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EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME		
RDT&E, N /BA-4 Advanced Component Dev & Prototypes (ADCP&P)		0603612M Marine Corps Mine/Countermeasures Systems				C2106 Advance Mine Detector		
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.925	4.478	3.265	3.760	0.649	0.000	0.000	0.000
RDT&E Articles Qty	12							
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
The Advance Mine Detector (AMD) will be a man-portable system capable of detecting both metallic and nonmetallic buried mines regardless of fuse type. The AMD will alleviate a critical deficiency for detection of buried metallic and semi-metallic mines. Current mine detection technologies are only able to detect metallic mines. The Family of Explosive Ordnance Disposal (FEOD) mission is to provide a capability to neutralize the hazards associated with explosive ordnance that are beyond the normal capabilities of other specialties and present a threat to operations, installations, personnel and material. The FEOD Equipment accomplishes this mission by detecting, identifying, rendering safe, recovering, evacuating and disassembling, and/or disposing of unexploded ordnance with a variety of tools.								
(U) ACCOMPLISHMENTS/PLANNED PROGRAM:								
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost	0.036	1.135	0.500	0.500				
RDT&E Articles Qty	12							
AMD: Facilitate program transition to Marine Corps Systems Command (MARCORSYSCOM) from Office of Naval Research (ONR). Provide program management, technical support, and travel.								
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost	0.446	1.000	1.700	2.716				
RDT&E Articles Qty								
AMD: Conduct initial developmental testing and follow-up developmental testing and operational testing in various soil types and environmental conditions of the AMD prototype to determine system capabilities.								
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost	0.000	0.706	0.634	0.544				
RDT&E Articles Qty								
AMD: Update programmatic documentation and technical drawings. Development of technical manuals and training packages.								
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost	0.418	1.637	0.431	0.000				
RDT&E Articles Qty								
AMD: Conduct Trade Studies to reduce power consumption/weight, improve detection depths, and sweep rate. Engineering and design studies to improve ergonomic characteristics, integrate human factors and finalize overall system design.								
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost	0.025	0.000	0.000	0.000				
RDT&E Articles Qty								
FEOD: Conduct re-configuration studies on the EOD tool sets.								
(U)Total \$	0.925	4.478	3.265	3.760				

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RDT&E, N /BA-4 Advanced Component Dev & Prototypes (ADCP&P)			0603612M Marine Corps Mine/Countermeasures Systems				C2106 Advance Mine Detector				
PROJECT CHANGE SUMMARY:			<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>					
(U) FY 2005 President's Budget:			1.177	4.522	6.234	3.716					
(U) Adjustments from the President's Budget:			0.025								
(U) Congressional/OSD Program Reductions											
(U) Congressional Rescissions											
(U) Congressional											
(U) Reprogrammings					-3.000						
(U) SBIR/STTR Transfer			-0.033								
(U) Minor Affordability Adjustment			-0.244	-0.044	0.031	0.044					
(U) FY 2006 OSD Budget:			0.925	4.478	3.265	3.760					
CHANGE SUMMARY EXPLANATION:											
(U) Funding: Change in FY06 funding is due to realignment of funding to higher priority programs within the Marine Corps.											
(U) Schedule: Not Applicable.											
(U) Technical: Not Applicable.											
(U) C. OTHER PROGRAM FUNDING SUMMARY:											
<u>Line Item No. & Name</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>FY 2010</u>	<u>FY 2011</u>	<u>To Compl</u>	<u>Total Cost</u>
PMC BLI 632500 Demo Support Sys		2.089	3.409	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.498
Advanced Mine Detector											
PMC BLI 652000 EOD Sys Advanced Mine Detector		0.000	0.000	1.097	4.639	3.814	1.065	0.000	0.000	0.000	10.615
(U) Related RDT&E: Not Applicable.											
(U) D. ACQUISITION STRATEGY: By leveraging an exploratory technology program for mine detection, the Marine Corps will maintain active involvement in the Advanced Mine Detector (AMD) development during concept and technology development. A backpack prototype, configured to detect Trinitrotoluene (TNT), Hexahydro-Trinitro-Triazine (RDX), tetryl and metallic and semi-metallic mines, will be delivered 2nd quarter FY 05 for test and evaluation. The demonstrated technology will then transition into system development and demonstration phase for further development. A cost plus contract with negotiated contractor incentives in the areas of weight, sweep rate, and power consumption will be awarded. After completion of Milestone B, the program enters Low Rate Initial Production (LRIP). LRIP items will undergo Intial Operational Test and Evaluation in preparation for full rate production. The production phase will employ a fixed price production contract.											
(U) SCHEDULE PROFILE: Not Applicable.											
(U) E. MAJOR PERFORMERS:											
FY04 - Aberdeen Test Center, Aberdeen, MD, Test Activity for the AMD Prototypes											
FY05 - TBD Competetive Contract for the Engineering and design support to improve ergonomic characteristics, integrate human factors and finalize overall system design.											

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Exhibit R-3 Cost Analysis									DATE: February 2005					
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT					PROJECT NUMBER AND NAME					
RDT&E, N /BA-4 Advanced Component Dev & Prototypes (ADCP&P)				0603612M Marine Corps Mine/Countermeasures					C2106 Advance Mine Detector					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Engineering & Design	TBD	TBD	0.000			1.132	2Q/05	0.434	1Q/06			Cont	Cont	
Systems Engineering	TBD	TBD	0.000			0.505	3Q/05	0.231	3Q/06	0.194	2Q/06	Cont	Cont	
Subtotal Product Dev			0.000	0.000		1.637		0.665		0.194		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Engineering Spt	RCP	MCSC Quantico, VA	0.128	0.275	3Q/04	1.135	1Q/05	0.400	1Q/06	0.350	1Q/06	Cont	Cont	
Engineering Spt	MIPR	CECOM Alexandria, VA	0.140	0.143	1Q/04								0.283	0.283
Engineering Spt	RCP	CECOM Alexandria, VA	0.042										0.042	0.042
Engineering Spt	RCP	MCSC Quantico, VA		0.036	3Q/04								0.036	0.036
Engineering Spt (FEOD)	RCP	MCSC Quantico, VA		0.025	2Q/04								0.025	0.025
Subtotal Support			0.310	0.479		1.135		0.400		0.350		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Testing	MIPR	Aberdeen Prvg Grnd, MD		0.446	3Q/04	1.000	1Q/05	0.700	1Q/06	1.600	1Q/07	Cont	Cont	
Testing	MIPR	MCAS Yuma, AZ		0.000		0.000		1.000	2Q/06	1.116	2Q/07	Cont	Cont	
Subtotal T&E			0.000	0.446		1.000		1.700		2.716		Cont	Cont	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Management Spt	RCP	BAE, Stafford, VA	0.000			0.706	1Q/05	0.500	1Q/06	0.500	2Q/06	Cont	Cont	
Management Spt													0.000	
Subtotal Management			0.000	0.000		0.706		0.500		0.500		Cont	Cont	
Remarks:														
Total Cost			0.310	0.925		4.478		3.265		3.760		Cont	Cont	