Exhibit R-2	2, RDT&E	Budget	Item J	ustifica	ation		Da	te:	
	,							February	y 2000
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NO	MENCLATURE				
ENGINEERING AND MANUFACT	URING DE	VELOPM	ENT,	JOINT	ROBOTICS	S PROGRA	AM PE	0604709D8	Z
DEFENSE-WIDE, BUDGET ACT	IVITY 5								
COST (\$ in Millions)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total PE Cost	14.708	14.660	11.553	13.123	13.590	13.853	14.121	Continuing	Continuing
SRS	9.700	10.000	3.000	0.000	0.000	0.000	0.000	0.000	22.700
RCSS	1.900	3.000	6.053	7.123	7.590	0.000	0.000	0.000	10.953
MDARS-I	3.108	1.660	1.500	0.000	0.000	0.000	0.000	0.000	6.268
MDARS-E	0.000	0.000	1.000	6.000	6.000	0.000	0.000	0.000	13.000
FTUV						13.853	14.121	Continuing	Continuing

A. Mission Description and Budget Item Justification. This program is a budget activity level 5 based on the successful transition of robotic technologies from Program Definition and Risk Reduction (PDRR) activities to Engineering, Manufacturing and Development (EMD) as part of an Evolutionary Strategy. This PE was established in response to Office of the Secretary of Defense (OSD) and Service agreement at the April 1997 Joint Robotics Program General Officer Steering Committee (GOSC). The agreement was to have OSD retain oversight of DoD robotics programs through EMD. Individual Services are responsible for requirements generation and procurement funding. Within the JRP, emphasis is on the development of robotic technologies that: are usable in multi-service missions; provide capability in hazardous environments; provide improved battlefield efficiency using supervised autonomous operational capability; reduce or enhance force manpower and sustainability; and are affordable. Success has been achieved in four programs to justify EMD at this time. This PE establishes the consolidated DoD robotics program for unmanned ground vehicles (UGV) and advances UGV concepts into EMD for (1) the Standardized Robotic System (SRS) - a generic, modular set of kits that can be used to retrofit several different types of currently fielded vehicles to allow remote obstacle breaching operations (minefields, earthworks, bunkers, etc.), and have supported operations in Bosnia and Kosovo; (2) the Robotic Combat Support System (RCSS) - a three phase block upgrade program to the "Block 0" Product Improved Mini-Flail for anti-personnel (AP) landmine/scattermine and unexploded ordnance (UXO) proofing for the light, rapid deployment forces; (3) the Mobile Detection Assessment Response System, Interior (MDARS-I) - which will provide physical security inside warehouses of fixed installations and large storage facilities, protection of critical inventory items and track movement of items in warehouses and ammunition storage facilities; and (4) the Mobile Detection Assessment Response System, Exterior (MDARS-E) - that are intended to provide unmanned roving security patrols among the buildings and around the perimeter of large fixed installations.

Exhibit R-2, RDT&E Budget	Ttem Just	ification	<u>ר</u>		Date:
,			-		February 2000
B. <u>Program Change Summary</u> (\$ million) Previous President's Budget		<u>FY1999</u> 15.115	<u>FY2000</u> 12.004	<u>FY2001</u> 11.742	Total <u>Cost</u> Continuing
Appropriated Value		15.115	15.004	11./42	contributing
Adjustments to Appropriated Value a. Congressionally Directed Appropriation Reduction b. Congressionally Directed Undistributed Reduction c. Below threshold reprogramming,					
inflation savings, government-wide res	scission	(0.407)	(0.344)	(0.189)	
Current Budget Submit/President's Budget		14.708	14.660	11.553	Continuing
 C. Other Program Funding Summary D. Acquisition Strategy E. Schedule Profile 					
Fiscal Year actual and planned events:					
F	Y 1999	FY2000	FY2001		
Acquisition Milestones					
SRS			MS III		
MDARS-I			MS III		
RCSS-Block 1		MS I			
MDARS-E		MS I/II			
Engineering Milestones					
T&E Milestones					
Contract Milestones					

Exhibit	R-2a, F	RDT&E Pro	iect J	ustific	ation			Date:	
			-					February 20	000
APPROPRIATION/BUDGET ACTIVITY		ROGRAM ELEMEN			ME AND NUMI				
EMD, DEFENSE WIDE,		PE 06047	09D8Z	STAND	ARDIZED	ROBOTIC	SYSTE	M (SRS)	
BUDGET ACTIVITY 5									
Cost (\$ in Millions)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY2005	Cost to Complete	
SRS	9.700	10.000	3.000	0.000	0.000	0.000	0.000	0.000	22.700
 A. <u>Mission Description a</u> generic, modular set engineer vehicles to Prototypes have been Operational Requireme (U) <u>FY 1999 Accomplis</u> Executed SRS EMD c kits (D7G, M9 Armo Operational Testin Conducted engineer Developed of an SR bulldozer kits for (U) <u>FY 2000 Plans</u> Continue SRS EMD e Complete DT and OT Engineering and pr (U) <u>FY 2001 PLANS</u> Continue SRS EMD e Complete DT and OT Complete DT and OT Engineering and pr (U) <u>FY 2001 PLANS</u> Continue SRS EMD e Complete DT and OT Operational SR END e Complete DT and OT Complete design fo Engineering and pr Obtain MSIII Decis 	of kits allow re used in nts Docu <u>hments</u> ontract red Comb g (OT) ing and S kit fo enginee ffort fo of the ogram ma ffort fo for the r the M9 ogram ma	that can k emote obsta support of ment (ORD) effort for bat Excavat program ma or the Inte ering school or the desi IVMMD (Mee anagement s r the desi D7G ACE, T3, nagement s	e used i acle breat operat:	to retrof aching op ions in E sign, man], T3 Doz t support icle Mour ation ufacture bobtic ki for the S ufacture, CE SRS ki	it severa erations cosnia and unfacture er, DEUCH for the ted Mine and deliv t RS kit de and deli t applica	al differe (minefiel d Kosovo. and deliv E) for Dev SRS kit o Detector very of er evelopment .very of e	ent types Lds, eart The US very of e velopment developme (IVMMD) ngineerin	s of currently thworks, bunke Army has an a engineering pr tal Testing (I ent program and I ng prototypes	r fielded ers, etc.) upproved rototype DT) and Enterim T-3

Exhibit R-2a, RDT&E P	roject Ju	ıstifica	tion	Date:
				February 2000
B. Other Program Funding Summary				
C. Acquisition Strategy The SRS kit development effort is contra The EMD contract was awarded 4 th Quarter incrementally funded beginning FY 1999 t scheduled for 4 th Quarter FY 2001, based	FY 1998 to hrough FY	o Omnitec 2001. Th	h Robotics Incorp ne SRS Milestone I	orated. The contract is
D. Schedule Profile				
Fiscal Year actual and planned events:	FY1999	FY2000	FY2001	
Acquisition Milestones				
SRS (D7G) (M9 ACE/DEUCE) (T3)			MSIII	
Ingineering Milestones				
T&E Milestones				
SRS (D7G) (M9 ACE/DEUCE) (T3)			DT/OT	
Contract Milestones				

EMD, DEFENSE-WIDE BUDGET ACTIVITY 5, Cost Categories Contrac (Tailor to WBS, or System/Item Requirements) Type Primary Hardware Development CPIF Ancillary Hardware Development CPIF Systems Engineering Licenses Tooling	PE Performing	GRAM ELEN 06047 Total 1998 Cost		1999 Award Date	2000 Cost 5.804	2000 Award Date		TANDAR STEM 2001 Award Date	DIZED RO (SRS) Cost To Complete	DBOTIC Total Cost	Target
Cost Categories Contrac Method (Tailor to WBS, or System/Item Method Requirements) Type Primary Hardware Development CPIF Ancillary Hardware Development CPIF Systems Engineering Licenses Tooling Image: Contract of the system control of the system contr	E Performing Activity & Location OmniTech	Total 1998	1999 Cost 7.900	1999 Award	Cost	Award	2001	2001 Award	Cost To		
(Tailor to WBS, or System/Item Requirements) Method Type Primary Hardware Development CPIF Ancillary Hardware Development CPIF Systems Engineering Licenses Tooling Image: Complexity of the system of t	Activity & Location	1998	Cost 7.900	Award	Cost	Award		Award			
Ancillary Hardware Development CPIF Systems Engineering Licenses Tooling					5 804						Value of Contract
Ancillary Hardware Development CPIF Systems Engineering Licenses Tooling	Omnitech		1.000				1.000			Cont.	Cont.
Licenses Tooling					1.000	1					
Tooling											
GFE											
Award Fees						1 1					
Subtotal Product Development			8.900		6.804		1.000			Cont.	Cont.
Development Support			T			<u> </u>		1			1
Software Development					0.496		0.444				
					0.190						
Training Development							0.111				
			0.125		0.300		0.050				
Training Development Integrated Logistics Support Configuration Management			0.125								
					0.300		0.050				
Integrated Logistics Support Configuration Management							0.050				

	ysıs (p	age 2)						Da	ate: Fe	bruary	2000	
EMD, DEFENSE-WIDE,			OGRAM ELE					S	FANDAF	RDIZED F	ROBOTI	
BUDGET ACTIVITY 5			PE 060	4709D8	ΒZ			S	YSTEM	(SRS)		
Cost Categories (Tailor to WBS, or System/Item	Contract Method &	Performing Activity &	Total 1998	1999 Cost	1999 Award	2000 Cost	2000 Award	2001 Cost	2001 Award	Cost To Complete	Total Cost	Target Value of
Requirements)	Туре	Location	Cost		Date	0.550	Date	0 000	Date			Contract
Developmental Test D7G	MIPR	APG, MD				0.550		0.200				
IOT&E D7G DT M9 ACE	MIPR	T&E CMD				0.550		0.306				
IOT&E M9 ACE	MIPR	APG, MD T&E CMD						0.306				
DT DEUCE	MIPR	APG, MD			<u> </u>		<u> </u>	0.450	+			
IOT&E DEUCE	MIPR	T&E CMD			<u> </u>		<u> </u>	<u> </u>	+			
DT T3	MIPR	APG, MD	+			0.175	<u> </u>		+			
IOT&E T3	MIPR	T&E CMD			 	0.175	 	 	+	ł		
Subtotal T&E	MIFR	TOR CHID			 	1.575	 	0.956	+	CONT	CONT	
Queto Decisiona Queto				1	1	1	1	1				
						0.075						
Government Engineering Support				0.500		0.075		0.500				
Government Engineering Support Program Management Support		US AMCOM		0.500		0.075		0.500				
Government Engineering Support Program Management Support Program Management Personnel		US AMCOM				0.500		0.500				
Government Engineering Support Program Management Support Program Management Personnel Travel		US AMCOM		0.500				0.500				
Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel)		US AMCOM				0.500		0.500				
Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous Subtotal Management		US AMCOM				0.500		0.500		CONT	CONT	
Program Management Personnel Travel Labor (Research Personnel) Miscellaneous		US AMCOM		0.075		0.500				CONT	CONT	
Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous Subtotal Management		US AMCOM		0.075		0.500				CONT	CONT	

Exhibit	R-2a,	RDT&E Pr	oject J	ustifica	ation			Date February	2000
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEME	ENT	PROJECT NAI	ME AND NUME	BER			
EMD, DEFENSE WIDE,		PE 06047	709D8Z	ROBOT	IC COMB	AT SUPPO	RT SYST	TEM (RCSS)	
BUDGET ACTIVITY 5									
Cost (\$ in Millions)	FY 1999	9 FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY2005	Cost to Complete	Total Cost
RCSS	1.900	3.000	6.053	0.000	0.000	0.000	0.000	0.000	10.953

A. <u>Mission Description and Budget Item Justification.</u> The Robotic Combat Support System (RCSS) Program utilizes a 3 phase "Block" upgrade approach. "Block 0" is the Product Improved Mini-Flail (PIMF) which is an RCSS with the anti-personnel mine proofing and clearing payload. The PIMF has proven effective in Bosnia and Kosovo as a contingency asset. "Block 1" will be an anti-personnel obstacle clearing and neutralization system and will replace the PIMF, providing improved off-route stability, increased anti-personnel (AP) landmine neutralization speed, improved reliability, and improved human-machine interface. "Block 2" will add AP wire obstacle clearing, advanced controls, remotely deployed smoke and obscurants, and remotely delivered special munitions to support dismounted operations. "Block 3" will add the capability to carry soldier loads and provide hands-free control and dismounted soldier leader-follower technology. Mechanical devices will be added to "Block 2" that will be used to emplace demolitions and special breaching systems. A Mission Need Statement (MNS) has been developed and an Operational Requirements Document (ORD) is waiting final approval at Army Training and Doctrine Command (TRADOC).

- (U) FY 1999 Accomplishments
- Designed, developed, and tested non-explosive breaching system for RCSS-Light
- Produced four lightweight contingency systems for operations in Bosnia and Kosovo

(U) FY 2000 Plans

- Engineering and program management support for the RCSS-Block 1 development
- Start RCSS-Block 1 Program Definition and Risk Reduction (PDRR) effort for the design, manufacture and delivery of engineering prototypes

(U) FY 2001 Plans

- Engineering and program management support for the RCSS-Block 1 development
- Conduct initial verification testing
- B. Other Program Funding Summary

C. Acquisition Strategy

	Exhibit R-2a, RDT&E Projec	t Justifi	cation		Date February	2000
	The RCSS-Block 1 contract will be awarded	under full	and open	competition in FY	2000.	
D.	Schedule Profile					
	Fiscal Year actual and planned events:	FY1999	FY2000	FY2001		
		111999	112000	112001		
-	ion Milestones Block 1		MSI			
ICCDD .	BIOCK I		1101			
ngineer	ing Milestones					
&E Mile						
RCSS-	Block 1			IVT		
ontract	Milestones			PDRR		

									Date: \mathbf{F}	ebru	ary 20	00	
BUDGET ACTIVITY 5 Cost Categories Cont			RAM ELEM						Robot	ic (Combat	Suppo	ort
Cost Categories Cont		PE	0604	1709D8	Z				Syste				
	ract Perfo	rming	Total	1999	1999	2000	2000	20	1		Cost To	Total	Target
	od & Activ		1998		Award	Cost	Award	Co			Complete	Cost	Value of
Requirements) Ty	rpe Loca	tion	Cost	Cost	Date		Date		Dat	e			Contract
Primary Hardware Development CPIH	. 08	ST		0.950				3.9	53				
Ancillary Hardware Development													
Systems Engineering				0.650		2.000		0.8	00				
Licenses				0.200									
Tooling								0.1	00				
GFE	TAC	COM		0.100									
Award Fees													
Subtotal Product Development				1.900		2.000		4.8	53		CONT	CONT	
Development Support		1		1	1	1	1 1	0.1	0.0				
Software Development						0.500		0.1					
Training Development						0.500		0.1					
Integrated Logistics Support								0.1					
Configuration Management								0.1					
								0.1	00				
Technical Data													
Configuration Management Technical Data GFE Subtotal Support						0.500		0.5	0.0		CONT	CONT	

Exhibit R-3 Cost Anal EMD, DEFENSE-WIDE,	1 (F		PROGRAM EL	EMENT				т	obotic	a Combat	- Curr	ort
			PE 060		27					c Combat	_ Supp	Jrt
BUDGET ACTIVITY 5			PE 000	4/0900) <u>С</u>			2	ystem	(RCSS)		
Cost Categories	Contract	Performi		1999	1999	2000	2000	2001	2001	Cost To	Total	Target
(Tailor to WBS, or System/Item	Method &	Activity		Cost	Award	Cost	Award	Cost	Award	Complete	Cost	Value of
Requirements)	Туре	Locatio	n Cost		Date		Date		Date			Contract
DT								0.300				
IOT&E												
DT												
IOT&E												
Subtotal T&E								0.300		CONT	CONT	
Remarks												
Remarks	I	1		T	T	Γ	I	0 100		I		
Contractor Engineering Support						0.500		0.100				
Contractor Engineering Support Government Engineering Support						0.500		0.100				
Contractor Engineering Support Government Engineering Support Program Management Support						0.500						
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel						0.500		0.100				
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel						0.500		0.100				
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel)						0.500		0.100				
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous								0.100		CONT	CONT	
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous Subtotal Management						0.500		0.100		CONT	CONT	
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous Subtotal Management								0.100		CONT	CONT	
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous Subtotal Management								0.100		CONT	CONT	
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous Subtotal Management								0.100		CONT	CONT	
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous Subtotal Management								0.100		CONT	CONT	
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous								0.100		CONT	CONT	
Contractor Engineering Support Government Engineering Support Program Management Support Program Management Personnel Travel Labor (Research Personnel) Miscellaneous Subtotal Management				1.900				0.100		CONT	CONT	

Exhibit	R-2a, H	RDT&E Pro	piect J	ustific	ation			Date:	
			3					February	2000
PPROPRIATION/BUDGET ACTIVITY EMD, DEFENSE WIDE, BUDGET ACTIVITY 5		TION ASS	ESSMEN	response s	YSTEM -				
BUDGEI ACIIVIII 5		TNIER	IOR (MD)	ARS-1)					
Cost (\$ in Millions)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY2005	Cost to Complete	Total Cos
MDARS-I	3.108	1.660	1.500	0.000	0.000	0.000	0.000	0.000	6.268
 A. <u>Mission Description a</u> Interior (MDARS-I) wi and large storage fac track movement or dis (U) <u>FY 1999 Accomplis</u> Awarded Engineerin Designed/fabricate 	ll provi ilities. turbance <u>hments</u> g Manufa	ide unmann. . In addi e of criti acturing D	ed physic tion to a cal inve evelopme	cal secur security, ntory ite nt (EMD)	ity insid the syst ms.	le the war	rehouses	of fixed insta	allations

(U) FY 2000 Plans

- Conduct Developmental and Operational Tests (DT/OT)
- Prepare/Coordinate MSIII IPR package
- Prepare material change package

(U) <u>FY 2001 Plans</u>

- Initiate Pre-Planned Product Improvement effort
- Obtain materials change decision
- Obtain MSIII decision
- B. Other Program Funding Summary
- C. Acquisition Strategy

D. Schedule Profile

Exhibit R-2a, RDT&E Pr	oject Ju	stificat	ion	_{Date} : February 2000
Fiscal Year actual and planned events:	FY1999	FY2000	FY2001	
Acquisition Milestones				
MDARS-I			MSIII	
Engineering Milestones				
T&E Milestones				
MDARS-I		DT/OT		
Contract Milestones	EMD			

EMD, DEFENSE-WIDE, BUDGET ACTIVITY 5		Exhibit R-3 Cost Analysis (page 1)											
	EMD, DEFENSE-WIDE,						PROGRAM ELEMENT PE 0604709D8Z						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performin Activity Location	& 1998	1999 Cost	1999 Award Date	2000 Cost	2000 Award Date	2001 Cost	2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract	
Primary Hardware Development	CPIF	TBD		1.750		1.000		1.000					
Ancillary Hardware Development												1	
Systems Engineering				0.200		0.150		0.150				1	
Licenses	1				1		1			İ		İ	
Fooling	1				1	1	1			İ		İ	
GFE	-												
Award Fees													
Subtotal Product Development	-			1.950		1.150		1.150		CONT	CONT		
Development Support					r	1	<u>г г</u>			1			
Software Development	· ·			0.500		0.150		0.150					
Training Development	· ·			0.200		0.150		0.130					
				0.200		0 100	1	0 100					
Configuration Management				0.100		0.100		0.100		1		1	
										1			
Fechnical Data							1						
Integrated Logistics Support	<u> </u>			0.200		0.100		0.100					

(Tailor to WBS, or System/Item Me	ntract thod & Type	Performin Activity Location	& 1998		1999 Award Date	2000 Cost 0.260	2000 Award Date	RE		DETECTI E SYSTE I) Cost To Complete		
Cost Categories Co (Tailor to WBS, or System/Item Mer Requirements) Co Developmental Test O Operational Test Co GFE Award Fees Award Fees Subtotal T&E	thod &	Activity	g Total & 1998	1999 Cost	1999 Award	Cost	Award	(M	DARS- 2001 Award	·I) Cost To	Total	Target Value of
Cost Categories Co (Tailor to WBS, or System/Item Mer Requirements) Co Developmental Test O Operational Test Co GFE Award Fees Award Fees Subtotal T&E	thod &	Activity	& 1998	Cost	Award	Cost	Award	(M	DARS- 2001 Award	·I) Cost To	Total	Target Value of
(Tailor to WBS, or System/Item Me Requirements) Developmental Test Operational Test Tooling GFE Award Fees Subtotal T&E	thod &	Activity	& 1998	Cost	Award	Cost	Award	2001	2001 Award	Cost To		Value of
(Tailor to WBS, or System/Item Me Requirements) Developmental Test Operational Test Tooling GFE Award Fees Subtotal T&E	thod &	Activity	& 1998	Cost	Award	Cost	Award		Award			Value of
Requirements) // Developmental Test // Operational Test // Tooling // GFE // Award Fees // Subtotal T&E // Subtotal T&E // Comparison // Compa								COST		Complete	COST	
Developmental Test Operational Test Tooling GFE Award Fees Subtotal T&E	Туре	Location		0.158	Date	0.260	Date		Date			Contract
Operational Test Tooling GFE Award Fees Subtotal T&E				0.158		0.200						
Tooling GFE Award Fees Subtotal T&E												
GFE Award Fees Subtotal T&E												
Award Fees Subtotal T&E												
Subtotal T&E												
				0.158		0.260				CONT	CONT	
Remarks				0.158		0.260				CONT	CONT	
Contractor Engineering Support												
Government Engineering Support		-						0 100				
Program Management Support				0.200				0.100				
Program Management Personnel				-								
Travel												
				0.000				0 100		CONT	CONT	
Labor (Research Personnel) Miscellaneous Subtotal Management				0.200				0.100		2017		

EXII.	ibit R-2a, 1	RDT&E Pro	oject J	ustifica	ation			_{Date} : February 20	000			
PPROPRIATION/BUDGET ACTIVITY EMD, DEFENSE WIDE, BUDGET ACTIVITY 5	P	rogram eleme PE 06047		PROJECT NAME AND NUMBER MOBILE DETECTION ASSESSMENT RESPONSE SYSTEM EXTERIOR (MDARS-E)								
Cost (\$ in Millions)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY2005	Cost to Complete	Total C			
MDARS-E	F1 1999	F1 2000	1.000	6.000	6.000	0.000	0.000	0.000	13.00			
	S-E) will prov arge fixed ins a addition to critical inve omplishments ng during this as during this as EMD Reques Source Selecti d EMD contract Funding Summar	vide unman stallation security, entory ite s fiscal y s fiscal y st for Pro	ned rovi s includ the sys ms. ear ear	ng securi ing wareh tem will	ty patrol ouses, la	ls among t arge stora	the build age faci	dings and arou lities and amm	nd the unition			

Exhibit R-2a, RDT&E Project	_{Date} : February 2000				
D. Schedule Profile: Fiscal Year actual and planned events:					
	FY1999	FY2000	FY2001		
Acquisition Milestones					
MDARS-E		MSI/II			
Engineering Milestones					
T&E Milestones					
Contract Milestones					

Exhibit R-3 Cost Analy	ysis (pa	age 1)							D	ate: Febi	cuary 20	000					
RDT&E, DEFENSE-WIDE	E,		PRO	GRAM ELEI	MENT				Μ	MOBILE DETECTION ASSESSM							
BUDGET ACTIVITY 4	,		P	E 0604	1709D8	Ζ			D	FODONO	F GVG _	5 - EXTERIOR					
BODGEI ACIIVIII 4										LUK							
				1					,	MDARS-							
Cost Categories	Contract	Perform		Total	1999	1999	2000	2000	2001	2001	Cost To	Total	Target				
(Tailor to WBS, or System/Item Requirements)	Method &	Activit Locati		1998 Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Complete	Cost	Value of Contract				
Requirements)	Туре	LOCALI	LOII	COSL		Date		Date		Date			Contract				
Primary Hardware Development									0.600								
Ancillary Hardware Development							1										
Systems Engineering									0.200								
Licenses																	
Tooling																	
GFE																	
Award Fees																	
Subtotal Product Development									0.800		CONT	CONT					
Development Gumment	T	-		1	1	1	ł	1	0 200		T	1	1				
Development Support Software Development									0.200								
Training Development										-							
Integrated Logistics Support																	
Configuration Management																	
Technical Data																	
GFE																	
Subtotal Support									0.200		CONT	CONT					
Remarks																	

Exhibit R-3 Cost Analy	hibit R-3 Cost Analysis (page 2)									Date: February 2000					
RDT&E, DEFENSE-WIDE	С.		PROC	GRAM ELE	MENT				М	OBILE	DETECT	ION AS	SESSMENT		
BUDGET ACTIVITY 4	- /		PI	E 060	4709D8	βZ				-	-				
BUDGEI ACIIVIII 4										RESPONSE SYSTEM - EXTER					
									(MDARS-	-E)				
Cost Categories	Contract	Perform		Total	1999	1999	2000	2000	2001	2001	Cost To	Total	Target		
(Tailor to WBS, or System/Item	Method &	Activit		1998	Cost	Award	Cost	Award	Cost	Award	Complete	Cost	Value of		
Requirements)	Туре	Locati	on	Cost		Date		Date		Date			Contract		
Developmental Test & Evaluation															
Operational Test & Evaluation															
Tooling															
GFE											ļ				
Subtotal T&E											CONT	CONT			
Contractor Engineering Support															
Government Engineering Support															
Program Management Support															
Program Management Personnel															
Travel															
Labor (Research Personnel)															
Miscellaneous															
Subtotal Management											CONT	CONT			
Remarks															
Total Cost									1.000						
Remarks															