 2016	-		-		-	0.000	2.500	0
Prototype Development E	SS/TBD	TBD : TBD	0.000	-		2.500		-		-		-	0.000	2.500	0
Technology Maturation Risk Reduction (TMRR) Development A	SS/TBD	TBD : TBD	0.000	-		-		26.127	Jun 2017	-		26.127	Continuing	Continuing	0
Technology Maturation Risk Reduction (TMRR) Development B	SS/TBD	TBD : TBD	0.000	-		-		26.127	Jun 2017	-		26.127	Continuing	Continuing	0
<b>Subtotal</b>			0.000	-		26.642		52.254		-		52.254	-	-	0.000

<b>Support (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
ARDEC Engineering Support	MIPR	ARDEC : Picatinny Arsenal, NJ	0.000	-		5.682		5.284		-		5.284	Continuing	Continuing	0
CERDEC Engineering Support	MIPR	CERDEC : Fort Belvoir, VA	0.000	-		0.450		1.168		-		1.168	Continuing	Continuing	0

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 4				PE 0603619A / Landmine Warfare and Barrier - Adv Dev				EK7 / Area Denial Capability Development							
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Mitre Engineering Support (C4)	FFRDC	Mitre : McLean, VA	0.000	-		0.586		0.440		-		0.440	Continuing	Continuing	0
NVESD Engineering Support	MIPR	NVESD : Fort Belvoir, VA	0.000	-		0.440		0.800		-		0.800	Continuing	Continuing	0
Millenium Program Support	C/FFP	Millennium : Arlington, VA	0.000	-		0.450		0.500	Mar 2017	-		0.500	Continuing	Continuing	0
ARL Engineering Support	MIPR	ARL : Adelphi, MD	0.000	-		0.633		0.850		-		0.850	Continuing	Continuing	0
AMSAA Engineering Support	MIPR	AMSAA : Aberdeen, MD	0.000	-		0.663		0.206		-		0.206	Continuing	Continuing	0
TRAC Analysis Support	MIPR	TRAC : White Sands, NM	0.000	-		3.240		-		-		-	0.000	3.240	0
USAF Engineering and Integration Support	MIPR	TBD : TBD	0.000	-		0.206		0.206		-		0.206	Continuing	Continuing	0
USN Engineering and Integration Support	MIPR	TBD : TBD	0.000	-		0.206		0.206		-		0.206	Continuing	Continuing	0
<b>Subtotal</b>			0.000	-		12.556		9.660		-		9.660	-	-	0.000
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Support Government Test Activities	MIPR	AMSAA, ATEC, ARDEC : Various	0.000	-		1.500		-		-		-	Continuing	Continuing	0
<b>Subtotal</b>			0.000	-		1.500		-		-		-	-	-	0.000
<b>Project Cost Totals</b>			0.000	-		45.757		68.360		-		68.360	-	-	0.000
<b>Remarks</b>															

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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>	<b>Project (Number/Name)</b> EK7 / <i>Area Denial Capability Development</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021																																																							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4																																																				
(1) Materiel Development Decision	MDD																																																																															
Model and Simulation Development																																	M&S Dev																																															
(2) Concept Prototype Agreements Award(s)																																																																																
Concept Prototype Build																																																																	Concept Prototype Build															
Concept Prototype Test and Evaluation																																																																	Concept Prototype T&E															
Analysis of Alternatives																																																																	AoA															
Materiel Solution Analysis																																																																	Materiel Solution Analysis															
(3) Milestone A																																																																	MS A															
(4) Technology Maturation and Risk Reduction Agreements Award(s)																																																																	Contract Award(s)															
Technology Maturation and Risk Reduction (TMRR)																																																																	TMRR															
(5) Milestone B	MS B																																																																															
(6) EMD Contract Award(s)	EMD Award(s)																																																																															
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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2017 Army		<b>Date:</b> February 2016
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0603619A / <i>Landmine Warfare and Barrier - Adv Dev</i>	<b>Project (Number/Name)</b> EK7 / <i>Area Denial Capability Development</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Materiel Development Decision	4	2015	4	2015
Model and Simulation Development	1	2016	1	2019
Concept Prototype Agreements Award(s)	2	2016	2	2016
Concept Prototype Build	2	2016	4	2016
Concept Prototype Test and Evaluation	1	2017	1	2017
Analysis of Alternatives	1	2016	4	2016
Materiel Solution Analysis	1	2017	3	2017
Milestone A	3	2017	3	2017
Technology Maturation and Risk Reduction Agreements Award(s)	3	2017	3	2017
Technology Maturation and Risk Reduction (TMRR)	4	2017	4	2019
Milestone B	4	2019	4	2019
EMD Contract Award(s)	2	2020	2	2020
EMD	1	2020	2	2024

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