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MDA RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	DATE February 2002
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BUDGET ACTIVITY 4 - Program Definition and Risk Reduction	PE NUMBER AND TITLE 0603871C NMD	PROJECT 2400
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COST (<i>In Thousands</i>)	FY2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY2007 Estimate	Cost to Complete	Total Cost
2400 National Missile Defense	1823723								

THE PROGRAM REPRESENTED IN THIS R-2 HAS BEEN RESTRUCTURED FOR FY2002 AND BEYOND AND IS CAPTURED IN PE 0603882C, MIDCOURSE DEFENSE SEGMENT (MDS).

A. Mission Description and Budget Item Justification

The National Missile Defense (NMD) program is designed to protect the nation against long range ballistic missile threats. The Program contributes to each of the three components of the nation’s broad strategy to deal with proliferation; preventing and reducing the threat, deterring the threat, and defending against the threat.

The Program is to assess the technical feasibility, schedule, and cost associated with maintaining a system development path that supports an accelerated, evolutionary acquisition strategy to design, develop, integrate, and test the entire system a systems capability to counter more complex threats. Department of Defense (DoD) conducted a Deployment Readiness Review (DRR) in August 2000. On 1 September 2000, the President decided to continue development and testing and defer the deployment decision.

To execute the program, Boeing North America was competitively awarded the Lead System Integrator (LSI) contract in April 1998. Under that contract, Boeing was required to meet performance requirements. The original contract was closed out in December 2000 and the Boeing Company was awarded a new contract, as the NMD Prime, to continue program development with options to support deployment.

The key NMD system element includes 1). Ground Based Interceptor (GBI) (consisting of a kill vehicle and booster, and GBI support equipment including Command and Launch Equipment (CLE); 2). Ground and space-based sensors, and 3). A Battle Management, Command, Control, and Communication (BM/C3) system. The ground-based sensors include development of an X-Band Radar (XBR) and the upgrade of existing Early Warning Radars (EWR). The BM/C3 system includes command and control and engagement planning capabilities, a communication network, and a communication system to transmit data to and from the interceptor while in flight. The NMD system will also use space-based assets for threat detection and tracking, such as the Air Force’s Defense Support Program (DSP), and eventually the Air Force’s Space Based Infrared System (SBIRS). SBIRS is an integral part of enhancing future NMD capabilities.

NMD DEVELOPMENT/INTEGRATION provides for the Prime Contractor to develop and integrate the individual NMD elements into a cohesive system. In FY 1998, the BM/C3 contract transitioned to Boeing, under the LSI contract. In FY 1999, the Exoatmospheric Kill Vehicle (EKV), Payload Launch Vehicle (PLV) and Integrated System Test Capability (ISTC) contracts were assumed by Boeing. At the end of FY 2000, the last of the NMD legacy contracts, the Ground Based Radar Prototype (GBR-P) contract transitioned to Boeing. The Prime Contractor will validate system performance and perform the necessary system-level trade studies to appropriately allocate element requirements with full consideration of Cost as an Independent Variable (CAIV). The Prime Contractor will operate and maintain NMD models and simulations to include ISTC, system Hardware in the Loop (HWIL), and LSI Integrated Distributed Simulation (LIDS). Until booster development is

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<p>complete, EKV flight tests will be flown on the PLV (a booster, comprised of Minuteman (MM) II second and third stages). Development of the Commercial Off-the-Shelf (COTS) booster consists of integrating a Gemini-40 first stage and Orbus-1A second and third stages. The booster will be tested during two verification flights in 3Q and 4Q, FY 2001. BM/C3 incremental prototypes will be integrated and demonstrated in a distributed fashion at multiple locations, and assessed with user participation to refine and focus the BM/C3 development and system behavior. Government leads/PM provide oversight of Prime Contractor counterpart Integrated Product Team (IPT).</p> <p>SENSOR TECHNOLOGY includes research and development efforts for critical sensor components, which support infrared surveillance, acquisition, tracking, and discrimination functions for use in the SBIRS Low system. Projects in radiation hardened electronics and spacecraft computers, focal plane arrays (FPAs), long-life cryogenic coolers, signal/data processing and optics are developing state-of-the-art technologies essential to operating in a space environment and viewing targets against the earth limb and space backgrounds. The projects provide mission enabling, risk and production cost reduction technologies for SBIRS Low.</p> <p>THE GBI contracts (EKV, PLV and ISTC) transitioned to the Prime Contractor in FY 1999. EKV sensor flight tests were successfully accomplished in 3Q, FY 1997 and 2Q, FY 1999. COTS booster development began in FY 1998. The PM GBI performs oversight of NMD Prime Contractor GBI development, integration and test, and deployment planning activities, manages and provides specific Government Furnished Equipment (GFE) to include transportation, testing, and facilities maintenance. Additionally, this office will conduct Independent Verification and Validation (IV&V) of Prime Contractor GBI hardware and software efforts and other required Independent Performance Assessments. The Prime Contractor is responsible for the booster, test facilities, primary production facilities, Peculiar Support Equipment (PSE), Command Launch Equipment (CLE), EKV subcontractors and the integration and test of the GBI element.</p> <p>THE BM/C3 functional area will provide technical oversight of all BM/C3 development activities of the NMD Prime Contractor, BM/C3 software models and simulations, IV&V and Verification, Validation and Accreditation (VV&A), provision of the Joint National Test Facility (JNTF) BM/C3 Element Support Center and BM/C3 Element Laboratory to support BM/C3 development and system test, and technical oversight of the procurement of the NMD Communications Network (NCN).</p> <p>THE XBR is the NMD sensor responsible for acquisition, tracking, discrimination, fire control support, and kill assessment. The Shemya XBR design is being executed by the NMD Prime Contractor. An XBR testbed that leveraged off the Theater Missile Defense Ground Based Radar (TMD-GBR) program (designated GBR-P) has been developed and installed at USAKA, Kwajalein Missile Range (KMR). The GBR-P participates in NMD Risk Reduction Flights (RRF) and Integrated Flight Tests (IFT). Beginning in FY 2001, GBR-P management and upgrades will be combined with the XBR efforts of the Prime Contractor.</p> <p>THE UPGRADED EWR (UEWR) hardware efforts and software upgrades were transitioned to Boeing, under the LSI contract in FY 1998. The UEWRs will detect, count and track the individual objects in a ballistic missile attack early in their trajectory. The data will be used for interceptor commit and XBR cueing. Efforts include IV&V and VV&A along with independent discrimination analysis.</p> <p>SYSTEM ENGINEERING develops the NMD system-level performance and integration requirements as prescribed in the Capstone Requirements Document (CRD) and Operational Requirements Document (ORD), and then flows them down to the individual NMD elements. The System Engineer identifies and mitigates system risk and institutes CAIV and other initiatives to facilitate system affordability. In addition, the System Engineer plans and directs Command and Control Simulations</p>		
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<p>(C2Sims) in which analyses, simulations, and tests are performed. C2Sims evaluates system effectiveness, proposed NMD system architectures, and Concept of Operations (CONOPS) against near and far-term ballistic missile threats. In addition, the System Engineer focuses on system-level balancing, verification, and validation of the integrated NMD system. At the request of the Ballistic Missile Defense Organization (BMDO), as well as the Office of the Secretary of Defense (OSD) and other external agencies, the System Engineer conducts Ad Hoc studies in support of treaty analysis, policy guidance, and other NMD derived missions.</p> <p>DEPLOYMENT & SUSTAINMENT (D&S) comprises development of plans and analysis to support system production, deployment and sustainment to include: Manpower Personnel Training (MPT) analysis; maintenance and supply support planning; site activation/deployment planning; Government Furnished Property/Government Furnished System/Government Furnished Facilities (GFP/GFS/GFF); and Environmental Safety and Health (ESH) activities. The effort includes conducting siting analyses and supporting site selection; preparing statutory National Environmental Policy Act (NEPA) and other ESH compliance analyses and documentation; establishing facilities requirements, assessing existing facilities, and developing MILCON programming and budget documentation.</p> <p>SYSTEM TEST AND EVALUATION activities involve managing and overseeing the NMD test and evaluation program, including execution of the lethality ground and flight test programs, and development of program test documentation such as the Test and Evaluation Master Plan (TEMP). Managerial oversight and execution responsibilities ensure the following are available: (1) test infrastructure (including test ranges and instrumentation); (2) oversight of Prime Contractor Ground-Based Test Models & Simulations; (3) target development for sensor and intercept tests; (4) sensor technology enhancements; (5) revised program strategy changes that include multiple engagements, test range upgrades, and the development of the new target booster; and (6) upgrades to government test facilities for the Prime Contractor. Management activities include detailed test plans, and post-test analysis plans for each ground and flight test. Post-test evaluation, analysis, review and reporting are also provided for under this project. Included in this area is the Discrimination program which provides the U.S. with the capability to generate high confidence target signatures for ballistic missile defenses. This is a critical adjunct to the design and evaluation of NMD system performance across the full spectrum of threats and engagement scenarios. This program provides signature collection sensors for live-fire missions and analysis of the resulting test data. Additionally, predictive models of target signatures are developed, as well as algorithms for the critical functions of discrimination, target handover and aimpoint selection.</p> <p>TEST TRAINING AND EXERCISE CAPABILITY (TTEC) will develop and implement through the Prime Contractor the hardware and software to meet the program management, technical and administrative support requirements of testing, training and conducting exercises. The Operational Support Group (OSG) will over see and facilitate the development of the NMD training program through its interface with the User community. TTEC also provides training development and reviews and assesses NMD System Training Plan.</p> <p>THE TECHNICAL DIRECTOR ensures a totally integrated effort of system engineering, test and evaluation, and production and logistics support over the system life cycle. Includes the process of system definition/baseline development; design engineering; systems engineering; software management; developmental and operational test and evaluation; reliability, availability and maintainability (RAM); standardization and specifications; countermeasures mitigation; and product improvement. Represents the Program Executive Officer in OSD, Joint Staff, congressional staff and international forums.</p> <p>MANAGEMENT AND OPERATIONAL SUPPORT provides personnel and related support common to all NMD projects including support to the Office of the Director, BMDO and his staff located in Washington, DC, as well as BMDO's Executing Agents within the U.S. Army Space and Missile Defense Command, U.S. Army PEO Missile Defense, U.S. Navy PEO for Theater Defense, U.S. Air Force PEO office and the JNTF. This project supports funding for overhead/indirect</p>		
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<p>personnel costs, benefits and infrastructure costs such as rents, utilities and supplies. Additionally, this project maintains NMD Joint Project Office (JPO) operations as well as JPO scientific, engineering and technical assistance contractor support.</p> <p>This project is assigned to the Budget Activity and Program Element codes as identified in this descriptive summary in accordance with existing DoD policy.</p> <p>FY 2001 Accomplishments:</p> <ul style="list-style-type: none"> • 1285134 NMD Development/Integration: Prepared for NMD System CDR. Conducted IFT-6 with all elements in-line. Completed UEWR hardware CDR software Build 2. Conducted BI-2 (BM/C3) Release Review. Continue booster development. Conduct Booster Verification (BV) Pathfinder and Flight Test 2. Initiated Alternate Booster Development Program. Upgraded XBR and EKV algorithms. Closed out the LSI contract and initiated the new NMD Prime contract with Boeing. Restructured NMD development program to a capabilities based block/increment upgrade effort incorporating spiral development concept. Planned for an increased flight test tempo and add multiple simultaneous engagements. • 11586 Sensor Technology: Delivered Lot 3 (final) FPAs of LWIR focal plane program. Initiated a focal plane producibility effort to support fabrication of flight units and reduce manufacturing costs. Continued Silicon FPA program for SBIRS Low. Continued visible array rad hard star tracker program; continued FPA performance testing. Completed cryocooler efforts through life and performance testing. Continued development of cryogenic integration technologies in cooperation with SBIRS Low contractual designs. Continued performance and life testing of cryocoolers. Continue development of cryocooler prototype. Continued development of rad hard electronics components/devices. Flight tested a space optics cleaner prototype and finalized the design. Support continued development of adaptive algorithms. • 38712 GBI: Performed oversight of GBI design development, integration and test, test planning, and deployment planning. Monitored EKV flight unit integration for IFT-6, and pre-mission flight tests. Supported IFT-6, including post test data reduction. Conducted IV&V and VV&A assessments. Monitored Alternate Boost Vehicle development activities. Supported BV Pathfinder and Flight Test 2, and post test data reduction • 29716 BM/C3: Performed oversight of BI-1. Supported IFT-6, and IGT-6. Performed technical oversight of engineering and acquisition activities for NCN. Conducted IV&V and VV&A assessments. Supported initiation of Cheyenne Mountain integration and provide user interaction with United States Space Command (USSPACECOM). Supported BM/C3 participation in C2 Simulations and Battle Planning Exercises. • 20977 XBR: Validated XBR hardware and software design (CDR). Supported system flight and ground test planning, execution, and post-test independent analysis. Supported evaluation of algorithms. Conducted SW IV&V and VV&A assessments • 9431 UEWR: Continued Real Time DII-COE evaluation for UEWR. Supported system flight and ground test planning, execution, and limited post-test independent analysis. Supported evaluation of tracking and object classification algorithms. Conducted hardware CDR. Supported discussion of issues with radars located on foreign soil as well as activities associated with EWR's Environmental Impact Statement (EIS), Radio Frequency Interference (RFI), and Ionospheric Data Collections (IDC). 		
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- 49117 System Engineering: Performed JPO level system engineering and integration activities. Refined NMD SRD. Provided support for NMD system requirements and design reviews, internal and external interface development/implementation cost assessment support, elevation of deployment readiness, and system deployment. Continued mitigation of system risk and implementation of CAIV and other initiatives to facilitate system affordability. Developed and updated Initial Block and Block 1 Increment 1 NMD System CARD and develop Long Term capability annex against technical requirements. Updated the NMD STAR. Developed/updated “design-to” and “analyze-to” parameters and scenarios. Conducted C2Sim exercise and tabletops. Continued integration with the SBIRS Program Office to ensure satisfaction of NMD system requirements. Performed nuclear environment calculations/requirements verification. Conducted data fusion/system discrimination development. Coordinated system VV&A and maintain IV&V capability to perform system VV&A.
 - 44699 Deployment & Sustainment: Continued development of the initial NMD System sustainment program planning to include maintenance and supply support. Completed XBR and GBI facility designs. Completed site-specific designs of IDT. Began design of non-tactical facilities at GBI site. Continued ESH documentation. Completed element RAM and supportability testability data and issue analysis reports. Provided Human System Integration (HSI) domain assessment criteria to service components for review. Developed and issued System Producibility and Manufacturing (P&M) Plans. Implemented the baseline approach to meeting TTEC requirements.
 - 146320 System Test and Evaluation: Supported IGT-6. Updated TEMP. Conduct IFT-6 pre-mission and mission activities. Evaluated post-test results. Monitor RRF 11. Completed VV&A of IFT-8 target. Continued lethality and live fire testing plan. Coordinated test range infrastructure and upgrades to support EKV flight test from KMR. Coordinated test range instrumentation upgrades and provide data collection and analysis for NMD testing. Conducted target launch for IFT-6 from VAFB. Monitored BV Pathfinder and Flight Test 2. Provided ground facility infrastructure and upgrades for NMD testing including: aerothermal testing at Tunnel 9, lethality testing at the Arnold Experimentation and Development Center (AEDC) Range G, and Infra-Red (IR) sensor testing at the 7V/10V Chamber at AEDC and Portable Optical Sensor Tester (POST).
 - 188031 Management and Operational Support: Provided management and operations support.
- Total 1823723

B. Program Change Summary	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
Previous President's Budget (FY 2002 PB)	1740238		
Adjustments to Appropriated Value	135000		
Appropriated Value	1875238		
a. Congressional General Reductions	-13098		
b. SBIR/STTR	-28331		
c. Omnibus or Other Above Threshold Reductions	-4075		
d. Below Threshold Reprogramming	-5508		
e. Recissions	-4188		
Adjustments to Budget Year Since FY 2002 PB	3685		

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Current Budget Submit (FY 2003 Budget Estimates)	1823723	
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Change Summary Explanation: This PE was deleted as part of an approved program restructure starting in FY 2002. The FY 2002 funding and beyond for MDS is included in Projects 3011 and 3012 in Program Element 0603882C.

C. <u>Other Program Funding Summary</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	To <u>Compl</u>	Total <u>Cost</u>
PE 0603871C NMD MILCON Design	35350								
PE0603871C NMD MINOR MILCON	2000								
PE 0603871C NMD MILCON Construction	9030								
PE 0208871C NMD Procurement	0								

D. Acquisition Strategy: The NMD program adopted an evolutionary acquisition strategy using a capability based program process with block upgrade development that can deliver specific levels of system performance. The program adopted a spiral development methodology in recognition of the rapidly changing technology environment and the need to satisfy Government requirements that are defined in general terms within an evolving technology base. This strategy will (1) allow early implementation of a capability while supporting an evolving requirement/threat definition process, (2) minimize the risks of obsolescence posed by the rapid pace of technology development, (3) provide opportunities to update a system to a changing set of standards, and (4) allow informed trades between cost, schedule, and performance while exploring operational possibilities.

E. <u>Schedule Profile</u>	<u>FY 2001</u>	<u>FY 2002</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>Engineering Milestones</u>								
UEWR Hardware CDR	2Q							
<u>Test and Evaluation Milestones</u>								
C2Sim 00	1Q							
IFT-6	4Q							
IGT-6	4Q							
BV-1 Pathfinder	3Q							
BV-2	4Q							
BM/C3 Build Increment 2	3Q							
RRF-10	1Q							
RRF-11	2Q							
TTEC PDR	1/3Q							

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BUDGET ACTIVITY
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PROJECT
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* This project this program has been restructured and transitioned to Program Element 0603882C starting in FY 2002.

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Prime Contractor										
	CPAF	Boeing*	3166443						3166443	
GBI										
	CPFF	Boeing	293194						293194	
	TM	CSC (formerly NRC)	24070						24070	
	CPFF	Sparta	10748						10748	
	TM	Mevatec	16654						16654	
	CPFF	SY TECH	6553						6553	
	TM	TBI (formerly TBE)	29471						29471	
	CPFF	Stone Engineer	5557						5557	
	CPFF	COLSA	10						10	
	FFRDC	MITRE	615						615	
	MIPR	OGA'S	41627						41627	
	N/A	GBI IOB	6045						6045	
	N/A	Misc Contracts	20560						20560	
BM/C3										
	N/A	NWSC	12117						12117	
	CPAF	TRW	20284						20284	
	FFRDC	MITRE Corp.	13104						13104	
	BPA (ITSP)	Sencom (ITSP)	7891						7891	
	CPFF	Sparta	12457						12457	
	TM	NRC	7874						7874	
	MIPR	GFE	3762						3762	
	N/A	Misc Contracts	7667						7667	
	CPAF	CST-HSV	1192						1192	
	MIPR	QRI-HSV	2307						2307	
	CPAF	CSC-HSV	1461						1461	
	MIPR	AMCOM	1467						1467	
	MIPR	USASMDC	3279						3279	
	N/A	DISDA-GFX	9813						9813	

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	CPFF	COLSA	130				130	
	CPAF	Vanguard Res.	1356				1356	
	BPA	TECOLOTE	690				690	
	MIPR	USAF ESC	65				65	
	MIPR	ARL	1300				1300	
XBR								
	CPFF	Raytheon	164361				164361	
	CPAF	TBE	16847				16847	
	CPAF	COLSA	18722				18722	
	CPAF	NRC	8844				8844	
	MIPR	MIT LLNL	15380				15380	
	TM	Ga Tech	5548				5548	
	TM	Mevatec	8029				8029	
	N/A	Misc OGA/IOB	19881				19881	
	N/A	Other Spt	7258				7258	
UEWR								
	PR	MITRE Corp.	2093				2093	
	BPA (ITSP)	SENCOM	8936				8936	
	BPA (ITSP)	TECOLOTE	1481				1481	
	CPR/PR	MIT LLNL	2514				2514	
	CPAF/MIPR	TRW @ JNTF	1433				1433	
	MIPR	GSA (Xontech)	1098				1098	
	MIPR	GSA (AFRL)	340				340	
	N/A	Misc Contracts	6081				6081	
SENSOR TECHNOLOGY								
	N/A	Cubic	365				365	
	CPAF	Ball	50				50	
	CPFF	Raytheon	1309				1309	
	N/A	Phillips	1687				1687	
	MIPR	AFRL	8040				8040	
	CPFF	TRW	428				428	
	CPAF	Dynacs	380				380	
	CPFF	Swales	1172				1172	
	CPAF	Ball	3933				3933	

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	CPAF	Ball	255						255	
	CPFF	Raytheon	4764						4764	
	CPAF	Rockwell	5184						5184	
	N/A	USASMDC	5094						5094	
	CPFF	NRC	720						720	
	N/A	MRC	1976						1976	
	MIPR	SPAWAR	565						565	
	N/A	TBE	95						95	
	N/A	ADI	400						400	
	N/A	Raytheon	280						280	
	CPAF	Nichols	380						380	
	CPAF	RI	687						687	
	CPAF	CSC	50						50	
	MIPR	NIST	100						100	
	CPAF	SBRIS Low	5500						5500	
	Subtotal Product Development:		4062023						4062023	

Remark:

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
SYSTEM ENGINEERING										
	CPFF	BMD/CSC	122681						122681	
	N/A	JNTF	22863						22863	
	N/A	DTRA	7309						7309	
	N/A	USAF/SMC/SBIRS	9200						9200	
	N/A	NSWC	8627						8627	
	N/A	Threat and CM	4847						4847	
	MIPR	MIT LLNL	11051						11051	
	MIPR	Misc/POET	5499						5499	
DEPLOYMENT & SUSTAINMENT PLANNING (R&D)										

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MIPR	NIST		7263				7263
N/A	USAF/SMC		21215				21215
CPFF	CSC		33005				33005
CPFF	TBD		2610				2610
TBD	Mis Contracts		11983				11983
CPFF	Nichols		4515				4515
CPFF	COLSA		170				170
CPFF	MEVATEC		900				900
MIPR	AMCOM		2359				2359
MIPR	USACE		10846				10846
MIPR	USA War College		464				464
MIPR	USASMDC		7670				7670
MIPR	Schreiver AFB		500				500
MIPR	HQ AFCEE		25				25
MIPR	DOD Joint Spectrum C.		362				362
MIPR	Hill AFB		200				200
MIPR	NSA		277				277
MIPR	USACECOM		50				50
MIPR	ARSPACE		600				600
MIPR	Alaskan Air Comm.		1632				1632
TBD	Site Activation CMD		9575				9575
MIPR	Peterson AFB		50				50
MIPR	Kirtland AFB		350				350
MANAGEMENT AND OPERATIONAL SUPPORT							
	CPAF/CPFF	CSC	190922				190922
	N/A	SFAE-MD/NMD ANAL	88048				88048
	N/A	GOVT PERS (DC)	23570				23570
	N/A	Misc RES.	9790				9790
	N/A	USSPACECOM	4946				4946
	N/A	TSM (SMDC)	28326				28326
	N/A	Operational accounts	251815				251815
	N/A	GOVT PER&SPT (HSV)	28604				28604
	TBD	Special Studies	13000				13000

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DISCRIMINATION									
	CPFF via NRL	PRA	18332						18332
SYSTEM ARCH AND ENGINEERING									
	N/A	Misc Contracts	13269						13269
THREAT AND COUNTERMEASURE									
	N/A	Misc Contracts	4194						4194
Subtotal Support Costs:			983514						983514

Remark:

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
TEST AND EVALUATION										
	CPAF/TM	TBE	44912						44912	
	CPFF	COLSA	56457						56457	
	N/A	Dynetics	620						620	
	CPFF	Boeing	11200						11200	
	CPFF	Raytheon	7400						7400	
	CPAF	TRW	246						246	
	CPFF	Raytheon	2900						2900	
	CPAF	SAIC	2331						2331	
	CPAF	Nichols	5126						5126	
	MIPR	USAKA	55942						55942	
	FFRDC/MIPR	Sandia	4442						4442	
	OGA/MIPR	USASMDC	5283						5283	
	OGA/MIPR	JNTF	2284						2284	
	OGA/MIPR	NRL	1971						1971	
	OGA/MIPR	NRC	2059						2059	
	N/A	Misc Contracts	71851						71851	
	MIPR	VAFB	3048						3048	
	TM	MEVATEC	9913						9913	
	MIPR	Space&Msl Cmd	327						327	
	CPFF	Lockheed MMS	3020						3020	

MDA RDT&E COST ANALYSIS (R-3)	DATE February 2002
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BUDGET ACTIVITY 4 - Program Definition and Risk Reduction	PE NUMBER AND TITLE 0603871C NMD	PROJECT 2400
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	N/A	USASMDC	1454						1454
	N/A	Various OGA'S	3675						3675
MODELLING AND SIMULATION									
	N/A	USASMDC	3890						3890
TEST RESOURCES									
	N/A	Misc Contracts	15474						15474
Subtotal Test and Evaluation:			640194						640194

Remark:

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a.				0		0				
Subtotal Management Services:										

Remark:

Project Total Cost:			1823723						5685731
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Remark: