EXHIBIT R-2a, RDT&E Project Justification						DATE: **Februrary 2003**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-4 Advanced Component Dev & Prototypes (ADCP&P)**			PROGRAM ELEMENT NUMBER AND NAME **0603612M Marine Corps Mine/Countermeasures Systems**					PROJECT NUMBER AND NAME **C2106 Advance Mine Detector**		
COST ($ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	Cost to Complete	Total Program
Project Cost	**0.000**	**0.486**	**1.215**	**6.032**	**6.251**	**3.724**	**0.641**	**0.000**	**0.000**	**18.349**
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 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.250**	**0.473**	**1.150**
RDT&E Articles Qty				

    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 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.500**	**1.000**
RDT&E Articles Qty				

    AMD: Conduct initial developmental testing and follow-up developmental testing in various soil types and environmental conditions of the AMD prototype to determine system capabilities.

COST ($ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**0.750**
RDT&E Articles Qty				

    AMD: Update programmatic documentation and technical drawings. Development of technical manuals and training packages.

COST ($ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.236**	**0.217**	**3.132**
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

COST ($ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.025**	**0.000**
RDT&E Articles Qty				

    FEOD: Conduct re-configuration studies on the EOD tool sets.

(U)Total $	0.000	0.486	1.215	6.032

EXHIBIT R-2a, RDT&E Project Justification	DATE:
	Februrary 2003

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**

PROJECT CHANGE SUMMARY:

	FY2002	**FY2003**	**FY2004**	**FY2005**
(U) FY 2003 President's Budget:				
(U) Adjustments from the President's Budget:	**0.000**	**0.497**	**5.881**	**5.754**
(U) Congressional/OSD Program Reductions		-0.011	-0.027	-0.130
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings			-4.639	0.408
(U) SBIR/STTR Transfer				
(U) Minor Affordability Adjustment				
(U) FY 2004 President's Budget:	**0.000**	**0.486**	**1.215**	**6.032**

CHANGE SUMMARY EXPLANATION:
(U) Funding: Change in FY04 and FY05 is due to the realignment of programs within the Marine Corps.
(U) Schedule: Not Applicable.
(U) Technical: Not Applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
PMC BLI 632500 Demo Support Sys Advanced Mine Detector	0.000	0.000	2.041	3.432	1.100	11.659	10.715	5.829	0.000	34.776

(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 AMD development during concept and technology development. A backpack prototype, configured to detect TNT, 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:
FY03 - TBD Competetive Contract for program support
FY04 - ATC, Aberdeen, MD, Test Actvity 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.

Exhibit R-2a, RDTE,N Project Justification
(Exhibit R-2a, page 2 of 3)

Exhibit R-3 Cost Analysis			DATE: February 2003										

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 Sys**					**C2106 Advance Mine Detector**					

Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 02 Cost**	**FY 02 Award Date**	**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**
Engineering & Design	TBD	TBD								1.132	2Q/05	Cont.	Cont.	
Systems Engineering	TBD	TBD								2.000	TBD	Cont.	Cont.	
Subtotal Product Dev			**0.000**	**0.000**		**0.000**		**0.000**		**3.132**		**Cont**	**Cont**	

Remarks:

Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 02 Cost**	**FY 02 Award Date**	**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**
Engineering Spt	TBD	MCSC Quantico VA				0.236	2Q/03	0.217	1Q/04	1.150	1Q/05	Cont.	Cont.	
Engineering Spt (FEOD)	TBD	MCSC Quantico VA						0.025	2Q/04					
Subtotal Support			**0.000**	**0.000**		**0.236**		**0.242**		**1.150**		**Cont**	**Cont**	

Remarks:

Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 02 Cost**	**FY 02 Award Date**	**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	MIPR	Aberdeen Proving Grounds, MD						0.500	1Q/04	0.500	1Q/05	Cont.	Cont.	
Testing	MIPR	Yuma								0.500	TBD	Cont.	Cont.	
Subtotal T&E			**0.000**	**0.000**		**0.000**		**0.500**		**1.000**		**Cont**	**Cont**	

Remarks:

Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 02 Cost**	**FY 02 Award Date**	**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**
Management Spt	TBD	BAE				0.250	2Q/03	0.473	1Q/04	0.750	1Q/05	Cont.	Cont.	
Subtotal Management			**0.000**	**0.000**		**0.250**		**0.473**		**0.750**		**Cont**	**Cont**	

Remarks:

Total Cost			**0.000**	**0.000**		**0.486**		**1.215**		**6.032**		**Cont**	**Cont**	