

**UNCLASSIFIED**

<b>Missile Defense Agency (MDA) Exhibit R-2 RDT&amp;E Item Justification</b>					Date <b>February 2008</b>		
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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, DW/06 RDT&amp;E Management Support</b>				<b>R-1 NOMENCLATURE</b> <b>0605502C Small Business Innovative Research - MDA</b>			
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COST (\$ in Thousands)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total Program Element (PE) Cost	142,510	0	0	0	0	0	0
0510 Statutory & Mandated Programs	142,510	0	0	0	0	0	0

**A. Mission Description and Budget Item Justification**

This project explores innovative concepts pursuant to Public Law 106-554 (Small Business Reauthorization Act of 2000) and Public Law 107-50 (Small Business Technology Transfer Program Reauthorization Act of 2001), which mandates a two-phase competition for small businesses with innovative technologies that can also be commercialized. The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs will develop new dual-use technologies for possible future MDA BMDS needs. Dual-use means that the technologies will also be judged on their potential for future private sector investment both as a vehicle for reducing development time and cost, unit costs of new MDA BMDS technologies, and as a route to national economic growth through new commercial products. MDA will conduct the competition and will award and manage the contracts with assistance from our executing agents.

**Accomplishments/Planned Program**

	FY 2007	FY 2008	FY 2009
SBIR Awards	127,241	0	0

**FY07 Accomplishments:**

- Selected 164 Phase I's (at about \$100K each) and 99 Phase II's (average award \$910K).
- Phase II awards were in the following 21 research areas: insensitive munitions, electro-optics, laser technology, cryogenics, space target technology, manufacturing process, security/anti-tamper, batteries, composite materials, radiation hardening, radar systems technology, satellite components, discrimination, modeling and simulation, software development, sensor fusion/decision architecture, sustainment and logistics, investment planning, THAAD upgrades, communications and battle management, and propulsion.
- Phase I awards were in the following 10 research areas: space technology, modeling & simulation, manufacturing technology, discrimination, radar system technology, integration, safety/insensitive munitions, airborne component technology, radiation hardening and anti-tamper
- Selected 22 awards for the Phase II Transition (formerly known as Enhancement) program (\$9M) to leverage matching, non-SBIR funds.
  - Selections primarily based on assessment of transition plans offered by the applicants.
- Selected 14 additional Phase II Transition Program awards and 2 Fast Track awards (\$6.8M) to leverage matching, non-SBIR funds.
  - Selections primarily based on assessment of transition plans offered by the applicants..

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	FY 2007	FY 2008	FY 2009
STTR Awards	15,269	0	0

**FY07 Accomplishments:**

- Selected 24 Phase I's and 13 Phase II's for award.
- The Phase II awards were in the following 8 research areas: insensitive munitions, electro-optics, laser technology, security/anti-tamper, radar systems, discrimination, sensor fusion/decision architecture, and propulsion.
- The Phase I awards were in the following 6 research areas: discrimination, space technology, manufacturing process, radiation hardening, insensitive munitions, and radar systems technology.

<b>B. Program Change Summary Table</b>	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008 PB)	0	0	0
Current President's Budget (FY 2009 PB)	142,510	0	0
Total Adjustments	142,510	0	0
Congressional Specific Program Adjustments	0	0	0
Congressional Undistributed Adjustments	0	0	0
Reprogrammings	0	0	0
SBIR/STTR Transfer	142,510	0	0
Adjustments to Budget Years	0	0	0

FY07 increase of \$142.510M includes the mandatory SBIR/STTR transfer.

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<b>C. Other Program Funding Summary</b>								
	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total Cost
PE 0207998C BRAC	0	103219	159938	61931	8724	0	0	333812
PE 0603175C Ballistic Missile Defense Technology	183849	108423	118718	115234	120152	127012	130358	903746
PE 0603881C Ballistic Missile Defense Terminal Defense Segment	1082454	1045276	1019073	795659	719847	548283	439752	5650344
PE 0603882C Ballistic Missile Defense Midcourse Defense Segment	2985140	2243213	2209262	2276848	1385258	946437	1103532	13149690
PE 0603883C Ballistic Missile Defense Boost Defense Segment	622218	510241	421229	423927	652642	799792	991839	4421888
PE 0603884C Ballistic Missile Defense Sensors	514989	586121	1221143	1184280	1099649	1077632	823583	6507397
PE 0603886C Ballistic Missile Defense System Interceptors	341358	340107	386817	500966	708803	815433	553136	3646620
PE 0603888C Ballistic Missile Defense Test and Targets	584615	621861	673691	672976	690938	708991	719209	4672281
PE 0603890C Ballistic Missile Defense System Core	425889	413934	432262	482947	605219	561947	571498	3493696
PE 0603891C Special Programs - MDA	347377	196892	288315	304234	538050	818136	786349	3279353
PE 0603892C Ballistic Missile Defense Aegis	1125426	1126337	1157783	1234220	1078539	1066712	1102542	7891559
PE 0603893C Space Tracking & Surveillance System	311402	231528	242441	266509	560130	735727	938191	3285928
PE 0603894C Multiple Kill Vehicle	133615	229943	354455	488294	649632	708582	879385	3443906
PE 0603895C BMD System Space Program	0	16552	29771	41638	56199	133915	157548	435623
PE 0603896C BMD C2BMC	249179	447616	289277	287194	270762	256767	259159	2059954
PE 0603897C BMD Hercules	46268	52462	55955	55289	56400	51902	52784	371060
PE 0603898C BMD Joint Warfighter Support	49833	49394	69982	73997	77205	80168	81948	482527
PE 0603904C Missile Defense Integration & Operations Center	104389	78557	96404	100437	100366	101512	102840	684505
PE 0603905C BMD Concurrent Test and Operations	21870	0	0	0	0	0	0	21870
PE 0603906C Regarding Trench	0	1986	2978	4964	4963	8933	8933	32757
PE 0603907C Sea Based X-Band Radar (SBX)	0	165243	0	0	0	0	0	165243
PE 0901585C Pentagon Reservation	15527	6019	19734	5040	5284	5370	5456	62430
PE 0901598C Management Headquarters - MDA	93350	80392	86453	70355	69855	69855	69855	540115

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