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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: FEBRUARY 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-4 Advanced Component Dev. and Prototypes			PROGRAM ELEMENT NUMBER AND NAME 0603611M Marine Corps Assault Vehicles			PROJECT NUMBER AND NAME: B0020 Expeditionary Fighting Vehicle (EFV)				
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
B0020 EXPEDITIONARY FIGHTING VEHICLE (EFV)		263.299	237.893	236.969	181.755	161.571	69.899	12.627	Cont	Cont
Quantity of RDT&E Articles		5	4							

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

The Expeditionary Fighting Vehicle (EFV) Program will field a successor to the Marine Corps' current amphibious vehicle, the Assault Amphibious Vehicle Model 7A1 (AAV7A1). The EFV will provide the principal means of tactical surface mobility for the Marine Air Group Task Force (MAGTF) during both ship-to-objective maneuvers and sustained combat operations ashore as part of the Navy and Marine Corps concepts within the Expeditionary Maneuver Warfare capstone. The EFV will provide the Marine Corps with the capability to execute the full spectrum of military missions from humanitarian operations to conventional combat operations. The EFV replaces the AAV7A1 Vehicle, which was originally fielded in the early 1970s. The EFV is a self-deploying, high-water speed, amphibious, armored, tracked vehicle capable of operating in all weather as well as Nuclear, Biological, and Chemical (NBC) environments.

The EFV program is the only ACAT-1D program managed by the Marine Corps. The EFV is the next generation of Marine Corps Assault Vehicles being developed to satisfy the requirements of the 21st Century Marine Warfighters. Along with the Landing Craft Air Cushion (LCAC) and the MV-22 Osprey, the EFV will provide the Marine Corps with the tactical mobility assets required to spearhead the concepts within the Expeditionary Maneuver Warfare capstone. Acquisition of the EFV is critical to the Marine Corps. The total EFV requirement is for 1,013 weapon systems. The EFV program remains the Marine Corps number one priority ground system acquisition.

The program received approval to enter the Systems Development and Demonstration (SDD) Phase (formerly Engineering and Manufacturing Development) of the acquisition process during the Milestone II Defense Acquisition Board Readiness Meeting held on 26 November 2000. All program exit criteria were successfully met or exceeded. The SDD Phase (2001 through 2007) will include validation of manufacturing and production processes, fabrication and testing of SDD vehicles, and finalizing and implementing the Life Cycle Management for EFV.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)		FY2003	FY2004	FY2005
Accomplishment/Effort Subtotal Cost		245.146	199.110	196.561
RDT&E Articles Qty		5	4	

(U) Fabrication of SDD phase prototypes. Design development. Developmental Testing. Survivability Program. SDD prototype shakedown testing.

FY03: Initiate contractor/government shakedown testing of SDD prototypes. Continue design development, manufacturing planning, and producibility design enhancements of the EFV(P) and EFV(C) designs. Continue the EFV survivability program. Continue fabrication and start delivery of SDD prototypes.

FY04: Continue design development, manufacturing planning, and producibility design enhancements of the EFV(P) and EFV(C) designs. Continue the EFV survivability program. Continue/complete fabrication and delivery of SDD prototypes.

FY05: Continue design development, manufacturing planning, and producibility design enhancements of the EFV(P) and EFV(C) designs. Continue the EFV survivability program. Complete fabrication and delivery of SDD prototypes.

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RDT&E, N /BA-4 Advanced Component Dev. and Prototypes	0603611M Marine Corps Assault Vehicles	B0020 Expeditionary Fighting Vehicle (EFV)			
COST (\$ in Millions)		FY2003	FY2004	FY2005	
Accomplishment/Effort Subtotal Cost		2.560	4.930	5.338	
RDT&E Articles Qty					
(U) Continue to provide in-house technical support.					
COST (\$ in Millions)		FY2003	FY2004	FY2005	
Accomplishment/Effort Subtotal Cost		7.865	5.368	4.891	
RDT&E Articles Qty					
(U) Continue to provide program support to coordinate and update program planning, program analysis, and program execution.					
COST (\$ in Millions)		FY2003	FY2004	FY2005	
Accomplishment/Effort Subtotal Cost		0.628	8.385	11.479	
RDT&E Articles Qty					
(U) Develop training courseware, devices and simulators.					
FY03: Continue development of EFV training courseware.					
FY04: Initiate development of EFV training devices/simulators. Continue development of EFV training courseware.					
FY05: Continue development of EFV training devices/simulators. Continue/Complete development of EFV training courseware.					
COST (\$ in Millions)		FY2003	FY2004	FY2005	
Accomplishment/Effort Subtotal Cost		7.100	20.100	18.700	
RDT&E Articles Qty					
(U) Ballistic Vulnerability testing. RAM-D testing. EOA.					
FY03: Initiate DT of SDD prototypes. Initiate Lethality Testing of MK-46 weapon station.					
FY04: Initiate Ballistic Vulnerability Testing. Continue DT of SDD prototypes. Continue Lethality Testing of MK-46 weapon station.					
FY05: Complete Ballistic Vulnerability Testing. Continue DT of SDD prototypes. Conduct Operational Testing. Complete Lethality Testing of MK-46 weapon station.					
COST (\$ in Millions)		FY2003	FY2004	FY2005	
(U) Total \$		263.299	237.893	236.969	

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-4 Advanced Component Dev. and Prototypes							PROGRAM ELEMENT NUMBER AND NAME 0603611M Marine Corps Assault Vehicles			PROJECT NUMBER AND NAME: B0020 Expeditionary Fighting Vehicle (EFV)		
(U) PROJECT CHANGE SUMMARY:												
		FY2003	FY 2004	FY 2005								
(U) FY 2004 President's Budget:		272.092	240.695	237.819								
(U) Adjustments from the President's Budget:												
(U) Congressional Program Reductions		-6.512	-2.802									
(U) Congressional Rescissions												
(U) Congressional Increases		4.675										
(U) Inflation/Pricing Adjustments				-0.850								
(U) SBIR/STTR Transfer		-6.956										
(U) Program Adjustment												
(U) FY 2005 President's Budget:		263.299	237.893	236.969								
CHANGE SUMMARY EXPLANATION:												
(U) Funding:		FY 2003 reflects a decrease of \$6.956M for SBIR, Congressional pro-rata reductions of \$6.512, and a Congressional increase of \$4.675M.										
		FY 2004 reflects Congressional pro-rata reductions of \$2.802M. FY 2005 reflects inflation reductions and NWCF pricing adjustments of \$850K.										
(U) Schedule:		EFV program schedule is adjusted to add one year to accommodate robust Operational Testing necessary for a successful MS C, Low Rate Initial Production										
(U) Technical:		Not Applicable										
(U) C. OTHER PROGRAM FUNDING SUMMARY:												
<u>Line Item No. & Name</u>		FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY 2009	To Compl	Total Cost		
(U) PANMC, BLI #147500, EFV		-	-	2.474	5.755	9.402	28.243	14.410	614.152	674.436		
(U) PMC BA2, BLI #202200, EFV		16.490	97.195	67.701	239.724	267.046	545.828	831.726	6,180.522	8,246.232		
(U) PMC BA7 (Spares), BLI (NA), EFV		0.501	-	-	9.076	9.568	19.421	29.483	247.599	315.648		
(U) PMC, EFV Totals		16.991	97.195	67.701	248.800	276.614	565.249	861.209	6,428.121	8,561.880		
(U) MILCON P-038		28.344	-	-	-	-	-	-	-	28.344		
(U) MILCON P-042		-	-	-	-	10.647	-	-	-	10.647		
(U) MILCON P-041		-	-	-	-	3.177	-	-	-	3.177		
(U) MILCON P-1010		-	-	-	-	-	-	-	7.182	7.182		
(U) REMAINING EFV MCON		-	-	-	-	-	-	-	31.807	31.807		
(U) MILCON, EFV Totals		28.344	0.000	0.000	0.000	13.824	0.000	0.000	38.989	81.157		
(U) Related RDT&E: Not Applicable.												
(U) PE 0206623M (Marine Corps Ground Combat/Supporting Arms Systems), Project C0021, AAV7A1.												
(U) PE 0206623M (Marine Corps Ground Combat/Supporting Arms Systems), Project B2237, AVTD.												

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EXHIBIT R-2a, RDT&E Project Justification		DATE: FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-4 Advanced Component Dev. and Prototypes	PROGRAM ELEMENT NUMBER AND NAME 0603611M Marine Corps Assault Vehicles	PROJECT NUMBER AND NAME: B0020 Expeditionary Fighting Vehicle (EFV)
<p>(U) D. ACQUISITION STRATEGY:</p> <p>The EFV Program acquisition strategy includes the extensive use of test assets, models, simulation, and advanced technology research to optimize vehicle design, reduce Total Ownership Cost (TOC), vehicle unit cost, and add flexibility to the program schedule. Three fully functional PDRR prototypes were developed and have undergone extensive developmental testing to further vehicle maturity. During the SDD phase of the program, nine prototype vehicles will be manufactured and tested extensively in developmental and operational tests. A tenth vehicle will be manufactured for use during Full Up System Level Lethality testing planned to begin in FY06. Following the LRIP decision review, LRIP vehicles will be delivered in FY07 and FY08 for use during Initial Operational Test and Evaluation (IOT&E). Initial Operational Capability (IOC) and Full Operational Capability (FOC) will occur in FY08 and FY18, respectively.</p> <p>The EFV management strategy is event driven, designed to ensure a logical progression through the EFV acquisition to reduce risk, ensure affordability, and provide adequate information to decision makers regarding acquisition progress. The EFV Program team is a partnership of government and industry experts, committed to developing the most versatile combat vehicle, providing the optimum balance of combat effectiveness, affordability, innovation, and technology. The program Integrated Product Teams (IPTs), composed of contractors, sub-contractors, Marines, and government civilians, are the foundation of the EFV acquisition management process. The government, prime contractor, and major subcontractors are co-located in a highly integrated communication environment that facilitates proactive decision-making processes and flexible execution of plans to support these teams and product development.</p> <p>Cost as an Independent Variable (CAIV) has been institutionalized throughout the program and as such is an integral consideration in all trade studies and decisions. The program has had a highly integrated and extensive test approach since its inception which has included a very strong engineering-model and prototype testing program supported by extensive modeling and simulation techniques which is intended to continue throughout System Development and Demonstration (SDD). As a Program Management Oversight for Life Cycle Support pilot program, the program office management strategy includes planning for life cycle support once the system is fielded to more efficiently manage and optimize operating and support requirements and reduce overall program cost.</p> <p>The program's contracting approach for the EFV is to award the vast majority of the work to one prime contractor, competitively selected in 1996. General Dynamics Land Systems (GDLS) operating through its division General Dynamics Amphibious Systems (GDAMS) will be responsible for designing and producing the vehicle and providing support for testing from Prototype Development and Risk Reduction (PDRR) through LRIP. Contracts for Government Furnished Property will be kept to a minimum and will include only property which could not otherwise be available to the contractor. Local Area Network support contract is currently provided by an 8(a) firm. Contract support for programmatic and technical support was competitively awarded in September 2003 as a cost plus fixed-fee contract and will continue through FY08. The Life Cycle Support Contract is scheduled for award during FY06 for a portion of the initial operations and maintenance support for the fielded EFVs.</p> <p>(U) E. MAJOR PERFORMERS:</p> <p>FY 03-07 - General Dynamics, Woodbridge, VA. Validation of manufacturing and production processes, fabrication and testing of SDD vehicles, and finalizing and implementing Life Cycle Management. Awarded Feb 01.</p>		

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Exhibit R-3 Cost Analysis								DATE: FEBRUARY 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME				
RDT&E, N /BA-4 Advanced Component Development and Prototypes			0603611M Marine Corps Assault Vehicles					B0020 Expeditionary Fighting Vehicle (EFV)				
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PDRR Contract	CPAF	GDLS - PDRR Award	399.703							Cont	Cont	400.000
SDD Contract	CPAF	GDLS - SDD Award	257.945	245.146	1/	199.110	1/	196.561	1/	Cont	Cont	865.445
Subtotal Program Dev Spt			657.648	245.146		199.110		196.561		Cont	Cont	
Remarks: 1/ The SDD contract was definitized in July 2001. The SDD contract is for the entire SDD effort and is incrementally funded. Target value does not include the program restructure.												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Program Support		EG&G, Manassas, VA	18.357	4.899	2/					Cont	Cont	24.000
Program Support		EG&G, Manassas, VA				3.353	3/	3.845	3/	Cont	Cont	18.226
Program Support		Various Government Contracts	12.621	2.966	4/	2.015	4/	1.046	4/	Cont	Cont	
Training devices/simulators		Various Government Contracts	0.800	0.628	4/	8.385	4/	11.479	4/	Cont	Cont	
Subtotal Program Support			31.778	8.493		13.753		16.370		Cont	Cont	
2/ EG&G contract (FFP with options) was awarded August 1998 and was completed in September 2003. 3/ EG&G contract (CPFF) was awarded in September 2003 for contract performance through FY08. 4/ Various contract award dates.												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Testing		Various Locations	15.431	7.100	4/	20.100	4/	18.700	4/	Cont	Cont	
Subtotal T&E			15.431	7.100		20.100		18.700		Cont	Cont	
Remarks: 4/ Various contract award dates.												

R-1 SHOPPING LIST - ITEM NO. 56

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EXHIBIT R-3, Project Cost Analysis
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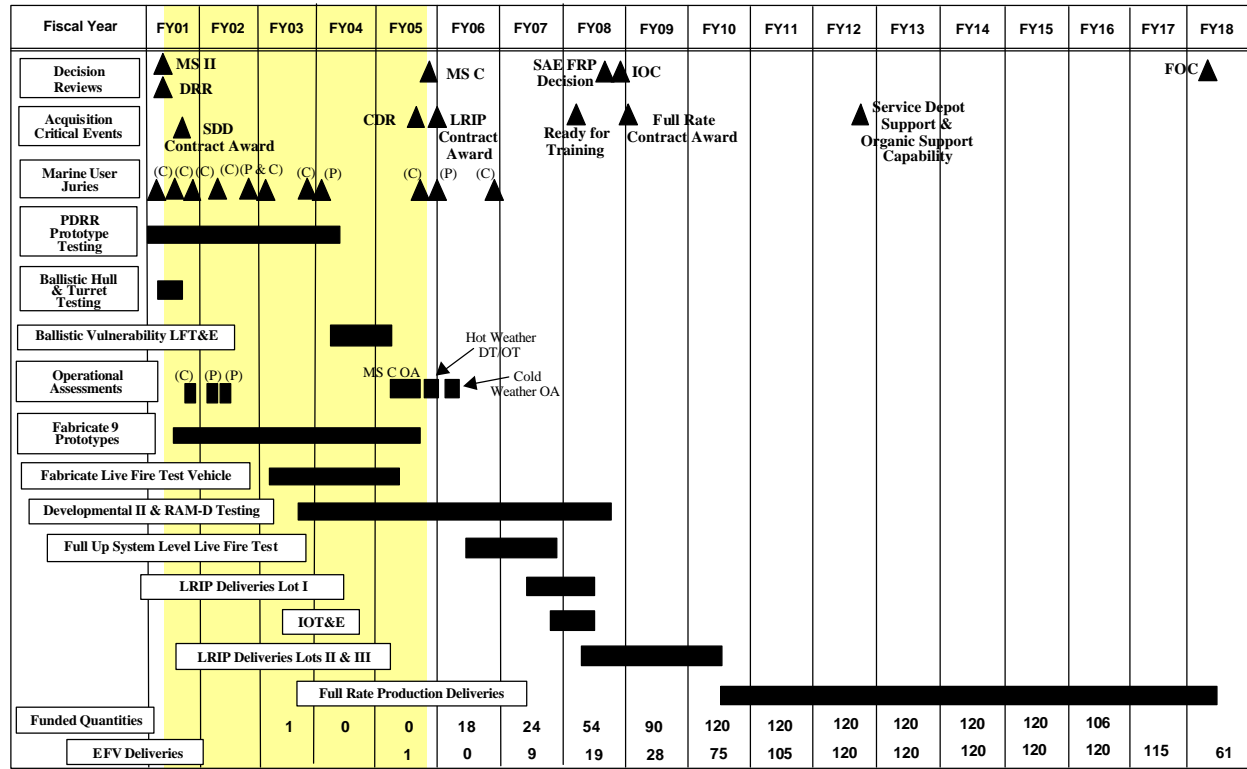
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Exhibit R-3 Cost Analysis								DATE: FEBRUARY 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME				
RDT&E, N /BA-4 Advanced Component Development and Prototypes			0603611M Marine Corps Assault Vehicles					B0020 Expeditionary Fighting Vehicle (EFV)				
Cost Categories (Tailor to WBS, or System/Iter Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
In-house technical support		Various Government Labs	73.905	0.599	4/	3.684	4/	4.024	4/	Cont	Cont	
Mgmt & Prof Support		MITRE CORP, McClean, VA	7.739	1.961	1Q	1.246	1Q	1.314	1Q	Cont	Cont	
Subtotal Management			81.644	2.560		4.930		5.338		Cont	Cont	
Remarks:												
4/ Various contract award dates.												
Total Cost			786.501	263.299		237.893		236.969		Cont	Cont	

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Exhibit R-4/a Schedule Profile/Detail DATE: **FEBRUARY 2004**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N /BA-4 Advanced Component Development and Prototypes** | PROGRAM ELEMENT NUMBER AND NAME: **0603611M Marine Corps Assault Vehicles** | PROJECT NUMBER AND NAME: **B0020 Expeditionary Fighting Vehicle (EFV)**



<u>Program Funding Summary</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N	263.299	237.893	236.969	181.755	161.571	69.899	12.627	Cont	Cont
(U) PANMC, BLI #147500, EFV	-	-	2.474	5.755	9.402	28.243	831.726	Cont	Cont
(U) PMC BA2, BLI #202200, EFV	16.490	97.195	67.701	239.724	267.046	545.828	831.726	6,180.522	8,246.232
(U) PMC BA7, BLI #700000, EFV	0.501	-	-	9.076	9.568	19.421	29.483	247.599	315.648
(U) PMC, EFV TOTALS	16.991	97.195	67.701	248.800	276.614	565.249	861.209	6,428.121	8,561.880
(U) MILCON P-038	-	28.344	-	-	-	-	-	-	28.344
(U) MILCON P-042	-	-	-	-	10.647	-	-	-	10.647
(U) MILCON P-041	-	-	-	-	3.177	-	-	-	3.177
(U) MILCON P-1010	-	-	-	-	-	-	-	7.182	7.182
(U) REMAINING EFV MILCON	-	-	-	-	-	-	-	31.807	31.807
(U) MILCON, AAV TOTALS	-	28.344	0.000	0.000	13.824	0.000	0.000	38.989	81.157

Exhibit R-4/4a Schedule Profile/Detail							DATE: FEBRUARY 2004		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
RDT&E, N /BA-4 Advanced Component Development and Prototypes		0603611M Marine Corps Assault Vehicles			B0020 Expeditionary Fighting Vehicle (EFV)				
SCHEDULE DETAIL		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
MS C					4Q				
SAE FRP Decision								4Q	
IOC								4Q	
PDRR Prototype Testing		1-4Q	1-4Q	1-2Q					
Ballistic Vulnerability LFT&E				2-4Q	1Q				
Operational Assessments		1-3Q			2-4Q	2Q			
Fabrication of 9 Prototypes, Refurb 3 PDRR Prototypes		1-4Q	1-4Q	1-4Q	1-2Q				
Fabricate Live Fire Test Vehicle			2-4Q	1-4Q	1-2Q				
Developmental II & RAM-D Testing			4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-3Q	
CDR					4Q				
LRIP Contract Award						1Q			
Full Up System Level Live Fire Test						2-4Q	1-4Q		
LRIP Deliveries Lot I							3-4Q	1-2Q	
IOT&E							4Q	1-2Q	
Ready for Training								1Q	
LRIP Deliveries Lots II & III								2-4Q	1-4Q
Full Rate Contract Award									1Q