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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	117.241	1.911	1.953	-	1.953	1.973	1.991	10.639	20.896	Continuing	Continuing
509: LIGHTWEIGHT 155M HOWITZER	-	-	1.911	1.953	-	1.953	1.973	1.991	10.639	20.896	Continuing	Continuing
516: Paladin/FAASV	-	117.241	-	-	-	-	-	-	-	-	-	117.241

**Note**  
Beginning FY15, 0604854A, project 516 has been moved to new APE 0210609A, project ED8.

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

Paladin Integrated Management (PIM) is an ACAT 1D Acquisition Program. The program will replace the current fleet of M109 Family of Vehicles (FoV) consisting of the M109A6 Paladin Self Propelled Howitzer and M992A2 Field Artillery Ammunition Supply Vehicle (FAASV). PIM is an Army Modernization Program that addresses a critical capability gap created by the Non-Line of Sight Cannon termination in June of 2009 as well as obsolescence and Space, Weight, and Power (SWAP) issues in the M109 FoV current fleet. The PIM system integrates current Bradley Fighting Vehicle suspension and drive train items, Future Combat Systems (FCS) developed Electric Gun Drive systems and current fleet (M109A6) fire control systems into a new chassis providing better force protection, survivability and increases electrical power over the current fleet. PIM is a two vehicle system: Self Propelled Howitzer (SPH) and Carrier Ammunition Tracked (CAT). The SPH has all characteristics listed above. The CAT utilizes all these same components and traits less those that relate directly to the cannon system. The PIM system replaces the current M109 FoV on a one for one basis, in the cannon fires battalions in the Armored Brigade Combat Team Formations and the Echelons above Brigade (EAB). The overall intent is to increase Soldier force protection, vehicle survivability, provide an appropriate amount of SWAP capacity to add future capabilities, increase vehicle reliability, reduce life cycle costs and extend the life of the M109 FoV through FY 2050.

The Lightweight 155mm Howitzer (LW155), also known as the M777A2, provides direct, reinforcing, general support fires to maneuver forces and direct support artillery. It replaces all howitzers in all missions in the USMC and replaces the M198 howitzer as the general support artillery for light forces in the Army. The LW155 fires unassisted projectiles to a range of 15 miles and assisted projectiles to 19 miles. The addition of the digital fire control system enables the weapon to program and fire the improved Excalibur precision-guided munitions to ranges in excess of 25 miles with better than 10-meter Circular Error Probable (CEP) accuracy. The LW155 is the first ground combat system whose major structures are made of high strength titanium alloy and the system makes extensive use of hydraulics to operate the breech, load tray, recoil and wheel arms. The combination of titanium structures and the use of hydraulic systems resulted in a significant weight savings of 7000 lbs over the M198 system. Compared to the M198, the LW155 emplaces three-times faster and displaces four-times faster. It traverses 32 percent more terrain worldwide and is 70 percent more survivable than the M198. It is a successful joint service program between the Marine Corps and Army working together to develop, produce, field, and sustain the howitzer. The LW155 was first introduced into the Marine Corps in April 2005 and the Marines have now fielded the howitzer to all active units. The Army has fielded the howitzer to its Stryker Brigade Combat teams (SBCT), Fires Brigades and National Guard. Fielding of the Infantry Brigade Combat Teams (IBCT) commenced in FY14 and will continue through 2018. The LW155 saw extensive action in Afghanistan, receiving high marks for its performance. Having now been in the field for almost 10 years, the howitzer will be going through obsolescent replacement of electronic components in its digital fire control system.

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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2016 Army	<b>Date:</b> February 2015
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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0604854A / <i>Artillery Systems - EMD</i>
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Funding supports engineering studies for capabilities identified in the Joint U.S. Army, U.S. Marine Corps Operational Requirements Document (JORD) for the Advanced Towed Cannon System but deferred during Engineering Manufacturing and Development due to technology maturity, cost and schedule as well as government sustainment activities requiring RDTE. This includes a digital direct fire sight for the Digital Fire Control System; low temperature, high density power solutions; and electric elevation drives and auto loader to achieve full operational requirements. Efforts in FY2015-FY2018 will be centered on researching technical solutions while efforts in FY2019-FY2020 will involve developing technology demonstrator prototypes.

<b>B. Program Change Summary (\$ in Millions)</b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>	<b><u>FY 2016 Base</u></b>	<b><u>FY 2016 OCO</u></b>	<b><u>FY 2016 Total</u></b>
Previous President's Budget	121.270	1.912	1.938	-	1.938
Current President's Budget	117.241	1.911	1.953	-	1.953
Total Adjustments	-4.029	-0.001	0.015	-	0.015
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-0.001			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-4.029	-	0.015	-	0.015

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) 509 / LIGHTWEIGHT 155M HOWITZER			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
509: LIGHTWEIGHT 155M HOWITZER	-	-	1.911	1.953	-	1.953	1.973	1.991	10.639	20.896	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

The Lightweight 155mm (LW155) Towed Howitzer is a jointly managed program with the Marine Corps.

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

The Lightweight 155mm Howitzer (LW155), also known as the M777A2, provides direct, reinforcing, general support fires to maneuver forces and direct support artillery. It replaces all howitzers in all missions in the USMC and replaces the M198 howitzer as the general support artillery for light forces in the Army. The LW155 fires unassisted projectiles to a range of 15 miles and assisted projectiles to 19 miles. The addition of the digital fire control system enables the weapon to program and fire the improved Excalibur precision-guided munitions to ranges in excess of 25 miles with better than 10-meter Circular Error Probable (CEP) accuracy. The LW155 is the first ground combat system whose major structures are made of high strength titanium alloy and the system makes extensive use of hydraulics to operate the breech, load tray, recoil and wheel arms. The combination of titanium structures and the use of hydraulic systems resulted in a significant weight savings of 7000 lbs over the M198 system. Compared to the M198, the LW155 emplaces three-times faster and displaces four-times faster. It traverses 32 percent more terrain worldwide and is 70 percent more survivable than the M198. It is a successful joint service program between the Marine Corps and Army working together to develop, produce, field, and sustain the howitzer. The LW155 was first introduced into the Marine Corps in April 2005 and the Marines have now fielded the howitzer to all active units. The Army has fielded the howitzer to its Stryker Brigade Combat teams (SBCT), Fires Brigades and National Guard. Fielding of the Infantry Brigade Combat Teams (IBCT) commenced in FY14 and will continue through 2018. The LW155 has seen extensive action in Afghanistan, receiving high marks for its performance. Having now been in the field for almost 10 years, the howitzer will be going through obsolescent replacement of electronic components in its digital fire control system.

Funding supports engineering studies for capabilities identified in the Joint U.S. Army, U.S. Marine Corps Operational Requirements Document (JORD) for the Advanced Towed Cannon System but deferred during Engineering Manufacturing and Development due to technology maturity, cost and schedule as well as government sustainment activities requiring RDTE. This includes a digital direct fire sight for the Digital Fire Control System; low temperature, high density power solutions; and electric elevation drives and auto loader to achieve full operational requirements. Efforts in FY2015-FY2018 will be centered on researching technical solutions while efforts in FY2019-FY2020 will involve developing technology demonstrator prototypes.

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

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
<b>Title:</b> Management Services	-	0.194	0.197
<b>Description:</b> Funding supports management services within the Program Management Office, Towed Artillery Systems			
<b>FY 2015 Plans:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Army							<b>Date:</b> February 2015				
<b>Appropriation/Budget Activity</b> 2040 / 5			<b>R-1 Program Element (Number/Name)</b> PE 0604854A / <i>Artillery Systems - EMD</i>			<b>Project (Number/Name)</b> 509 / <i>LIGHTWEIGHT 155M HOWITZER</i>					
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>							<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>		
Funding supports management and coordination with the Armaments Research Development and Engineering Center to conduct trade studies to determine the best material solution for the digital direct fire sight and low temperature, high density power solutions.											
<b>FY 2016 Plans:</b> Funding supports management and coordination with the Armaments Research Development and Engineering Center to conduct modeling, simulation, analysis and trade studies to characterize the M777A2 for performance improvements. The data generated from these efforts will be used to establish a database to support government sustainment activities as well as future technology demonstrations focused on achieving current JORD objective capabilities as well as Force 2025 and Beyond Initiatives.											
<b>Title:</b> Product Development <b>Description:</b> Funds engineering support from the Armaments Research Development and Engineering Center  <b>FY 2015 Plans:</b> Funding supports conducting trade studies to determine the best material solution for digital direct fire sight for the Digital Fire Control System and low temperature, high density power solutions to achieve full operational requirements.  <b>FY 2016 Plans:</b> Funding will support modeling, simulation, analysis and trade studies to characterize the M777A2 for performance improvements. ARDEC will establish a technical database that will support PM initiated sustainment activities and future technology demonstrations. Begins preliminary designs efforts.							-	1.717	1.756		
<b>Accomplishments/Planned Programs Subtotals</b>							-	1.911	1.953		
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u> <u>Base</u>	<u>FY 2016</u> <u>OCO</u>	<u>FY 2016</u> <u>Total</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• M777 Mods: <i>M777 Mods - Modification of Weapons and Other Combat Vehicles SSN GZ1700</i>	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-	-	76.626
<b>Remarks</b>											
Procurement Funding supports active retrofits for previously contracted Digital Fire Control System components, addressing obsolescence.											
<b>D. Acquisition Strategy</b>											
This will be a collaborative effort between the Program Management Office, Towed Artillery Systems, and the Armaments Research Development and Engineering Center at Picatinny Arsenal.											

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2016 Army		<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604854A / <i>Artillery Systems - EMD</i>	<b>Project (Number/Name)</b> 509 / <i>LIGHTWEIGHT 155M HOWITZER</i>

### E. Performance Metrics

N/A

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2016 Army</b>													<b>Date:</b> February 2015		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0604854A / <i>Artillery Systems - EMD</i>					<b>Project (Number/Name)</b> 509 / <i>LIGHTWEIGHT 155M HOWITZER</i>					

  

<b>Management Services (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Program Management	Sub Allot	Program Management Towed Artillery Systems : Picatinny Arsenal, NJ	0.000	-		0.194	Feb 2015	0.197	Oct 2015	-		0.197	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	-		0.194		0.197		-		0.197	-	-	-

  

<b>Product Development (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Engineering	MIPR	Armaments Research & Developmet Center : Picatinny Arsenal, NJ	0.000	-		1.717	Feb 2015	1.756	Oct 2015	-		1.756	Continuing	Continuing	Continuing
<b>Subtotal</b>			0.000	-		1.717		1.756		-		1.756	-	-	-

  

<b>Prior Years</b>	<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	0.000	-		1.911		1.953		-	1.953	-	-	-

  

**Remarks**

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army																							Date: February 2015					
Appropriation/Budget Activity										R-1 Program Element (Number/Name)								Project (Number/Name)										
2040 / 5										PE 0604854A / Artillery Systems - EMD								509 / LIGHTWEIGHT 155M HOWITZER										
Event Name	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Feasibility and Concept Studies																												
Preliminary Designs																												
Fabrication Prototypes																												
Technology Demonstrator																												
Test and Evaluation																												

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Army			<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604854A / <i>Artillery Systems - EMD</i>	<b>Project (Number/Name)</b> 509 / <i>LIGHTWEIGHT 155M HOWITZER</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Feasibility and Concept Studies	1	2015	2	2016
Preliminary Designs	2	2016	1	2018
Fabrication Prototypes	2	2018	2	2019
Technology Demonstrator	3	2019	2	2020
Test and Evaluation	3	2020	2	2021



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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) 516 / Paladin/FAASV			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
516: <i>Paladin/FAASV</i>	-	117.241	-	-	-	-	-	-	-	-	-	117.241
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

Starting FY15, 0604854A, project 516 has been moved to new APE 0600609A, project ED8.

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

Paladin Integrated Management (PIM) is an ACAT 1D Acquisition Program. The program will replace the current fleet of M109 Family of Vehicles (FoV) consisting of the M109A6 Paladin Self Propelled Howitzer and M992A2 Field Artillery Ammunition Supply Vehicle (FAASV). PIM is an Army Modernization Program that addresses a critical capability gap created by the Non-Line of Sight Cannon termination in June of 2009 as well as obsolescence and Space, Weight, and Power (SWAP) issues in the M109 FoV current fleet. The PIM system integrates current Bradley Fighting Vehicle suspension and drive train items, Future Combat Systems (FCS) developed Electric Gun Drive systems and current fleet (M109A6) fire control systems into a new chassis providing better force protection, survivability and increases electrical power over the current fleet. PIM is a two vehicle system: Self Propelled Howitzer (SPH) and Carrier Ammunition Tracked (CAT). The SPH has all characteristics listed above. The CAT utilizes all these same components and traits less those that relate directly to the cannon system. The PIM system replaces the current M109 FoV on a one for one basis, in the cannon fires battalions in the Armored Brigade Combat Team Formations and the Echelons above Brigade (EAB). The overall intent is to increase Soldier force protection, vehicle survivability, provide an appropriate amount of SWAP capacity to add future capabilities, increase vehicle reliability, reduce life cycle costs and extend the life of the M109 FoV through FY 2050.

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

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
<b>Title:</b> Paladin/FAASV Integrated Management (PIM) Development  <b>Description:</b> Funding is provided for the following developmental efforts:  <b>FY 2014 Accomplishments:</b> Continued developmental fixes, sub-system qualification, and testing for production. Continued engineering development for Corrective Actions, Producibility, and Obsolescence (CPOs) and Software Phase III efforts required for LRIP production-continue Software Phase II maintenance efforts for CPO functionality. Executed Software Developmental Qualification Testing (DQT) for Software Phase III. Developed of an Objective Underbelly Kit per guidance of the Defense Acquisition Executive (DAE.) Continued development of logistical support products (manuals and training) required for fielding. Execution of First Article Testing (FAT) of production vehicles.	84.969	-	-
<b>Title:</b> Test and Evaluation  <b>Description:</b> Funding is provided for the following government test efforts:  <b>FY 2014 Accomplishments:</b>	4.900	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army								Date: February 2015			
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) 516 / Paladin/FAASV			
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2014	FY 2015	FY 2016	
Planned and executed continued DT including qualification of subsystems, system safety, performance testing, live fire exploitation testing, and logistics demonstration. Key developmental tests events included verification of CPO changes to validate the LRIP production configuration. This testing consisted of full load cooling test, software DQT, and automotive and firing performance testing on a production representative vehicle. Key live fire test events included final exploitation testing on a BH&T and production representative vehicle, component ballistic testing, and testing of the Automatic Fire Extinguisher System (AFES). Logistics demonstration is integrated with the test plan as CPO changes are verified.											
Title: Program Management								18.455	-	-	
Description: Funding is provided for the following program management support:											
FY 2014 Accomplishments: Government System Engineering and Program Management for the total program including: OEM management consisting of weekly, monthly, and quarterly program management reviews; continued contract execution management for the EMD phase contract until completion of all efforts in FY 16. Managed Government Developmental Test and Evaluation program. Management of the program cost, schedule, and performance metrics including making programmatic trade-off decisions. Management of Other Governmental Agencies (OGAs) that supported the PIM program.											
Title: Training								5.864	-	-	
Description: Funding is provided for the following training government and contractor efforts:											
FY 2014 Accomplishments: Continue PIM training developmental efforts that support TADSS for crew and maintainers, NET, and fielding plans.											
Title: Data								3.053	-	-	
Description: Funding is provided for the following data contractor efforts:											
FY 2014 Accomplishments: Contractor Technical Data Package Updates and Technical Publications											
Accomplishments/Planned Programs Subtotals								117.241	-	-	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• Paladin/FAASV: Paladin/FAASV Mod	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-	109.000	410.027

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army									Date: February 2015		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) 516 / Paladin/FAASV			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• Paladin Integrated Management (PIM): PIM Mod In Service	199.477	-	-	-	-	-	-	-	-	-	199.477
Remarks											
Starting FY15, 0604854A, project 516 has been moved to new APE 0600609A, project ED8.											
D. Acquisition Strategy											
The PIM Program was initiated on 16 August 07 under the BAE Systems, Inc., System Technical Support (STS) Contract W56HZV-07-C-0096. Subsequent work directives were awarded under BAE STS contract W56HZV-07-C-0256 to further define the configuration of the PIM vehicles. On 14 August 2009, a Research, Development, Test and Evaluation (RDT&E) Contract W56HZV-09-C-0550 was awarded to BAE Systems Inc. for the Prototype Development and Fabrication of 7 prototype vehicles (5 PIM Self Propelled Howitzer (SPH) Systems and 2 PIM Carrier Ammunition Tracked (CAT) vehicles). A Comprehensive Contract Modification (CCM) award to the RDT&E contract was accomplished on 6 Jan 2012. This modification allows for the completion of the design engineering and initial developmental test portion of the Engineering and Manufacturing Development (EMD) Phase and transfers the system responsibility for the program from the Government to BAE Systems Inc. An additional modification to the EMD contract was awarded on 18 Jul 2014 to extend the contract until 31 Mar 2017 to cover contractor support to Production Qualification Testing (PQT), the Logistics Demonstration, and Initial Operational Test & Evaluation (IOT&E). The awarded Low-Rate Initial Production (LRIP) contract is of a Fixed Price Incentive Firm Target (FPIF) contract type for procurement of vehicles with a period of performance running from Nov 2013 through approximately Jun 2019. The LRIP contract will provide for three LRIP years with the initial base year including 19 SPHs and 18 CATs and the remaining two option years with 18 sets and 30 sets, respectively (each set consisting of one each SPH and CAT) of PIM vehicles. The Full Rate Production (FRP) contract is planned as a FPIF contract that converts to a Firm Fixed Price (FFP) contract after the second year of FRP. The FRP contract provides for the remaining PIM vehicles to fulfill the requirement up to the Army Acquisition Objective of 580 sets.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army												Date: February 2015			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) 516 / Paladin/FAASV					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
PMO Support	MIPR	PM Paladin/FAASV : Picatinny, NJ/ TACOM	106.191	18.455	Dec 2013	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			106.191	18.455		-		-		-		-	-	-	-
Product Development (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Training	SS/CPIF	BAE Systems : York, PA	6.428	5.864	Nov 2013	-		-		-		-	Continuing	Continuing	Continuing
Data	SS/CPIF	BAE : York, PA	6.788	3.053	Nov 2013	-		-		-		-	Continuing	Continuing	Continuing
Small Business Innovative Research/Small Business Technology Transfer Program	Various	TACOM : Warren, MI	3.668	-		-		-		-		-	Continuing	Continuing	Continuing
PIM Development - Contractor	SS/CPIF	BAE, Systems : York, PA	487.871	84.969	Nov 2013	-		-		-		-	Continuing	Continuing	Continuing
PIM Development - Government	MIPR	Various OGAs : Various	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			504.755	93.886		-		-		-		-	-	-	-
Remarks															
Funding has been moved to new PE 650609 and PROJECT ED8.															
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Level Testing	Various	Various OGAs : Various	45.991	4.900	Feb 2014	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			45.991	4.900		-		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army											Date: February 2015			
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD					Project (Number/Name) 516 / Paladin/FAASV				
	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals	656.937	117.241		-		-		-		-	-	-	-	

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Army														Date: February 2015														
Appropriation/Budget Activity 2040 / 5										R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD								Project (Number/Name) 516 / Paladin/FAASV										
Event Name	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Contractor Testing																												
Government Development Test																												
(1) Milestone C																												
Low Rate Initial Production Contract																												
Low Rate Initial Production Deliveries																												
Full Up System Live Fire Test																												
IOTE																												
(2) Full Rate Production Decision																												

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Army			<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604854A / <i>Artillery Systems - EMD</i>	<b>Project (Number/Name)</b> 516 / <i>Paladin/FAASV</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Contractor Testing	1	2011	4	2015
Government Development Test	3	2011	4	2016
Milestone C	1	2014	1	2014
Low Rate Initial Production Contract	1	2014	2	2016
Low Rate Initial Production Deliveries	2	2015	3	2018
Full Up System Live Fire Test	3	2015	4	2016
IOTE	4	2016	4	2016
Full Rate Production Decision	2	2017	2	2017