EXHIBIT R-2, RDT&E Budget Item Justification				DATE: May 2009				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT (PE) NAME AND NO. **0206624M Marine Corps Combat Services Support**							
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total			
Total PE Cost	**124.955**	**9.620**	**17.057**	**0.000**	**17.057**			
C0201 Logistical Vehicle System Replacement (LVSR)	**5.571**	**4.141**	**1.500**	**0.000**	**1.500**			
C2316 Combat Service Support Engineering Equipment	**114.069**	**0.572**	**10.306**	**0.000**	**10.306**			
C2509 Motor Transport Modernization	**1.790**	**0.601**	**2.131**	**0.000**	**2.131**			
C2929 Testing Measuring Diagnostic Equip (TMDE) & SE	**3.525**	**1.981**	**1.494**	**0.000**	**1.494**			
C9872 Autonomic Logistics	**0.000**	**2.325**	**0.000**	**0.000**	**0.000**			
C9C90 MTVR Mod	**0.000**	**0.000**	**1.626**	**0.000**	**1.626**			
Quantity of RDT&E Articles								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program element (PE) provides funding for Marine Air-Ground Task Force requirements for Combat Service Support equipment improvement. It will enhance combat breaching capabilities of the ground combat elements, logistics, maintenance and transportation. The PE also provides improvements in all areas of Combat Service Support Equipment Vehicles by determining the replacement for the heavy, medium and light fleet vehicles. Alternative Power Sources for Communications Equipment (APSCE) is a suite of devices that provide the commander with the capability to use existing power to operate his communication equipment, computers and peripheral equipment instead of using batteries or fossil fuel generators. The Marine Corps Family of Automatic Test Systems (ATS), formerly TETS, provides automatic testing capability for use by technicians both in garrison and forward edge of Battlefield.

B. PROGRAM CHANGE SUMMARY

	FY2008	FY2009	FY2010
Funding:			
FY 2009 President's Budget:	12.750	9.646	3.396
FY 2010 President's Budget:	124.955	9.620	17.057
Total Adjustments:	112.205	-0.026	13.661
Summary of Adjustments:			
a. Congressional Adjustments:		-0.019	
- FY08 GWOT:	111.210		
b. SBIR/STTR Transfer:	-1.623		
c. Program Adjustments:	2.618	-0.002	13.871
d. Rate/Misc Adjustments:	0.000	-0.005	-0.210
Subtotal	112.205	-0.026	13.661

EXHIBIT R-2a, RDT&E Project Justification					DATE: May 2009			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206624M Marine Corps Combat Services Support**				PROJECT NUMBER AND NAME **C0201 Logistical Vehicle Sys Replacement (LVSR)**			
	FY 2008	FY 2009	FY2010	FY2010OCO	FY2010 TOT			
	5.571	**4.141**	**1.500**	**0.000**	**1.500**			
RDT&E Articles Qty								

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Logistical Vehicle System Replacement (LVSR) program will replace the current Logistical Vehicle System (LVS) fleet. This vehicle will increase mobility, maintainability, and reliability for the heavy fleet, while increasing off-road payload. Three LVSR variants will replace the current five LVS variants. The Cargo variant will be fielded prior to the LVSR Tractor and Wrecker variants which are options on the LVSR cargo variant production contract. The Flatrack Refueling Capability (FRC) program will replace the M970 Semi-Trailer refueling in both the Force Service Support Group (FSSG) and the Marine Air Wings (MAWs) for ground refueling missions.

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**2.297**	**0.300**	**0.000**	**0.000**
RDT&E Articles Qty				
LVSR: Test and Evaluation.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.150**	**0.200**	**0.000**
RDT&E Articles Qty				
LVSR: Engineering/Program Management				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**2.986**	**0.000**	**0.000**
RDT&E Articles Qty				
LVSR: Engineering Support. Tractor/Wrecker				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**2.537**	**0.000**	**1.300**	**0.000**
RDT&E Articles Qty				
LVSR: Operational Test and Evaluation.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.737**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty	1			
FRC: Prototype Development				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.605**	**0.000**	**0.000**
RDT&E Articles Qty				
FRC: Developmental Test				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.100**	**0.000**	**0.000**
RDT&E Articles Qty				
FRC: Program Management and Support Costs				
(U) Total $	**5.571**	**4.141**	**1.500**	**0.000**

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206624M Marine Corps Combat Services Support**	PROJECT NUMBER AND NAME **C0201 Logistical Vehicle Sys Replacement (LVSR)**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2008	FY 2009	FY 2010	FY2010 OCO
(U) PMC Line (BLI# 509300) LVSR	24.758	273.051	217.390	59.219

(U) Related RDT&E:

(U) PE 0206623M Marine Corps Ground Combat Supporting Arms Systems
(U) PE 0603640M Marine Corps Advanced Technology Demonstration
(U) PE 0604804A Logistics and Engineering Equip/Engr Development
(U) PE 0206313M Marine Corps Communications

(U) D. ACQUISITION STRATEGY: The Logistics Vehicle System Replacement (LVSR) program consists of two separate phases. During the first phase, the System Development and Demonstration (SD&D) phase, two contracts were awarded to procure prototypes for developmental testing. The winner of the SD&D phase was awarded a production contract to produce Low Rate Initial Production (LRIP) vehicles for operational testing. The other two LVSR variants, the Tractor and Wrecker variants have been designed, built and are being tested under the LVSR Cargo production contract.

(U) D. ACQUISITION STRATEGY: The Flatrack Refueling Capability (FRC) program original acquisition strategy consisted of a joint procurement contract with the US Army. FY07 RDTE funds were used to procured two protoypes developed by DSR Systems Inc. After development and initial testing the Army decided not to procure the DSR system. Our revised acquisition strategy will only include US Marine Corps requirements. Further anaylsis has resulted in the new acquistion strategy focused to contract for Commerically available Items via a Small Business Set Aside procurement. These funds will procure one prototype for Developmental Testing and Field Users Evaluation (FUE). After successfully testing we will procure the AO.

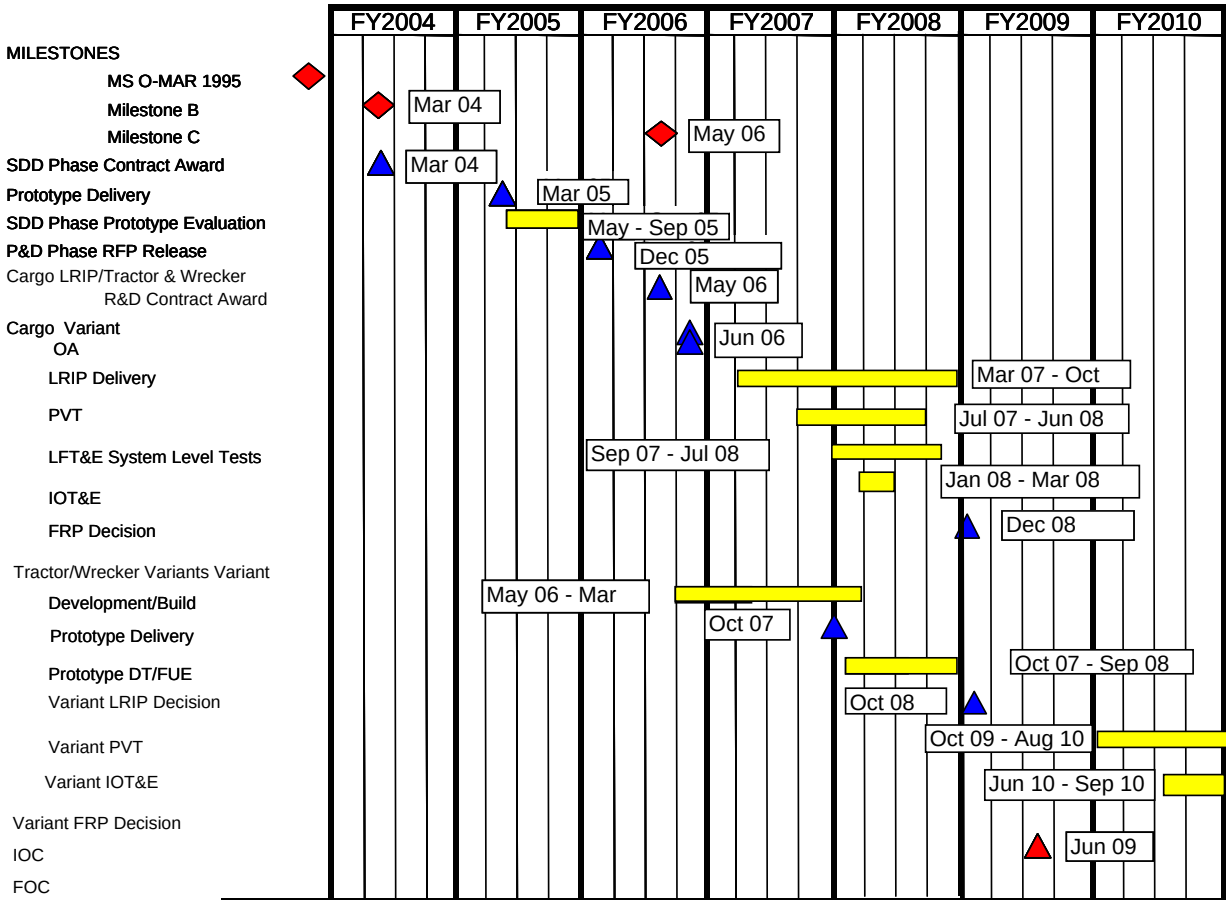
(U) E. MAJOR PERFORMERS:

Mar '04	American Truck Corp	3 Vehicle Prototypes
Mar '04	Oshkosh Truck Corp	3 Vehicle Prototypes
May'07	DSR System Incorporated	2 Prototypes

Exhibit R-3 Cost Analysis					DATE: May 2009									
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NUMBER AND NAME									
RDT&E, N /BA 7 Operational Sys Dev		**0206624M Marine Corps Combat Servic**			**C0201 Logistical Vehicle System Replacement (LVSR)**									
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
LVSR Variant Prototypes	RCP	MCSC Quantico, VA	16.793	0.000		0.000		0.000						
LVSR Source Selection	RCP	MCSC Quantico, VA	0.248	0.000										
FRC Prototypes	RCP	DSR Systems Incorporat	3.920	0.000		0.000		0.000						
FRC Prototype	RCP	TBD	0.000	0.637	09/08	0.000		0.000						
Subtotal Product Dev			**20.961**	**0.637**		**0.000**		**0.000**						
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
LVSR Development Design & Test	MIPR	OshKosh, WI	0.175	0.000		0.000								
LVSR Variant Test	MIPR	TACOM, Warren, MI	0.110	0.000		0.000								
LVSR Corrosion Test	WR	NSWC Philadephia	0.140	0.000		0.000								
LVSR Development Test	MIPR	Aberdeen Test Center	4.220	1.425	03/08	0.000								
LVSR Development Test	RC	OshKosh, WI	0.000	1.622	10/07	0.000								
LVSR Development & Test	WR	NSWC Indian Head, MD	0.024	0.000		0.000								
FRC Modeling and Simulation	RCP	NSWC, Carderock, MD	0.355	0.000		0.000								
FRC Developmental T&E	RCP	NATC, NV	0.000	0.000		0.605	03/09	0.000						
Subtotal Developmental Cost			**5.024**	**3.047**		**0.605**		**0.000**						
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
LVSR Engineer & Tech Support	WR	NTSC, Orlando, FL	0.194	0.000		0.000								
LVSR Engineer Change Support	RCP	MCSC Quantico, VA	0.569	0.000		2.986	12/08							
Subtotal Engineer & Tech Support			**0.763**	**0.000**		**2.986**		**0.000**						
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
LVSR Operational T&E	WR	MCOTEA	1.023	1.357	12/07	0.300	12/08	1.300	04/10					
LVSR Operational T&E	WR	Fort Greely and 29 Palm	0.000	0.100	01/08									
LVSR Operational T&E	RCP	OshKosh, WI		0.330	04/08									
Subtotal Operational Support			**1.023**	**1.787**		**0.300**		**1.300**						
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
LVSR Contractor Suppt	RCP	TBD	4.079	0.000				0.100	12/09					
LVSR Prgrm Mgmnt Spt	WR	MCSC Quantico, VA	0.798	0.000		0.150	12/08	0.100	12/09					
FRC Contractor Suppt	RCP	Sverdrup, Dumfries, VA.	0.000	0.050	05/08	0.050	12/08							
FRC Prgrm Mgmnt Spt	WR	MCSC Quantico, VA	0.000	0.050	05/08	0.050	12/08							
Subtotal Management			**4.877**	**0.100**		**0.250**		**0.200**						
Remarks:														
Total Cost			**32.648**	**5.571**		**4.141**		**1.500**						

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206624M Marine Corps Combat Services Spt	C0201 Logistical Vehicle System Replacement (LVSR)

Logistical Vehicle System Replacement



Program Funding Summary (APPN, BLI #, NOMEN)	FY 2008	FY 2009	FY 2010
(U) RDT&E,N (C0201 LVSR)	4.834	3.436	1.500
(U) PMC Line (BLI# 509300) LVSR	24.758	273.051	276.609

LVSR SCHEDULE DETAIL				FY 2008	FY 2009	FY 2010				
Release RFP										
Source Selection										
Contract Award										
Cargo Prototype Delivery										
Operational Assessment										
Cargo Variant										
Milestone C										
LRIP Delivery										
PVT				3Q						
IOT&E				2Q						
FRP Decision				4Q						
Tractor/Wrecker Variants										
Prototype Delivery				1Q						
LRIP Delivery					4Q					
PVT						1Q				
IOT&E						3Q				
FRP Decision										
IOC					3Q					
FOC										

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	**0206624M Marine Corps Combat Services Spt**	PROJECT NUMBER AND NAME **C2316 Combat Services Support Engineering Equipment**

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total			
Project Cost	**114.069**	**0.572**	**10.306**	**0.000**	**10.306**			
RDT&E Articles Qty								

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project includes improvements in all areas of the M1A1 main battle tank. The M1A1 tank provides armor protected firepower to the USMC ground combat element. Its advanced thermal sights provide superior target acquisition and target identification. Coupled with its 120mm cannon and suite of ammunition, it is the primary armor defeating weapon on the battlefield, that also provides lethal supporting fires to supported maneuver units. Continued funding is required to address obsolescence and support pre-planned product improvements.

Corrosion Prevention and Control Program (CPAC): Funding will also address corrosion prevention and control issues for all Marine Corps tactical ground and ground support equipment. CPAC RDT&E funding will identify corrosion prone areas of legacy systems against new process, procedure and material solutions and new technologies for implementation during system acquisition. The M1A1 Survivability/Lethality Program effort includes critical product improvements including the application of additional armor, integration of counter-sniper fire technology, and improvement to existing secondary armanment systems. These improvements directly address Marine Corps Lessons Learned, after action reports, and will ensure maximan survivability.

Joint Assault Bridge (JAB) is an armored vehicle used for rapidly employing, short-gap, assault crossing system, capable of spanning natural and manmade obstacles up to 60 feet (18.29) while under fire for up to Military Load Class (MLC) 70-ton vehicles. The JAB consists of a rebuilt and upgraded M1A1 Tank chassis with existing MLC70 scissors bridge and a modified BR90 launcher. The JAB will provide the MAGTF with the capability to conduct assault and tactical wet and dry gap crossings in all types of climate and terrain, including slopes, trenches and vertical steps. The M1A1 based vehicle will provide the survivability, maintainability, and maneuverability required to keep pace with the maneuver force.

Mine Resistant Ambush Protected Vehicles (MRAP) increase the survivability and mobility of Joint Forces operating in hazardous fire areas. The expanded use of Improvised Explosive Devices (IED) of various types and the continual use of rocket propelled grenades (RPGs) and small arms fire (SAF) in the area of operation requires a vehicle capable of surviving the IED/RPG/SAF threat. Funding will provide ballistic/survivability objective and threshold testing and spiral upgrade development for these critical vehicles.

This spiral development project will enhance the capabilities of the Route Reconnaissance and Clearance (R2C) systems, a family of systems that is currently fielded in support of OIF via the UUNS process. This research and development effort will integrate future vehicles, robots, and associated equipment to provide standoff detection, marking, and neutralization of Explosive Hazards such as mines and Improvised Explosive Devices (IEDs). Enhancements for R2C will provide capabilities that are not found in the current inventory to defeat explosive hazards and will protect Marines and equipment while conducting route and area clearance operations. The integration of the next generation of armored security and support vehicles, Vehicle Mounted Mine Detectors (VMMDs), specialized robots, and a new suite of detection, marking, and neutralization systems will enable maneuver commanders to make timely and informed decisions in avoiding or neutralizing explosive hazards that impede their missions. Multiple detection and marking capabilities will detect a broader spectrum of explosive hazards and achieve higher overall effectiveness rates, while standoff and remote-controlled detection, marking, and neutralization capabilities will enhance force protection and system survivability. O

The Assault Breacher Vehicle (ABV) is a tracked combat engineer vehicle that provides deliberate and in-stride breaching capability of minefields and complex obstacles to the Ground Combat Element (GCE) of the Marine Air Ground Task Force (MAGTF). The ABV combines crew protection and vehicle survivability with the speed and mobility to keep pace with the maneuver force. The ABV is assigned to and employed by the Combat Engineer Battalion (CEB) as part of a synchronized operation to rapidly breach obstacles and create lanes for the MAGTF. FY2010 / FY2011 funding will be used to develop a Counter Improvised Explosive Device (CIED) capability, integrate an Insensitive Munition (IM) compliant line charge and integrate mine roller capability for the system. Standoff CIED capability from under armor will provide a significant increase in system flexibility and lethality while improving crew protection. An IM compliant line charge will permit safe loading of the charge while on the transport vessel well deck, enabling the ABV to begin performing its mission immediately upon touching the beach. Thus, the crew will not be forced to load the line charge on the shore, possibly under fire. Integration of a mine roller will increase the ABVs proofing capability, thus increasing mine cl

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**1.829**	**0.572**	**1.221**	**0.000**
RDT&E Articles Qty				

M1A1 Modifications: Continue joint participation and evaluation of prospective modifications including component enhancements, advanced fire control systems, survivability systems, safety modifications, mobility and others.

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.474**	**0.000**
RDT&E Articles Qty				

M1A1 Survivability/Lethality Program: Product improvements to the M1A1 Main Battle Tank, including added Hull armor, external mounted secondary armament, counter sniper protection systems, and other critical product improvements essential to maintain combat dominance.

EXHIBIT R-2a, RDT&E Project Justification			DATE: May 2009	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	**0206624M Marine Corps Combat Services Spt**		PROJECT NUMBER AND NAME **C2316 Combat Services Support Engineering Equipment**	
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**2.169**	**0.000**
RDT&E Articles Qty				
Corrosion Prevention and Control: The useful life of Marine Corps assets will be extended through a comprehensive CPAC RDT&E program aimed at identifying and certifying new corrosion control products, materials, processes and procedures for legacy and new acquisition.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**108.460**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
MRAP Mine Resistant Ambush Protected Vehicles: MRAP vehicles increase the survivability and mobility of Joint Forces operating in hazardous fire areas. The expanded use of Improvised Explosive Devices (IED) of various types and the continual use of rocket propelled grenades (RPGs) and small arms fire (SAF) in the area of operation requires a vehicle capable of surviving the IED/RPG/SAF threat. Funding will provide ballistic/survivability objective and threshold testing and spiral upgrade development for these critical vehicles.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**3.780**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
Joint Assault Bridge (JAB): Continue system integration with M1A1 tank chassis, BR90 bridge launcher, and MLC70 assault bridge. Continue Developmental testing.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**3.485**	**0.000**
RDT&E Articles Qty				
Route Reconnaissance and Clearance (R2C): Begin integration of future family of vehicles with enhanced mobility and survivability for route clearance teams. Integrate comprehensive detection capabilities that detect and mark metallic, low metallic, and non-metallic explosive hazards; detect and mark explosive hazards at deeper depths; detect and mark explosive hazards at standoff forward of a vehicle; detect and mark explosive hazards at standoff to the sides of routes; remotely detect and mark explosive hazards in confined areas; clear routes of light debris (trash, boxes, etc.) which will enable Marines to visually scan and locate explosive hazards; identify anomalies and changes in the environment at standoff forward of a vehicle; and view explosive hazards through an optical viewing capability at standoff. Integrate current robots that can provide standoff detection, marking, and neutralization; be prepared to align with the Small Unmanned Ground Vehicle (SUGV) when that platform becomes mature. Develop enhanced standoff neutralization capabilities.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.000**	**0.000**
RDT&E Articles Qty				
R2C: Program management and engineering support.				
COST ($ in Millions)	FY 2008	FY 2009	FY 20010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.429**	**0.000**
RDT&E Articles Qty				
R2C: Conduct Developmental Testing.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.528**	**0.000**
RDT&E Articles Qty				
ABV: Three (3) identified system improvements / upgrades: Improve Counter Improvised Explosive Device (CIED) capability, integrate Insensitive Munitions (IM) compliant line charge, and integration of a vehicle width mine roller.				
(U) Total $	**114.069**	**0.572**	**10.306**	**0.000**

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY		PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	**0206624M Marine Corps Combat Services Spt**	**C2316 Combat Services Support Engineering Equipment**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total
(U) PMC (BLI#206100) Mod Kits (M1A1 Mod	11.989	110.826	27.236	0.000	27.236
(U) PMC (BLI#206100) Safety Mods	80.523	1.653	0.000	0.000	0.000
(U) PMC (BLI#206100) M1A1 Survivability	0.000	0.000	0.637	0.000	0.637
(U) PMC (BLI#206100) Joint Assault Bridge	0.372	0.000	0.000	0.000	0.000
(U) PMC (BLI#209500) M1A1 FEP	14.674	14.663	0.000	0.000	0.000
(U) PMC (BLI#667000) CPAC	0.000	0.000	0.490	0.000	0.490
(U) PMC Line (BLI# 652000)EOD Sys-MRAP	1435.000	0.000	0.000	0.000	0.000
(U) PMC Line (BLI# 652000) EOD Sys- JAB	0.000	10.133	19.789	0.000	19.789
(U) PMC Line (BLI# 652000)EOD Sys- ABV	24.938	11.500	20.814	0.000	20.814
(U) PMC SPARES BLI# 700049 BA-7- ABV	1.521	0.559	0.000	0.000	0.000

(U) Related RDT&E:

(U) PE 0206623M Marine Corps Ground Combat Supporting Arms Systems
(U) PE 0603640M Marine Corps Advanced Technology Demonstration
(U) PE 0604804A Logistics and Engineering Equip/Engr Development
(U) PE 0206313M Marine Corps Communications

(U) D. ACQUISITION STRATEGY:

(U) The **M1A1 MODIFICATION** Program leverages Army developmental programs to create a system that more readily meets Marine Corps requirements. Modification includes safety, reliability, corrosion control, and technology up-grades to meet Marine Corps requirements. M1A1 Mods will exercise options on existing contracts of varying types to conduct research and analysis associated with the development of modifications and corrosion prevention to the M1A1 Tank and supporting platforms.

(U) The **M1A1 Survivability/Lethality Program** will utilize Army initiatives and programs as much as possible, but will also involve unilateral USMC efforts to research, develop and acquire best value counter sniper protection systems. The program will use both in house contracting activities as well as other

(U) **CPAC Program** The Program will execute the RDT&E Program through direct allocation of funding to the Naval Surface Warfare Center - Carderock Division Corrosion Research and Engineering Branch for comprehensive program aimed at identifying and certifying new corrosion control products, materials, processes and procedures for legacy and new acquisition.

(U) **Joint Assault Bridge (JAB):** Begin system integration with M1A1 tank chassis, BR90 bridge launcher, and MLC70 assault bridge to build first article JAB demonstrator. JAB is an armored vehicle used for rapidly employing, short-gap, assault crossing system, capable of spanning natural and manmade obstacles up to 60 feet (18.29) while under fire for up to Military Load Class (MLC) 70-ton vehicles. The JAB consists of a rebuilt and upgraded M1A1 Tank chassis with existing MLC70 scissors bridge and a modified BR90 launcher. The JAB will provide the MAGTF with the capability to conduct assault and tactical wet and dry gap crossings in all types of climate and terrain, including slopes, trenches and vertical steps. The M1A1 based launcher will provide the survivability, maintainability, and maneuverability required to keep pace with the maneuver force.

(U) **Government to Government (USMC-Army) system integration and manufacture.** Anniston Army depot manufacturers the ABV, which consists of a re-manufactured M1A1 tank chassis/hull with a new turret designed to perform the combat engineer obstacle reduction and mine clearing mission. PM Engineer Systems performs system integration to include procurement of major subsystems via individual contracts with and delivers them to ANAD for integration. Competitive procurements resulted in selection of two major subsystems. These are the Front End Equipment (FEE) manufactured by Pearson Engineering, Ltd. and the Linear Demolition Charge system (LDCS) built by EG&G Albuquerque. Maximum use is made of existing GOTS / COTS item procurement to minimize program cost, performance and schedule risk.

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY		PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	**0206624M Marine Corps Combat Services Spt**	**C2316 Combat Services Support Engineering Equipment**

(U) **Route Reconnaissance and Clearance (R2C)**: Starting in FY10, procure a fleet of standardized Route Reconnaissance and Clearance systems based upon the successful route clearance teams operating in Iraq; use Capabilities Production Documents for current systems and leverage contracts already in place. Concurrently support a research and development effort to integrate future vehicles with enhanced mobility and survivability, a suite of improved detection and marking capabilities, and robots with greater detection, marking, and neutralization capabilities

(U) E. MAJOR PERFORMERS:

Aberdeen Proving Grounds, Aberdeen MD
GDLS, Ottawa, Canada
Picatinny Arsenal, PA
FY09
Aberdeen Proving Grounds, Aberdeen MD
FY10
NSWC Carderock, MD

Exhibit R-3 Cost Analysis						DATE: May 2009								
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**		PROGRAM ELEMENT **0206624M Marine Corps Combat Services Spt**				PROJECT NUMBER AND NAME **C2316 Combat Services Support Engineering Equip**								
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**					
M1A1 Modifications	CPFF	Tank and Automotive Command (TACOM)		0.200	04/08	0.450	01/09	0.771	01/10					
M1A1 Modifications	FFP	Aberdeen Test Center		0.603	12/07	0.122	12/08	0.450	12/09					
M1A1 Modifications	FFP	Yuma Test Center		0.082	02/08									
M1A1 Modifications	FFP	CEOSS (MCSC)		0.107	06/08									
M1A1 Modifications	FFP	Fort Belvoir		0.200	08/08									
M1A1 Modifications	FFP	Benet Labs		0.250	08/08									
M1A1 Modifications	FFP	Picatinny Arsenal		0.414	05/08									
M1A1 SLES	CPFF	MCSC, Quantico, VA (Various)						0.474	12/09					
JAB Development	FFP	MCSC, Quantico, VA (Various)		2.225	Var									
ABV CIED Dev and integration	Var	Various	0.000					0.940	02/10					
R2C Sys Articles & Integration	Various	Various	0.000	0.000		0.000		3.485	11/09					
Subtotal Product Dev			**0.000**	**4.081**		**0.572**		**6.120**						
Remarks:														
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**					
Program Support (JAB)	RCP	MCSC, Quantico, VA (BAE Stafford)	0.855	0.520	11/07									
Program Support - R2C	RCP	EG&G, Stafford VA	0.000	0.000		0.000		1.000	11/09					
Subtotal Support			**0.855**	**0.520**		**0.000**		**1.000**						
Remarks:														
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**					
CPAC	WR	Naval Surface Warfare Center - Carderock Divis	0.000	0.000		0.000		2.169	02/10					
JAB Test Support	VAR	MCOTEA, Quantico, VA		0.208	03/08									
JAB Test Support	MP	Aberdeen Proving Ground, Aberdeen, MD	0.612	0.800	11/07									
MRAP II Test Support	FFP	Ideal Innovations Inc. (I3), Arlington, VA		18.260	03/08									
MRAP II Test Support	FFP	BAE Systems, York, PA		11.178	03/08									
MRAP Test Support	MP	Aberdeen Test Center (ATC), Aberdeen, MD	26.089	12.627	03/08									
MRAP Test Support	MP	ARL, APG Maryland		18.046	04/08									
MRAP Test Support	MP	NAVSEA, Dahlgren, VA		3.660	04/08									
MRAP Test Support	MP	TACOM, Warren, MI		24.100	04/08									
MRAP Upgrades	FFP	Navistar Defense ,Warrenville, IL		6.878	07/08									
MRAP Upgrades	FFP	Force Protection Industries, Inc., Ladson,SC		10.902	04/08									
MRAP Upgrades	FFP	GDLS, Ottawa,Ontario		2.809	07/08									
ABV Test Support	MIPR	Aberdeen Proving Ground	0.000					0.610	02/10					
R2 Test Support	MIPR	Aberdeen Prvg Grnd, MD	0.000	0.000		0.000		0.407	11/09					
Subtotal T&E			**26.701**	**109.468**		**0.000**		**3.186**						
Total Cost			**27.556**	**114.069**		**0.572**		**10.306**						

Exhibit R-4/4a Schedule Profile Detail		DATE: May 2009
APPROPRIATION/BUDGET ACTIV	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys	0206624M Marine Corps Combat Services Sp	C2316 Combat Services Support Engineering Equip

ROUTE RECONNAISSANCE AND CLEARANCE

Fiscal Year / Quarter	08 I	II	III	IV	09 I	II	III	IV	10 I	II	III	IV								
Spiral 1 Integration & DT																				
Spiral 1 LRIP																				
Spiral 1 LUE																				
Spiral 1 IOT&E																				
Spiral 1 Production & Fielding Decision																				
Spiral 1 IOC/FOC																				

Program Funding Summary

(APPN, BLI #, NOMEN)	FY 2008	FY 2009	FY 2010
(U) RDT&E	0.000	0.000	4.914
(U) PMC	0.000	0.000	18.789

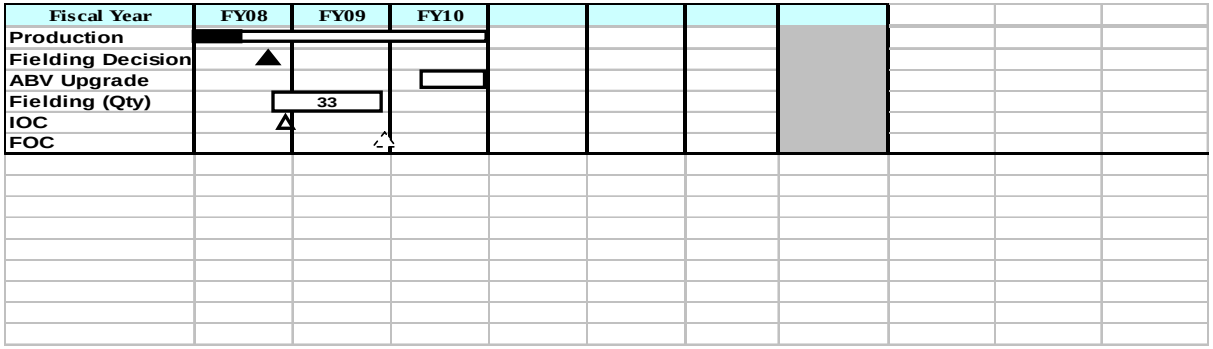
R2C SCHEDULE DETAIL	FY 2008	FY 2009	FY 2010					
Spiral 1 Integration and Developmental Test			Q1-Q4					

Exhibit R-4/4a Schedule Profile Detail		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E,N/BA 7 Operational Sys Dev	**0206624M Marine Corps Combat Services Spt**	**C2316 Combat Services Support Engineering Equip**

ASSAULT BREACHER VEHICLE

Program Funding Summary	FY 2008	FY 2009	FY 2010
(APPN, BLI #, NOMEN)			
(U) PMC BLI 652200 FFME ABV	0.000	8.000	0.000
(U) PMC BLI 652000 ABV	24.938	11.500	20.814
(U) PMC SPARES BLI700049 BA-7	1.521	0.559	0.000
(U) RDT&E ABV	0.000	0.000	1.528
(U) OMMC 1A2A ABV	0.000	0.000	3.010

Assault Breacher Vehicle Schedule



ABV R2C SCHEDULE DETAIL	FY 2008	FY 2009	FY 2010
Production	Q1		Q4
Fielding	Q4		
Upgrade			Q2-Q4
IOC	Q4		

EXHIBIT R-2a, RDT&E Project Justification					DATE: May 2009					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206624M Marine Corps Combat Services Support**				PROJECT NUMBER AND NAME **C2509 Motor Transportation Modification (MTM)**					
COST ($ in Millions)	FY 2008	FY 2009	FY2010	FY10 OCO	FY10 Total					
Project Cost	**1.790**	**0.601**	**2.131**	**0.000**	**2.131**					
RDT&E Articles Qty										

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Marine Corps Tactical Transportation Program manages procurement and life cycle sustainment for more than 40,000 principle end items divided among four fleets: Light Fleet, Medium Fleet, Heavy Fleet, and Special Fleet. A sustained effort is maintained in the Marine Corps for development and testing in support of fleet Service Life Extension Program (SLEP) initiatives, vehicle quality deficiency resolutions, safety initiatives, environmental/state transportation mandated vehicle changes, and system component refresh modifications efforts. Given transportation asset operational availability declines at a steady rate over time, SLEP, Fleet overhauls, and enhanced depot level modifications are essential in maintaining a viable transportation capability in the Marine Corps Operating Forces.
Motor Transportation Modification (MTM) program line specifically develops Marine Corps unique improvements/modernizations to fielded transportation systems and supports monitoring the commercial automotive industrial base for technology insertions to increase Reliability Availablity and Maintainability-Durability (RAM-D), reduce total ownership costs, resolve unplanned safety hazards, and monitor/implement emerging state and federal transportation/environmental regulations as required. This is a sustained program line for "level of effort" programs. Funding will focus on streamlined acquisitions of Commercial-Off-the-Shelf/Non-Developmental Items (COTS/NDI) that can be identified, integrated, and tested in a short amount of time. Successful modifications and tests are intended for follow-on procurement and incorporation into existing system component upgrades, SLEPs, or rapid COTS/NDI fielding for the Fleet Operating Forces.

High Mobility Multi-Wheeled Vehicle ECV (HMMWV-ECV) Armor program line is intended to allow the program office to investigate and test advanced armoring materials/concepts that would allow the HMMWV program office to quickly and continuously respond to the evolving threats.

The Flatrack Refueling Capability (FRC) program will replace the M970 Semi-Trailer refueling in both the Force Service Support Group (FSSG) and the Marine Air Wings (MAWs) for ground refueling missions.
Improved Recovery Vehicle (IRV) project includes improvements in all areas of the M88A2 Improved Recovery Vehicle. Continued funding is required to address obsolescence and support pre-planned product improvements. Additionally, funding will provide development activity by the OEM to address lessons learned and develop safety related ECPS to correct hazards noted during the standard day to day operation of the M88A2 Improved Recovery Vehicle

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total
Accomplishment/Effort Subtotal Cost	**0.000**	**0.100**	**0.100**	**0.000**	**0.100**
RDT&E Articles Qty					

MTM: Program management and travel in support of Transportation Systems modifications, COTS/NDI modernizations.

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total
Accomplishment/Effort Subtotal Cost	**0.576**	**0.501**	**0.496**	**0.000**	**0.496**
RDT&E Articles Qty					

MTM: Testing, integration, evaluation of Transportation Systems modifications.

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total
Accomplishment/Effort Subtotal Cost	**1.214**	**0.000**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty					

MTM: Perform Armor Test and Evaluation for HMMWV FK4 in support of GWOT.

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.321**	**0.000**	**0.321**
RDT&E Articles Qty					

HMMWV: Test advanced Armoring Materials for the HMMWV

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.696**	**0.000**	**0.696**
RDT&E Articles Qty					

FRC: Developmental Test

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.518**	**0.000**	**0.518**
RDT&E Articles Qty					

IRV: Continue joint participation with US Army on evaluation of prospective modifications including realibility, survivivability and safety related vehicle improvements

(U) Total $	**1.790**	**0.601**	**2.131**	**0.000**	**2.131**

EXHIBIT R-2a, RDT&E Project Justification		DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206624M Marine Corps Combat Services Support**	PROJECT NUMBER AND NAME **C2509 Motor Transportation Modification (MTM)**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2008	FY 2009	FY 2010	FY2010 OCO	FY2010 Total
(U) PMC Line (BLI# 523000) Motor T Mod	16.937	5.423	5.948	0.000	5.948
(U)PMC Line BLI# 504500 HMMWV	352.290	180.838	9.796	205.036	214.832
(U)PMC Line BLI# 509300 FRC	10.715	20.444	0.000	0.000	0.000
(U)PMC Line BLI# 509700 FRC	0.000	0.000	7.347	0.000	7.347
(U)PMC Line BLI# 206100 HRV	20.893	0.000	0.000	0.000	0.000
(U)PMC Line BLI# 206200 IRV	7.600	0.000	0.000	0.000	0.000

(U) Related RDT&E:

(U) PE 0206623M Marine Corps Ground Combat Supporting Arms Systems
(U) PE 0603640M Marine Corps Advanced Technology Demonstration
(U) PE 0604804A Logistics and Engineering Equip/Engr Development
(U) PE 0206313M Marine Corps Communications

(U) D. ACQUISITION STRATEGY: The **MTM** program is a sustained program line for "level of effort" programs. Funding will focus on streamlined acquisitions of Commercial-Off-The-Shelf Non-Developmental Items (COTS/NDI) that can be identified, integrated, and tested in a short amount of time. Successful modifications and tests are intended for follow-on procurement and incorporation into existing system component upgrades, SLEPS, or rapid COTS/NDI fielding for the Fleet Marine Forces (FMF).

(U) D. ACQUISITION STRATEGY: The **HMMWV** Program has procured armor in response to the threats faced in OIF and GWOT operations as needed. Since the initial procurement the HMMWV Program Office has aggressively sought out more advanced and effective armor solutions for the warfighter. This program line allows the HMMWV Program to continualy seek the most advance materials/concepts that would allow the HMMWV Program Office to continuously respond to the evolving threats.

(U) D. ACQUISITION STRATEGY: The Flatrack Refueling Capability (FRC) program original acquisition strategy consisted of a joint procurement contract with the US Army. FY07 RDTE funds were used to procured two protoypes developed by DSR Systems Inc. After development and initial testing the Army decided not to procure the DSR system. Our revised acquisition strategy will only include US Marine Corps requirements. Further anaylsis has resulted in the new acquistion strategy focused to contract for Commerically available Items via a Small Business Set Aside procurement. These funds will procure one prototype for Developmental Testing and Field Users Evaluation (FUE). After successfully testing we will procure the AO.

(U) D. ACQUISITION STRATEGY: The Improved Recovery Vehicle (IRV) program also leverages Army developmental programs to create a system that more readily meets Marine Corps heavy recovery vehicle requirements. Improvements include safety, reliability, and technology upgrades.

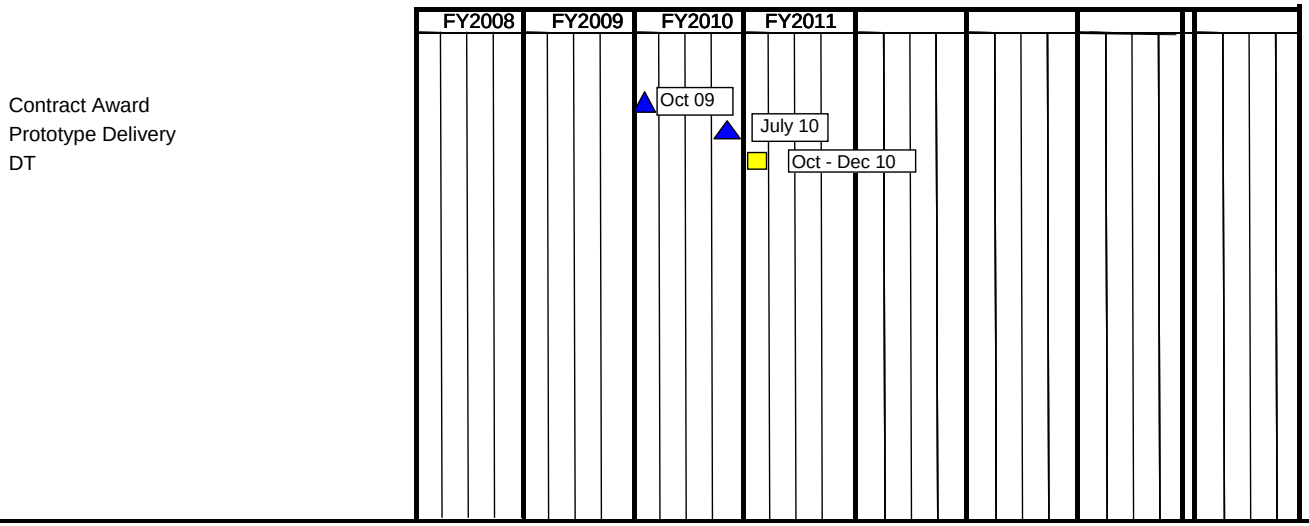
(U) E. MAJOR PERFORMERS:

Navada Automative Test Center
Aberdeen Proving Grounds

Exhibit R-3 Cost Analysis												
DATE: May 2009												
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**		PROGRAM ELEMENT **0206624M Marine Corps Combat Servic**				PROJECT NUMBER AND NAME **C2509 Motor Transport Mod**						
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO Cost**	**FY 10 OCO Award Date**	**FY 10 Total Cost**
Improved Recovery Veh	CPFF	TACOM	0.000	0.000		0.000		0.518	12/09			
			0.000	0.000								
Subtotal Product Dev			**0.000**	**0.000**		**0.000**		**0.518**		**0.000**		**0.518**
Remarks:												
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO Cost**	**FY 10 OCO Award Date**	**FY 10 Total Cost**
Development Test MTVR Trailer	RCP/FFP	CMDC, OK	0.000	0.263	01/08	0.000						
Development Test MTVR Trailer	WR	NSWC Carderock, MD	0.000	0.015	01/08	0.000						
Development Test MTVR Trailer	RCP/CPFF	NATC, NV	0.000	0.116	01/08	0.000						
Live Fire Testing LVS MAK	MIPR	APG, MD	0.000	0.028	01/08	0.100	01/09	0.000				
MTVR Development Testing	RC	NATC, NV	0.000	0.100	12/07	0.000		0.000				
MT Test	TBD	APG, MD	0.000	0.000		0.400	01/09	0.496	12/09			
HMMWV Test	RC	NATC, NV	0.000	1.268	09/08	0.000		0.321	12/09			
FRC Developmental Testing	TBD	TBD	0.000	0.000		0.000		0.696	10/09			
Subtotal Developmental Cost			**0.000**	**1.790**		**0.500**		**1.513**		**0.000**		**1.513**
Remarks: **FY 10 and FY 11 show MT and HMMWV Test To Be Determine (TBD) efforts and cost are determined each year in accordance with the current readiness reports.**												
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO Cost**	**FY 10 OCO Award Date**	**FY 10 Total Cost**
			0.000	0.000		0.000		0.000				
Subtotal Engineer & Tech Support			**0.000**	**0.000**		**0.000**		**0.000**		**0.000**		
Remarks:												
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO Cost**	**FY 10 OCO Award Date**	**FY 10 Total Cost**
			0.000	0.000		0.000		0.000				
			0.000	0.000		0.000		0.000				
			0.000	0.000		0.000		0.000				
Subtotal Operational Support			**0.000**	**0.000**		**0.000**		**0.000**		**0.000**		**0.000**
Remarks: **FY 10 and FY 11 show OP Test To Be Determine (TBD) cost given are estimates, efforts and cost are determined each year in accordance with the current readiness reports.**												
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO Cost**	**FY 10 OCO Award Date**	**FY 10 Total Cost**
Program Mangement and Travel	WR	MCSC	0.000	0.000		0.101	12/08	0.100	12/09			
			0.000	0.000		0.000		0.000				
Subtotal Management			**0.000**	**0.000**		**0.101**		**0.100**		**0.000**		**0.100**
Remarks:												
Total Cost			**0.000**	**1.790**		**0.601**		**2.131**		**0.000**		**2.131**

Exhibit R-4-4a Project Schedule/Detail		May 2009
APPROPRIATION/BUDGET ACTIVITY	**PROGRAM ELEMENT**	**PROJECT NUMBER AND NAME**
RDT&E, N /BA 7 Operational Sys Dev	**0206624M Marine Corps Combat Services Spt**	**C2509 Motor Transporation Modification (MTM)**

Flatrack Refueling Capability



Program Funding Summary (APPN, BLI #, (Flatrack)	FY 2008	FY 2009	FY 2010	2010 OCO	2010 Total
(U) RDT&E,N (Flatrack)	0.737	0.705	0.000	0.000	0.000
(U) RDT&E,N (Flatrack)	0.000	0.000	0.696	0.000	0.696
(U) PMC Line (BLI# 509300) FRC	10.715	20.444	0.000	0.000	0.000
(U) PMC Line (BLI# 509700) FRC	0.000	0.000	7.347	0.000	7.347

Exhibit R-4-4a Project Schedule/Detail		May 2009
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206624M Marine Corps Combat Services Spt	C2509 Motor Transporation Modification (MTM)

Flatrack Refueling Capability

FRC SCHEDULE DETAIL	FY 2008	FY 2009	FY 2010	FY 2011				
Milestone B								
Contract Award			1Q					
Prototype Delivery			4Q					
DT				1Q				
FUE								

EXHIBIT R-2a, RDT&E Project Justification					DATE: May 2009			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
RDT&E, N /BA 7 Operational Systems Development	**0206624M Marine Corps Combat Services Spt**			**C2929 Testing Measuring Diagnostic Equip (TMDE) & SE**				
COST ($ in millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total			
Project Cost	**3.525**	**1.981**	**1.494**	**0.000**	**1.494**			
RDT&E Articles Qty								

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Alternative Power Sources for Communications Equipment (APSCE) program is a suite of devices that provides the commander with the capability to use existing power to operate communication equipment, computers and peripheral equipment instead of using batteries or fossil fuel generators.
The Marine Corps Family of Automatic Test Systems (ATS) (formerly called Third Echelon Test Sets (TETS)), provides automatic test program capability for use by technicians both in Garrison and the forward edge of the battlefield; specifically in the area of interactive electronic tech manuals, condition/predictive based maintenance, embedded sensors and prognostics.

The Marine Corps Automatic Test Equipment (MCATE) program provides development of sustainment technology for automatic test equipment used in organizational/intermediate maintenance facilities.
The Autonomic Logistics (AL) program provides weapon system sensor data collection and processing for information conversion to provide situational awareness. FY10 efforts will focus on system health application for additional platforms. Conduct developmental test and evaluation of platform level system health hardware and software.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.075**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
APSCE: Develop battery charging adaptor for the next generation tactical radio systems.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.661**	**1.170**	**0.000**	**0.000**
RDT&E Articles Qty				
ATS: Development of new technology testing applications in support of emerging weapon systems.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.638**	**0.537**	**1.243**	**0.000**
RDT&E Articles Qty				
MCATE: Develop new technology for sustainment of current Marine Corps Automatic Test Equipment.				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**2.151**	**0.274**	**0.251**	**0.000**
RDT&E Articles Qty				
AL: Weapon sensor data collection & processing for information conversion to provide situational awareness.				
(U) Total $	**3.525**	**1.981**	**1.494**	**0.000**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2010 OCO**
(U) PMC Line (BLI# 418100) TETS	29.148	12.193		1.324
(U) PMC Line (BLI# 418100) Autonomic Log	3.798	10.680	4.552	
(U) PMC Line (BLI# 418100) Calibration	1.961	2.102	9.935	

(U) Related RDT&E:

(U) D. ACQUISITION STRATEGY:
All work is being done in-house at Marine Corps Logistics Base (MCLB), Albany, GA., Naval Surface Warfare Center (NSWC) Corona and Seal Beach, CA.
AL Competitive through Marine Corps Systems Command Contracts. All other work is being done in house and at Gov Engineering facilities.

(U) E. MAJOR PERFORMERS: Automatic Test Equipment Program (ATEP), Albany, GA and Naval Surface Warfare Centers Corona and Seal Beach, CA.

Exhibit R-3 Cost Analysis						DATE: May 2009									
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME									
RDT&E, N /BA 7 Operational Systems Development		0206624M Marine Corps Combat Svs Spt				C2929 Testing Measuring Diagnostic Equip (TMDE) & Systems Engineering									
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO**						
Study & Hardware	FFP	MCSC, Quantico VA	2.427	0.664	08/08	0.506	05/09									
Eval Testing	RCP	MCSC, Quantico, VA	2.037	0.203	08/08											
Study and Hardware	RCP	NSWC, Corona, CA	1.457			0.300	05/09	0.983	12/09							
Program Support	FFP	MCSC, Quantico	0.048													
Subtotal Product Dev			**5.969**	**0.867**		**0.806**		**0.983**		**0.000**						
Remarks:																
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO**						
Program Support	WR	ATEP, Ga	0.045	1.061	12/07											
Engineering Support	WR	NFESC, Port Hueneme, CA	0.595													
Travel	DTS	MCSC, Quantico VA	0.135													
Software Support	WR	Indian Head, MD	1.500													
Program Support	RCP	MCSC, Quantico VA	1.933	1.087	05/08	0.274	01/09	0.246	03/10							
Risk Study	RCP	ONR, Arlington, VA	0.452													
Study and Hardware	WR	NSWC, Corona CA	0.191													
Program Support	WR	MCSC, Quantico VA	2.138													
Engineering Support	MP	TACOM, Arsenal, NJ				0.307	03/09									
Software Support	WR	ATEP, GA	1.491	0.140	06/08	0.364	01/09	0.265	02/10							
Engineering Support	WR	ATEP, GA		0.200	01/08	0.230	01/09									
Subtotal Support			**8.480**	**2.488**		**1.175**		**0.511**		**0.000**						
Remarks:																
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO**						
Eval Testing	RCP	MCOTEA, Quantico, VA	0.479	0.095	04/08											
Eval Testing	WR	NSWC, Carderock, MD	0.126													
T&E of Hardware	WR	NSWC, Carderock, MD	0.111	0.075	11/08											
Subtotal T&E			**0.716**	**0.170**		**0.000**		**0.000**		**0.000**						
Remarks:																
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 08 Cost**	**FY 08 Award Date**	**FY 09 Cost**	**FY 09 Award Date**	**FY 10 Cost**	**FY 10 Award Date**	**FY 10 OCO**						
Subtotal Management			**0.000**	**0.000**		**0.000**		**0.000**		**0.000**						
Remarks:																
Total Cost			**15.165**	**3.525**		**1.981**		**1.494**		**0.000**						

EXHIBIT R-2a, RDT&E Project Justification					DATE: May 2009				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206624M Marine Corps Combat Services Spt**				PROJECT NUMBER AND NAME **C9872 Autonomic Logistics**				
COST ($ in millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total				
Project Cost	**0.000**	**2.325**	**0.000**	**0.000**	**0.000**				
RDT&E Articles Qty									

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project C9872 - Autonomic Logistics (AL) program provides weapon system sensor data collection and processing for information conversion to provide situational awareness.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM

R&D efforts to explore collection & processing of system health data from weapon systems sensor and digital data buss structures for system health information. Work includes diagnostic and prognostic algorithms.

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**2.325**	**0.000**	**0.000**
RDT&E Articles Qty				
Autonomic Logistics C9872: Develop new technology for sustainment of current Marine Corps Automatic Test Equipment.				
(U) Total $	**0.000**	**2.325**	**0.000**	**0.000**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	**FY 2008**	**FY 2009**	**FY 2010**	**FY10 OCO**
(U) PMC Line (BLI# 418100) Autonomic Log	3.798	10.680	4.552	0.000

(U) Related RDT&E:

(U) D. ACQUISITION STRATEGY:

(U) E. MAJOR PERFORMERS:

EXHIBIT R-2a, RDT&E Project Justification					DATE: May 2009				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206624M Marine Corps Combat Services Support**				PROJECT NUMBER AND NAME **C9872 Autonomic Logistics**				
COST ($ in millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO	FY 2010 Total				
Project Cost	**0.000**	**2.331**	**0.000**	**0.000**	**0.000**				
RDT&E Articles Qty									

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project C9872 - The Autonomic Logistics (AL) program provides weapon system sensor data collection and processing for information conversion to provide situational awareness.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM

R&D efforts to explore collection & processing of system health data from weapon systems sensor and digital data buss structures for system health information. Work includes diagnostic and prognostic algorithms.

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY 2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**2.325**	**0.000**	**0.000**
RDT&E Articles Qty				
Autonomic Logistics C9872: Develop new technology for sustainment of current Marine Corps Automatic Test Equipment.				
(U) Total $	**0.000**	**2.325**	**0.000**	**0.000**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	**FY 2008**	**FY 2009**	**FY 2010**
(U) PMC Line (BLI# 418100) Autonomic Log	3.798	10.680	4.552

(U) Related RDT&E:

(U) D. ACQUISITION STRATEGY:

(U) E. MAJOR PERFORMERS:

EXHIBIT R-2a, RDT&E Project Justification					DATE: May 2009			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206624M Marine Corps Combat Services Support**				PROJECT NUMBER AND NAME C9C90 Medium Tactical Vehicle Replacement (MTVR)			
COST ($ in Millions)	FY 2008	FY 2009	FY2010	FY2010 OCO	FY 2010 TOT			
Project Cost	**0.000**	**0.000**	**1.626**	**0.000**	**1.626**			
RDT&E Articles Qty								

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The MTVR Modication program line funds numerous and very important modifications and initiatives that are required to address operational priorities, engineering change proposals, safety concerns, support equipment inefficiencies, tool malfunctions, product quality deficiencies, beneficial suggestions and other issues that affect vehicle reliability, availability, maintainability and readiness. A proactive and focused approach ensures proper vehicle sustainment and life-cycle management and it allows the program office the flexibility to develop and implement improvements as need to respond to the evolving needs of the Marine Corps.

COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.410**	**0.000**
RDT&E Articles Qty				
MTVR: Engineering Change Proposals				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.215**	**0.000**
RDT&E Articles Qty				
MTVR: Safety Initiatives				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.416**	**0.000**
RDT&E Articles Qty				
MTVR: Component Upgrades, Test on Prototypes				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.370**	**0.000**
RDT&E Articles Qty				
MTVR: Engine/Parts Obsolescence				
COST ($ in Millions)	FY 2008	FY 2009	FY 2010	FY2010 OCO
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.215**	**0.000**
RDT&E Articles Qty				
MTVR: Product Quality Deficiencies				
(U) Total $	**0.000**	**0.000**	**1.626**	**0.000**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2010 OCO**
(U)PMC Line BLI# 508800 MTVR	78.783	30.832	10.792	131.044

(U) Related RDT&E:
N/A

(U) D. ACQUISITION STRATEGY: The strategy for the MTVR Modification initiative is to be proactive in our approach. This will aid in the prevention of parts obsolescence, potential safety concerns, and support the needs of the Marine Corps. A proactive and focused approach ensures proper vehicle sustainment and life-cyle management and it allows the program office the flexibility to develop and implement improvements as required to respond to evolving needs. The anticipated life of the MTVR was partially based on the vehicle being at curb weight a large percentage of its life time. Due to the addition of the MTVR Armor System, various other components and the current high optempo, it is anticipated that the MTVR life expectancy will be lessened. It is important to ensure MTVR sustainment in any and all

(U) E. MAJOR PERFORMERS:

Exhibit R-3 Cost Analysis					DATE: **May 2009**									
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**			PROGRAM ELEMENT **0206624M Marine Corps Combat Services**			PROJECT NUMBER AND NAME **C9C90 Medium Tactical Vehicle Replacement**								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	C9C90 Me FY 10 Cost	FY 10 Award Date					
			0.000	0.000		0.000		0.000						
			0.000	0.000										
Subtotal Product Dev			**0.000**	**0.000**		**0.000**		**0.000**						
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
			0.000	0.000		0.000		0.000						
			0.000	0.000				0.000						
Component Upgrade, Prototype Testing	RC	NATC, NV	0.000	0.000				0.416	TBD					
Subtotal Test and Evaluation			**0.000**	**0.000**		**0.000**		**0.416**						
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
ECPs	RC	Oshkosh Trucking, WI	0.000	0.000		0.000		0.410	TBD					
Engines/Part Obsolescence	RC	Oshkosh Trucking, WI						0.370	TBD					
Product Quality Deficiencies	RC	Oshkosh Trucking, WI						0.215	TBD					
Safety Initiatives	RC	Oshkosh Trucking, WI	0.000	0.000		0.000		0.215	TBD					
Subtotal Engineering Support Costs			**0.000**	**0.000**		**0.000**		**1.210**						
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
			0.000	0.000		0.000		0.000						
			0.000	0.000		0.000		0.000						
			0.000	0.000		0.000		0.000						
Subtotal Operational Support			**0.000**	**0.000**		**0.000**		**0.000**						
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	FY 10 Cost	FY 10 Award Date					
			0.000	0.000		0.000		0.000						
			0.000	0.000		0.000		0.000						
Subtotal			**0.000**	**0.000**		**0.000**		**0.000**						
Remarks:														
Total Cost			**0.000**	**0.000**		**0.000**		**1.626**						