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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)					PE 0604622A I Family of Heavy Tactical Vehicles							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	17.975	28.310	12.913	-	12.913	7.624	6.935	6.907	6.774	-	87.438
659: Family Of Hvy Tac Veh	-	15.046	26.262	9.304	-	9.304	2.955	2.958	2.960	2.963	-	62.448
VR5: TWV Protection Kits	-	2.929	2.048	3.609	-	3.609	4.669	3.977	3.947	3.811	-	24.990

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

Note

FY15 decrement for higher priorities.

A. Mission Description and Budget Item Justification

This program element aligns system development and demonstration of Heavy Tactical Vehicles with Future Modular Force requirements to support combat and combat support missions. These missions include the following: line haul, local haul, and unit resupply. These trucks transport water, ammunition, and general cargo over all terrain and throughout the battle-space. Funding will also be used for developing the Army's next generation of tactical trucks, as part of the Army's Tactical Wheeled Vehicle Modernization Strategy. Funding in Project 659 supports the Family of Heavy Trucks (FHTV) Heavy Dump Truck (HDT). Funding in Project VR5 supports periodic, evolutionary upgrade of survivability and crew protection for Heavy Tactical Vehicles as described in the Long Term Protection Strategy.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	3.077	21.321	14.511	-	14.511
Current President's Budget	17.975	28.310	12.913	-	12.913
Total Adjustments	14.898	6.989	-1.598	-	-1.598
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments 1	14.898	6.989	-1.598	-	-1.598

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles				Project (Number/Name) 659 / Family Of Hvy Tac Veh			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
659: Family Of Hvy Tac Veh	-	15.046	26.262	9.304	-	9.304	2.955	2.958	2.960	2.963	-	62.448
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note												
Family of Heavy Tactical Vehicles (FHTV) Heavy Dump Truck (HDT)												
Mine Resistant Ambush Protected (MRAP) Vehicle												
A. Mission Description and Budget Item Justification												
The Heavy Dump Truck (HDT) supports construction projects by loading, transporting and dumping payloads of sand and gravel aggregates, crushed rock, hot asphalt mixes, earth, clay, rubble, large boulders and other materials up to gross vehicle weight rating to job sites under worldwide climatic conditions. The HDT also serves as a quarry truck for the quick transport of bulk raw earth material to and from the crushing screening and washing plant and the asphalt mixing plant. The HDT also serves as a transportation asset for organizational equipment. The HDT is LTAS compliant with armored protection and includes a material control system coupled with the heated bed and Command, Control, Communications, Computers, and Intelligence (C4I) electrical architecture.												
APO MRAP will execute R&D funding on survivability, mobility and storage technologies to improve current capabilities.												
The HDT is required to replace the M917 and F5070 HDT.												
FY15 funding will be used for test assets, PM support, and various testing for the HDT.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Heavy Dump Truck (HDT) Articles: Description: Truck Test Assets FY 2014 Plans: Test and Evaluation									-	5.410	-	
									-	-	-	
Title: Test and Evaluation (HDT)									-	3.545	6.564	
Articles:									-	-	-	

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Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) 659 / Family Of Hvy Tac Veh		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
Description: Test and Evaluation					
FY 2014 Plans: Test and Evaluation					
FY 2015 Plans: Test and Evaluation					
Title: Program Support (HDT)			0.046	0.950	0.150
Articles:			-	-	-
Description: Program support.					
FY 2013 Accomplishments: Funds will provide program support to the Heavy Tactical Vehicles family.					
FY 2014 Plans: Funds will provide program support to the Heavy Tactical Vehicles family.					
FY 2015 Plans: Funds will provide program support to the Heavy Tactical Vehicles family.					
Title: Prototype Design and Integration (HDT)			-	9.367	2.590
Articles:			-	-	-
Description: Prototype Design and Integration					
FY 2014 Plans: Prototype Design and Integration					
FY 2015 Plans: Prototype Design and Integration					
Title: Maxx Pro & MATV			15.000	6.990	-
Articles:			-	-	-
Description: Maxx Pro & MATV Test and Development					
FY 2013 Accomplishments:					

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Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles				Project (Number/Name) 659 / Family Of Hvy Tac Veh			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2013	FY 2014	FY 2015	
Maxx Pro & MATV Test and Development											
FY 2014 Plans: Maxx Pro & MATV Test and Development											
Accomplishments/Planned Programs Subtotals								15.046	26.262	9.304	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• Family of Heavy Tactical Vehicles: <i>Family of Heavy Tactical Vehicles (FHTV) DA0500</i>	52.863	14.731	28.425	-	28.425	33.449	45.562	7.237	0.007	Continuing	Continuing
• Truck, Dump: <i>Truck, Dump, 20T D16001</i>	-	-	-	-	-	22.926	26.970	29.982	22.958	Continuing	Continuing
• Mine Resistant Ambush Protected: <i>Mine Resistant Ambush Protected (MRAP) Mods (D03002)</i>	158.804	373.240	14.731	-	14.731	7.252	1.991	-	-	-	556.018
Remarks											
D. Acquisition Strategy											
Funds will provide test assets, design and integration of Military specific requirements; test and evaluation; and program management in support of FHTV - Heavy Dump Truck (HDT).											
Funds will provide test and evaluation, armor and underbody development and technology improvements in support of MRAP Vehicles - Maxx Pro and M-ATV.											
E. Performance Metrics											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles				Project (Number/Name) 659 / Family Of Hvy Tac Veh					
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
HDT Prototype Design and Integration	C/FFP	TBD : TBD	0.000	-		9.367	May 2015	2.590	May 2015	-		2.590	-	11.957	-
Subtotal			0.000	-		9.367		2.590		-		2.590	-	11.957	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Heavy Dump Truck (HDT) Test Assets	C/FFP	TBD : TBD	0.000	-		5.410	May 2015	-		-		-	-	5.410	-
Maxx Pro & MATV Development	MIPR	Various : Various	0.000	-		5.000	Apr 2014	-		-		-	-	5.000	-
Maxx Pro & MATV Armor Development	MIPR	Various : TARDEC/ Various	0.000	8.597	Aug 2013	-		-		-		-	-	8.597	-
Subtotal			0.000	8.597		10.410		-		-		-	-	19.007	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
HDT Program Support	MIPR	TACOM : Warren, MI	0.000	0.046	Dec 2012	0.950	Oct 2014	0.150	Dec 2014	-		0.150	Continuing	Continuing	Continuing
Maxx Pro & MATV Program Support Costs	MIPR	TARDEC : Warren, MI	0.000	2.721	Aug 2013	-		-		-		-	-	2.721	-
Subtotal			0.000	2.767		0.950		0.150		-		0.150	-	-	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
HDT Test and Evaluation	MIPR	TBD : TBD	0.000	-		3.545	Jul 2015	6.564	Oct 2015	-		6.564	Continuing	Continuing	Continuing

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Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles				Project (Number/Name) 659 / Family Of Hvy Tac Veh					

Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Maxx Pro & MATV Test	MIPR	Various : Various	0.000	3.682	Aug 2013	-		-		-		-	-	3.682	-
Maxx Pro & MATV Test	MIPR	Various : TARDEC/ Various	0.000	-		1.990	Apr 2014	-		-		-	-	1.990	-
Subtotal			0.000	3.682		5.535		6.564		-		6.564	-	-	-

	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	15.046	26.262	9.304	-	9.304	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army																Date: March 2014			
Appropriation/Budget Activity 2040 / 5								R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>								Project (Number/Name) 659 / <i>Family Of Hvy Tac Veh</i>			

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Heavy Dump Truck (HDT) Test Assets																												
HDT Program Management Support																												
HDT Prototype Design and Integration																												
HDT Testing																												
Maxx Pro & MATV Development																												
Maxx Pro & MATV Test FY14																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>	Project (Number/Name) 659 / <i>Family Of Hvy Tac Veh</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Heavy Dump Truck (HDT) Test Assets	4	2015	4	2015
HDT Program Management Support	1	2013	4	2015
HDT Prototype Design and Integration	4	2015	1	2016
HDT Testing	2	2016	4	2016
Maxx Pro & MATV Development	2	2014	2	2015
Maxx Pro & MATV Test FY14	2	2014	2	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army										Date: March 2014		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles				Project (Number/Name) VR5 / TWV Protection Kits			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
VR5: TWV Protection Kits	-	2.929	2.048	3.609	-	3.609	4.669	3.977	3.947	3.811	-	24.990
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This program element supports periodic, evolutionary upgrade of survivability and crew protection for Heavy Tactical Vehicles (HTV) as described in the Tactical Wheeled Vehicle (TWV) Strategy and individual variants' Capability Production Documents. The upgrades will leverage the Army Technology Objective's (ATO) survivability and Army Research Laboratory's (ARL) research and development activities to develop and evaluate kits which increase the protection level of the HTV to the MRAP 1.1 level while anticipating changing threat environments, protection gaps, or improving the operating performance, efficiency, and reliability through armor weight reduction.												
FY15 funding will be used to develop and test an armored solution for the newly produced Heavy Equipment Transporter (HET).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
Title: Design and Build Armor Kits. Articles: Description: Design and build prototype kits for the Heavy Tactical Vehicle systems. FY 2014 Plans: Design and build prototype kits that represent production alternatives in terms of form, fit, and function sufficient to validate the required protection levels and kit interface to the vehicle platform. FY 2015 Plans: Design and build prototype kits in terms of form, fit, and function sufficient to validate the required protection levels and kit interface to the vehicle platform.										-	1.878	2.939
										-	-	-
Title: Test and Evaluation. Articles: Description: Funding is provided for the following effort. FY 2013 Accomplishments:										2.752	-	0.500
										-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army								Date: March 2014			
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles				Project (Number/Name) VR5 / TWV Protection Kits			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2013	FY 2014	FY 2015	
Continuation of test and evaluation of Tactical Wheel Vehicle protection kits. It consists of ballistic evaluations, automotive performance, and durability mileage sufficient to assess kit performance against established vehicle and ballistic requirements. Testing will determine capabilities and limitations of the protection kit integration onto the vehicle platform.											
FY 2015 Plans: Validation of HUSK design in preparation of Full Materiel Release.											
Title: Program Management											
Description: Subject matter engineering matrix support for ballistics advisement.											
FY 2013 Accomplishments: Program Management support											
FY 2014 Plans: Program Management support											
FY 2015 Plans: Program Management support											
Articles:								0.177 -	0.170 -	0.170 -	
Accomplishments/Planned Programs Subtotals								2.929	2.048	3.609	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• 005: Family of Heavy Tactical Vehicles (FHTV) (DA0500)	52.863	14.731	28.425	-	28.425	33.449	45.562	7.237	0.007	-	182.274
• 003: Family of Medium Tactical Vehicles (FMTV) (D15500)	343.813	223.910	-	-	-	-	248.944	249.122	-	-	1,065.789
• 000: Tactical Wheeled Protection Kits - D04003	69.072	17.000	38.226	-	38.226	45.700	45.805	45.838	45.841	-	307.482
Remarks											
D. Acquisition Strategy											
All funds are dedicated to creating an armor solution to develop MRAP 1.1-level armor for the HET A1.											

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) VR5 / TWV Protection Kits
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles				Project (Number/Name) VR5 / TWV Protection Kits					
Management Services (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SBIR/STTR	C/TBD	WARREN, MI : TBD	0.058	-		-		-		-		-	-	0.058	-
Subtotal			0.058	-		-		-		-		-	-	0.058	-
Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Analysis of Alternatives/ Design and Build Armor Kits	SS/CPFF	OshKosh Truck Corporation : OshKosh, WI	0.173	-		-		-		-		-	Continuing	Continuing	Continuing
Design and Build	MIPR	TBD : TBD	0.973	-		1.878	Mar 2014	2.939	Oct 2014	-		2.939	-	5.790	-
Vulnerability Modeling and Simulation	MIPR	Army Research Lab : Adelphi, MD	0.120	-		-		-		-		-	Continuing	Continuing	Continuing
Survivability Modeling & Simulation	MIPR	TARDEC : Warren, MI	0.250	-		-		-		-		-	-	0.250	-
Subtotal			1.516	-		1.878		2.939		-		2.939	-	-	-
Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Support	MIPR	TARDEC : Warren, MI	0.280	0.177		0.170	Jul 2014	0.170	Jul 2015	-		0.170	-	0.797	-
Subtotal			0.280	0.177		0.170		0.170		-		0.170	-	0.797	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	MIPR	Various Locations : Various Locations	0.000	2.752		-		0.500	Jun 2015	-		0.500	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army												Date: March 2014		
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>				Project (Number/Name) VR5 / <i>TWV Protection Kits</i>				

Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			0.000	2.752		-		0.500		-		0.500	-	-	-

	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1.854	2.929	2.048	3.609	-	3.609	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Army										Date: March 2014									
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles					Project (Number/Name) VR5 / TWV Protection Kits									

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Design and Build Armor Kits																												
Test and Evaluation																												
Program Support																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>	Project (Number/Name) VR5 / <i>TWV Protection Kits</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Design and Build Armor Kits	2	2012	4	2020
Test and Evaluation	1	2013	3	2017
Program Support	2	2012	4	2020