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Exhibit R-2, RDT&E Budget Item Justification						Date: February 2004	
APPROPRIATION/BUDGET ACTIVITY DEFENSE WIDE RDT&E BA 5				R-1 ITEM NOMENCLATURE PE 0604709D8Z JOINT ROBOTICS EMD			
COST (\$ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	27.326	21.381	13.845	14.081	14.264	14.761	15.085
CRS	6.939	7.600	2.330	2.000	2.146	2.197	2.117
RCSS	7.687	2.500	2.870	2.094	2.420	2.460	2.471
GLADIATOR	0.000	9.700	5.165	6.437	6.078	6.424	6.717
MDARS-E	12.700	1.581	3.480	3.550	3.620	3.680	3.780

A. Mission Description and Budget Item Justification:

This program is a budget activity level 5 based on the successful transition of robotic technologies from Concept and Technology Development activities to System Development and Demonstration (SDD) 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 SDD formerly Engineering, Manufacturing and Development (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 five programs to justify SDD at this time. This PE establishes the consolidated DoD robotics program for Unmanned Ground Vehicles (UGV) and advances UGV concepts into SDD for (1) the Common Robotic System (CRS) - a generic, modular set of robotic systems 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) - capable of neutralizing anti-personnel mines, breaching wire obstacles and delivery of smoke or obscurants with P3I upgrades such as manipulator arm, semi-autonomous/autonomous control, prototypes have supported operations in Bosnia, Kosovo, Iraq and Afghanistan; (3)

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GLADIATOR—in response to a Marine Corps requirement, GLADIATOR will provide units of the Marine Air Ground Task Force (MAGTF) with multi-mission (RSTA, obstacles, direct fire, chem./bio detect) capability.

B. Program Change Summary: The Program was transferred by direction of Congress from the Department of the Air Force to the Department of Defense for FY 2004 execution.

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
Previous President's Budget	27.887	13.597	13.861
Current FY 2005 President's Budget	27.326	21.381	13.845
Total Adjustments	-.561	+7.784	-.016
Congressional program reductions			
Congressional rescissions	-.561		-.016
Congressional increases		+7.784	
Reprogrammings			
SBIR/STTR Transfer			

C. Other Program Funding Summary:

Not Applicable

D. Acquisition Strategy:

Not Applicable

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Exhibit R-2a, RDT&E Budget Item Justification						Date: February 2004	
APPROPRIATION/BUDGET ACTIVITY DEFENSE WIDE RDT&E BA 5				R-1 ITEM NOMENCLATURE JOINT ROBOTICS PROGRAM PE 0604709D8Z			
COST (\$ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
CRS	6.939	7.600	2.330	2.000	2.146	2.197	2.117

A. Mission Description and Budget Item Justification:

The Common Robotic System (CRS) program is a generic and modular robotic system that can be retrofitted to many different military applications and vehicles. The U.S. Army approved the Operational Requirements Document (ORD) in September 1997. Currently, the SRS system is being built for the DEUCE engineer dozer for the BCT; the GSTAMIDS Block 0 countermine system; the Unmanned Ground Vehicle Robotic Obscuration Platform (UGV ROP) for the M56 Coyote Smoke Obscuration System; and USMC Assault Breacher Vehicle (ABV) to allow remote obstacle breaching operations (minefields, earthworks, bunkers and obstacles such as clearing of rubble in a MOUT environment or a man-made obstacle covered by enemy fire). The Joint Project Office continues to support six M1A1 Panther systems for contingency support Bosnia and Kosovo that have cleared over 500 mines and submunitions. Panther is a tank chassis with SRS system and mine rollers used to proof roads or fields for mines.

B. Accomplishments/Planned Program

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	6.939	0.000	0.000
RDT&E Articles Quantity * (as applicable)			

- Continued engineering and program management support for CRS system development.
- Continued SDD acquisition activity for the design, manufacture, and deliver of engineering prototypes for CRS.
- Conducted CRS IPR.
- Initiated CRS competitive Source Selection.
- Tested CRS contingency kits for GSTAMIDS Block 0.
- Delivered kits for the Assault Breacher and UGV ROP testing.

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	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	7.600	0.000
RDT&E Articles Quantity * (as applicable)			

- Award CRS SDD contract.
- Begin DT for UGV ROP.
- Begin GSTAMIDS Block 0 production of 10 units.

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	0.000	2.330
RDT&E Articles Quantity * (as applicable)			

- Complete SDD for UGV ROP.
- Obtain MS C for UGV ROP.
- Begin Full Rate Production of UGV ROP.

C. Other Program Funding Summary:

Not Applicable

D. Acquisition Strategy:

Not Applicable

E. Major Performers:

Not Applicable

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Exhibit R-3 Cost Analysis (page 1)										Date:	February-2004	
DEFENSE-WIDE			Program Element				CRS					
BUDGET ACTIVITY 5			PE 0604709D8Z									
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	2003 Cost	2003 Award Date	2004 Cost	2004 Award Date	2005 Cost	2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development				3.141		3.702		0.746				
Ancilliary Hardware Development												
Systems Engineering				2.318		2.318		1.057				
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development				5.459		6.020		1.803				
Remarks:												
Development Support				0.240		0.240		0.145				
Software Development				0.600		0.600		0.098				
Training Development												
Integrated Logistics Support				0.180		0.180		0.072				
Configuration Management				0.180		0.180		0.072				
Technical Data												
GFE												
Subtotal Support				1.200		1.200		0.387				
Remarks:												

Exhibit R-4, Schedule Profile																								Date: February 2004												
Appropriation/Budget Activity DEFENSE WIDE RDT&E/B.A. #5												Program Element Number and Name PE 0604709D8Z – Joint Robotics Program												Project Number and Name CRS												
Fiscal Year	2001				2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones	[Timeline bar with triangle at 2006 Q1 and star at 2006 Q3]																																			
Contingency Prototypes	[Timeline bar from 2001 Q1 to 2004 Q4]												MS C	FUE																						
T&E Milestones																	[Triangle]																			
DT and IOT&E for each System																	[Box: DT and IOT&E]																			
Production Milestones LRIP GSTAMIDS M56 Coyote																	[Triangle]	[Box: LRIP]	[Triangle]	[Box: LRIP]																
Full Rate Production																	FRP start	[Triangle]	[Timeline bar]																	
Deliveries																																				

R-4 Schedule Profile

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Exhibit R-4a, Schedule Detail				Date: February 2004				
Appropriation/Budget Activity Research, Development, Test & Evaluation, Defense-Wide, Budget Activity 4		Program Element Number and Name PE 0603709D8Z Joint Robotics Program			Project Number and Name Common Robotic System (CRS)			
Schedule Profile	FY 2001	FY 2002	FY200 3	FY200 4	FY200 5	FY200 6	FY200 7	FY200 8
SDD	1-4Q	1-4Q	1-4Q	1-4Q				
Milestone C						1Q		
LRIP GSTAMIDS				3Q				
LRIP M56 Coyote								
Full Rate Production UGV ROP						2Q		

R-4a Schedule Profile

Exhibit R-2a, RDT&E Budget Item Justification						Date: February 2004	
APPROPRIATION/BUDGET ACTIVITY DEFENSE WIDE RDT&E BA 5				R-1 ITEM NOMENCLATURE PE 0604709D8Z JOINT ROBOTICS PROGRAM			
COST (\$ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
RCSS	7.687	2.500	2.870	2.094	2.420	2.460	2.471

A. Mission Description and Budget Item Justification:

The Robotic Combat Support System (RCSS) Program is an upgrade approach from the Product Improved Mini-Flail (PIMF). The PIMF has proven effective in Bosnia and Kosovo, as well as in Afghanistan, as a contingency asset. RCSS threshold requirements include anti-personnel mine clearing and neutralization, improved reliability and human-machine interface, wire obstacle breaching, remotely deployed smoke and obscurants, and the capability to carry soldier loads. P3I requirements include advanced controls, remotely delivered special munitions to support dismounted operations, hands-free control using dismounted soldier leader-follower technology, and mechanical devices that will be used to emplace demolitions and special breaching systems. A Mission Need Statement (MNS) and an Operational Requirements Document (ORD) have been approved by Army Training and Doctrine Command (TRADOC).

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B. Accomplishments/Planned Program

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	7.687	0.000	0.000
RDT&E Articles Quantity * (as applicable)			

- Completed evaluation of CTD contract efforts.
- Revised Acquisition Strategy to meet War on Terrorism Urgent Requirements.
- Conducted market survey to determine availability of COTS capability.
- Selected RCSS COTS vendor.

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	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	2.500	0.000
RDT&E Articles Quantity * (as applicable)			

- Initiate RCSS COTS procurement contract.
- Conduct safety testing and obtain safety release.
- Field RCSS COTS systems to War on Terrorism operating forces including training and maintenance support.
- Begin preparation for Type Classification testing.

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	0.000	2.870
RDT&E Articles Quantity * (as applicable)			

- Continue Type Classification testing.
- Continue fielding and support of RCSS COTS systems to War on Terrorism forces.
- Obtain Type Classification.
- Begin integration of selected Mission Effects Modules.

C. Other Program Funding Summary:

Not Applicable

D. Acquisition Strategy:

Not Applicable

E. Major Performers:

Not Applicable

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Exhibit R-3 Cost Analysis (page 1)							Date:	February 2004				
DEFENSE-WIDE BUDGET ACTIVITY 5			Program Element PE 0604709D8Z				RCSS					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	2003 Cost	2003 Award Date	2004 Cost	2004 Award Date	2005 Cost	2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	CPFF			2.712		0.779		1.149				
Ancillary Hardware Development												
Systems Engineering				2.663		0.602		0.602				
Licenses												
Tooling				0.767		0.052		0.052				
GFE												
Award Fees												
Subtotal Product Development				6.142		1.433		1.803				
Remarks:												
Development Support				0.075		0.052		0.052				
Software Development				0.112		0.086		0.086				
Training Development				0.125		0.105		0.105				
Integrated Logistics Support				0.125		0.085		0.085				
Configuration Management				0.125		0.075		0.075				
Technical Data												
GFE												
Subtotal Support				0.562		0.403		0.403				
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)							Date:	February-2004				
DEFENSE-WIDE			Program Element				RCSS					
BUDGET ACTIVITY 5			PE 0604709D8Z									
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	2003 Cost	2003 Award Date	2004 Cost	2004 Award Date	2005 Cost	2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
DT						0.206		0.206				
IOT&E						0.240		0.240				
Initial Verification Testing				0.746								
Subtotal T&E				0.746		0.446		0.446				
Remarks:												
Contractor Engineering Support				0.052		0.038		0.038				
Government Engineering Support				0.110		0.120		0.120				
Program Management Support				0.075		0.060		0.060				
Program Management Personnel												
Travel												
Labor (Research Personnel)												
Miscellaneous												
Subtotal Management				0.237		0.218		0.218				
Remarks:												
Total Cost				7.687		2.500		2.870				
Remarks:												

Exhibit R-4, Schedule Profile																												Date: February 2004								
Appropriation/Budget Activity DEFENSE WIDE RDT&E/B.A. #5														Program Element Number and Name PE 0604709D8Z – Joint Robotics Program										Project Number and Name RCSS												
Fiscal Year	2001				2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones																																				
Log Demo	MS A																																			
Safety Testing																																				
T&E Milestones																																				
Independent Verification Test																																				
Type Classification Tests																																				
IOT&E																																				
Production Milestones																																				
COTS Procurement																																				
Deliveries	<p>1 22 2 4</p>																																			

R-4 Schedule Profile

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Exhibit R-4a, Schedule Detail				Date: February 2004					
Appropriation/Budget Activity Research, Development, Test & Evaluation, Defense-Wide, Budget Activity 5		Program Element Number and Name PE 0604709D8Z Joint Robotics Program			Project Number and Name Robotic Combat Support System (RCSS)				
Schedule Profile	FY 2001	FY 2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	
Milestone A	1Q								
Contract Preparation	1-4Q	1-4Q	1-4Q						
CTD Contract Award	4Q		1Q						
CTD	4Q	1-4Q	1Q						
Milestone B									
Contract Preparation		4Q							
SDD Contract Award									
SDD									
Safety Test				2-3Q					
Type Classification testing				4Q	1-4Q				
IOT&E									
COTS Procurement Contract				2Q					
Full Rate Production									
First Unit Equipped				3Q					

R-4a Schedule Profile

Exhibit R-2a, RDT&E Budget Item Justification						Date: February 2004	
APPROPRIATION/BUDGET ACTIVITY DEFENSE WIDE RDT&E BA 5				R-1 ITEM NOMENCLATURE PE 0604709D8Z JOINT ROBOTICS PROGRAM			
COST (\$ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
GLADIATOR	0.000	9.700	5.165	6.437	6.078	6.424	6.717

A. Mission Description and Budget Item Justification:

The Gladiator Program is a USMC initiative based on the Joint Army-Marine Corps Tactical Unmanned Vehicle (TUV) ORD originated by the U.S. Army Infantry School. Mission Need Statement (MNS) INT 12.1.1 (dated 4 November 1993) validated the need for a tactical unmanned ground vehicle system, and the ORD was approved by the Army in August 1995 and by the Marine Corps in May 1996. Changes in Service deficiencies and required capabilities have led both Services to reevaluate the existing ORD and to initiate efforts to revise it or to approve new requirements documents for robotic systems supporting the tactical commander. The Marine Corps has drafted the Gladiator ORD to support the dismounted infantry of the Marine Ground Combat Element (GCE) with the organic unmanned capability to remote combat tasks including scout/surveillance. The system will reduce risk and neutralize threats to Marines across the full spectrum of conflict and military operations. Gladiator formal requirement document is in final staffing within the Marine Corps. The Gladiator is a teleoperated/semi-autonomous, small-to-medium sized, highly mobile UGV with, initially, the basic capability to conduct scout/surveillance missions and to carry various mission payloads for specific tasks. It will be inherently simple, durable, multi-functional, and easily transported. In the conduct of Operational Maneuver From The Sea (OMFTS), Ship To Objective Maneuver (STOM), Sustained Operations Ashore (SOA), and Operations Other Than War (OOTW), the Gladiator will enhance the ability to accomplish assigned missions. Operating just forward of the GCE units, Gladiator will perform basic scouting/surveillance, obstacle breaching, and

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NBC reconnaissance tasks while permitting the operator to remain covered or concealed. The basic Marine Corps system will consist of a mobile base unit (MBU), an OCU, and specific mission payload modules (MPMs). Initial MPMs will include Joint Chemical Agent Detector (JCAD), Anti-Personnel Obstacle Breaching System (APOBS), and direct fire (lethal and non-lethal) weapons.

B. Accomplishments/Planned Program

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	0.000	0.000
RDT&E Articles Quantity * (as applicable)			

- Program remained in CTD.

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	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	9.700	0.000
RDT&E Articles Quantity * (as applicable)			

- Complete detailed design of Gladiator.
- Complete Future Naval Capability demonstrations.
- Prepare Milestone B documentation.
- Obtain Milestone B approval, initiate System Design and Development (SDD).

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	0.000	5.165
RDT&E Articles Quantity * (as applicable)			

- Complete build of 6 EDMs for DT/OT.
- Complete DT/OT.
- Complete Log Demo.
- Prepare MS C documentation.

C. Other Program Funding Summary:

Gladiator is a cooperative program of the Office of Naval Research and the DoD Joint Robotics Program. The ONR is responsible for funding the major portion of the technology demonstration, while the JRP continues to manage the Gladiator program through SDD to production in support of Marine Corps requirements. FNC funding, under Autonomous Operations is:

FY 2002 5.000 million
 FY 2003 2.500 million
 FY 2004 1.500 million

D. Acquisition Strategy:

Not Applicable

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E. Major Performers:

Not Applicable

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Exhibit R-3 Cost Analysis (page 1)							Date: February-2004					
DEFENSE-WIDE			Program Element				Gladiator					
BUDGET ACTIVITY 5			PE 0604709D8Z									
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	2003 Cost	2003 Award Date	2004 Cost	2004 Award Date	2005 Cost	2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	CPFF					5.264		2.444				
Ancilliary Hardware Development												
Systems Engineering						2.223		0.102				
Licenses												
Tooling						0.052		0.052				
GFE												
Award Fees												
Subtotal Product Development				0.000		7.539		2.598				
Remarks:												
Development Support						0.095		0.052				
Software Development						0.086		0.086				
Training Development						0.046		0.046				
Integrated Logistics Support						0.085		0.085				
Configuration Management						0.075		0.075				
Technical Data												
GFE												
Subtotal Support				0.000		0.387		0.344				
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)							Date:	February-2004					
DEFENSE-WIDE BUDGET ACTIVITY 5			Program Element PE 0604709D8Z				Gladiator						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	2003 Cost	2003 Award Date	2004 Cost	2004 Award Date	2005 Cost	2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract	
DT						1.451		2.000					
IOT&E													
Initial Verification Testing													
Subtotal T&E				0.000		1.451		2.000					
Remarks:													
Contractor Engineering Support						0.038		0.038					
Government Engineering Support						0.225		0.125					
Program Management Support						0.060		0.060					
Program Management Personnel													
Travel													
Labor (Research Personnel)													
Miscellaneous													
Subtotal Management				0.000		0.323		0.223					
Remarks:													
Total Cost			0.000	0.000		9.700		5.165					
Remarks:													

Exhibit R-4, Schedule Profile																								Date: February 2004												
Appropriation/Budget Activity DEFENSE WIDE RDT&E/B.A. #5												Program Element Number and Name PE 0604709D8Z – Joint Robotics Program												Project Number and Name GLADIATOR												
Fiscal Year	2001				2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones	[Timeline bar with milestones: MS B (2004 Q3), MS C (2006 Q1), FUE (2007 Q4)]																																			
Prototype Phase	[Timeline bar from 2001 Q1 to 2002 Q4]												MS B				MS C				FUE															
Program Milestones																																				
Log Demo																																				
T&E Milestones																																				
Independent Verification Test																																				
DT																																				
OT																																				
IOT&E																																				
Production Milestones																																				
LRIP FY 06	LRIP start [Timeline bar from 2005 Q4 to 2007 Q4]																																			
FRP FY 07	FRP start [Timeline bar from 2007 Q4 to 2009 Q4]																																			
Deliveries	[Timeline bars with counts: 44 (2007 Q4), 44 (2008 Q4), 47 (2009 Q4)]																																			

R-4 Schedule Profile

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Exhibit R-4a, Schedule Detail				Date: February 2004					
Appropriation/Budget Activity Research, Development, Test & Evaluation, Defense-Wide, Budget Activity 5		Program Element Number and Name PE 0604709D8Z Joint Robotics Program			Project Number and Name Gladiator				
Schedule Profile	FY 2001	FY 2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	
Milestone A									
Contract Preparation		1-2Q							
CTD Contract Award		2Q							
CTD		2-4Q	1-4Q						
Milestone B				3Q					
Contract Preparation				2-4Q					
SDD Contract Award				4Q					
SDD				3-4Q	1-4Q				
Developmental Test					3-4Q				
Log Demo					4Q				
Operational Test					4Q	1Q			
Milestone C						2Q			
Low Rate Initial Production						2Q			
IOT&E							2Q		
Full Rate Production							4Q		
First Unit Equipped							4Q		

R-4a Schedule Profile

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Exhibit R-2a, RDT&E Budget Item Justification						Date: February 2004	
APPROPRIATION/BUDGET ACTIVITY DEFENSE WIDE RDT&E BA 5				R-1 ITEM NOMENCLATURE PE 0604709D8Z JOINT ROBOTICS PROGRAM			
COST (\$ in millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
MDARS-E	12.700	1.581	3.480	3.550	3.620	3.680	3.780

A. Mission Description and Budget Item Justification:

The Mobile Detection Assessment Response System - Exterior (MDARS-E) will provide commanders at Army, Air Force, Navy, and Defense Logistics Agency (DLA) facilities with the capability to conduct semi-autonomous, random patrols and surveillance activities, barrier assessment, and theft detection functions. MDARS-E can be used in a variety of installations: chemical storage facilities, general storage yards; depots; Arms, Ammunition, and explosives (AA&E) storage areas; air fields; rail-yards; and port facilities. The system will autonomously conduct surveillance activities, conduct lock interrogations, and assess the status of facility barriers such as AA&E storage bunkers. Capabilities include the detection of unauthorized personnel, verification of barriers and product status, and the remote investigation of an alarm source.

B. Accomplishments/Planned Program

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	12.700	0.000	0.000
RDT&E Articles Quantity * (as applicable)			

- Conduct Critical Design Review
- Identify Early User Appraisal (EUA) Activities for Army and Air Force Sites.
- Deliver First Pre-Production Platforms.
- Conduct Production Qualifications Test (PQT) 1a.
- Explore Tactical/Contingency Applications.
- Continue System Integration of Sensor Technologies.

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- Continue C2 Software Engineering and Test.

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	1.581	0.000
RDT&E Articles Quantity * (as applicable)			

- Conduct PQT 1b.
- Conduct Early User Appraisal Training (EUA) at Hawthorne Army Depot and Nellis Air Force Base, NV.

	FY 2003	FY 2004	FY 2005
Accomplishment/Effort/Subtotal Cost	0.000	0.000	3.480
RDT&E Articles Quantity * (as applicable)			

- Conduct PQT2.
- Conduct New Equipment Training.
- Initiate Initial Operational Test and Evaluation.

C. Other Program Funding Summary:

Not Applicable

D. Acquisition Strategy:

Not Applicable

E. Major Performers:

Not Applicable

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Exhibit R-3 Cost Analysis (page 1)							Date:		February 2004			
DEFENSE-WIDE BUDGET ACTIVITY 5			Program Element PE 0604709D8Z				MDARS-E					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	2003 Cost	2003 Award Date	2004 Cost	2004 Award Date	2005 Cost	2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development				12.700		1.581		3.480				
Ancillary Hardware Development												
Systems Engineering												
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development				12.700		1.581		3.480				
Remarks:												
Development Support												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
GFE												
Subtotal Support				0.000		0.000		0.000				
Remarks:												

Exhibit R-4, Schedule Profile																								Date: February 2004												
Appropriation/Budget Activity DEFENSE WIDE RDT&E/B.A. #5												Program Element Number and Name PE 0604709D8Z – Joint Robotics Program												Project Number and Name MDARS-E												
Fiscal Year	2001				2002				2003				2004				2005				2006				2007				2008				2009			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones																																				
Award SD&D Contract																																				
System Delivery																																				
EUA Training																																				
EUA/PQT2																																				
IOT&E																																				

R-4 Schedule Profile

UNCLASSIFIED

Exhibit R-4a, Schedule Detail				Date: February 2004					
Appropriation/Budget Activity RDT&E, Defense Wide/ Budget Activity 5		Program Element Number and Name PE 0604709D8Z		Project Number and Name MDARS-E					
Schedule Profile	FY 2001	FY 2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	
Milestone B IPR	3Q								
Award SD&D contract		2Q							
System Delivery				2Q					
EUA Training				2Q					
EUA/PQT2									
Initiate				2Q					
Complete					2Q				
IOT&E					3Q				
Milestone C IPR						3Q			

R-4a Schedule Profile