

**UNCLASSIFIED**

PE NUMBER: 0603311F  
 PE TITLE: Ballistic Missile Technology

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2004</b>
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<b>BUDGET ACTIVITY</b> <b>03 Advanced Technology Development (ATD)</b>	<b>PE NUMBER AND TITLE</b> <b>0603311F Ballistic Missile Technology</b>
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Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	12.795	11.402	0.000	0.000	0.000	0.000	0.000	0.000	TBD
4091 Missile Electronics	12.795	11.402	0.000	0.000	0.000	0.000	0.000	0.000	TBD

Note: In FY 1997, the Air Force eliminated this program. However, Congress has added funds for special interest projects since FY 1997.

**(U) A. Mission Description and Budget Item Justification**

This program develops, integrates, and demonstrates advanced guidance, navigation, and control technologies for ballistic missiles, including upgrades of instrumentation for range safety instrumentation. Note: In FY 2004, Congress added \$8.5 million for Ballistic Missiles Technology and \$3.0 million for Common Aerospace Vehicle (CAV), Small Launch Vehicle (SLV), Minuteman III (MMIII) Critical Technology Development.

This program is in Budget Activity 3, Advanced Technology Development, since it develops and demonstrates technologies for existing system upgrades and/or new system developments that have military utility and address warfighter needs.

**(U) B. Program Change Summary (\$ in Millions)**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) Previous President's Budget	13.159	0.000	0.000
(U) Current PBR/President's Budget	12.795	11.402	0.000
(U) Total Adjustments	-0.364	11.402	
(U) Congressional Program Reductions			
Congressional Rescissions		-0.098	
Congressional Increases		11.500	
Reprogrammings			
SBIR/STTR Transfer	-0.364		

**(U) Significant Program Changes:**

In FY 1997, the Air Force eliminated this program. However, Congress has added funds for special interest projects since FY 1997.

**Exhibit R-2a, RDT&E Project Justification**

DATE  
**February 2004**

BUDGET ACTIVITY <b>03 Advanced Technology Development (ATD)</b>				PE NUMBER AND TITLE <b>0603311F Ballistic Missile Technology</b>			PROJECT NUMBER AND TITLE <b>4091 Missile Electronics</b>		
Cost (\$ in Millions)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total
4091 Missile Electronics	12.795	11.402	0.000	0.000	0.000	0.000	0.000	0.000	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

**(U) A. Mission Description and Budget Item Justification**

This program develops, integrates, and demonstrates advanced guidance, navigation, and control technologies for ballistic missiles, including upgrades of instrumentation for range safety instrumentation. Note: In FY 2004, Congress added \$8.5 million for Ballistic Missiles Technology and \$3.0 million for Common Aerospace Vehicle (CAV), Small Launch Vehicle (SLV), Minuteman III (MMIII) Critical Technology Development.

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**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
(U) CONGRESSIONAL ADD: Ballistic Missile Technology, Advanced Guidance Technologies for Ballistic Missiles and Range Safety Instrumentation.	11.351	0.000	0.000
(U) In FY 2003: Developed, integrated, and demonstrated advanced guidance technologies applied to emerging designs that sustain current strategic missile systems. Developed new accelerometer technologies with the associated radiation hardenable electronics and flight computers required for future strategic missile applications. Developed, validated, and certified advanced, mobile range safety instrumentation extending prompt missile launch capabilities to existing and future range sensors. Developed advanced vehicle structures and designs for improved ballistic missile guidance and control. Developed and demonstrated sustainable technologies and material sources capable of reducing vehicle cost while increasing robustness, maintainability, and controllability to meet the unique requirements of the advanced ballistic missile mission.			
(U) In FY 2004: Not Applicable.			
(U) In FY 2005: Not Applicable.			
(U) CONGRESSIONAL ADD: Ballistic Missile Technology, Common Guidance Development Program of Sensor Technologies.	1.444	0.000	0.000
(U) In FY 2003: Developed advanced sensor technologies that are accurate and robust enough to provide the next generation of guidance instrumentation required for a broad range of future ballistic missiles. Identified the critical technical elements and component technologies needed to meet accuracy requirements, to extend range, to reduce maintenance costs, and to lengthen mean time between failures.			
(U) In FY 2004: Not Applicable.			
(U) In FY 2005: Not Applicable.			

Exhibit R-2a, RDT&E Project Justification							DATE <b>February 2004</b>			
BUDGET ACTIVITY <b>03 Advanced Technology Development (ATD)</b>			PE NUMBER AND TITLE <b>0603311F Ballistic Missile Technology</b>		PROJECT NUMBER AND TITLE <b>4091 Missile Electronics</b>					
(U)										
(U)	CONGRESSIONAL ADD: Ballistic Missile Technology.							0.000	8.428	0.000
(U)	In FY 2003: Not Applicable.									
(U)	In FY 2004: Develop, integrate, and demonstrate ballistic missile technologies related to advanced guidance, range safety instrumentation and guidance sensors. Extend testing of innovative accelerometer, gyroscope, and flight computer instrumentation to strategic radiation levels. Integrate the instruments with guidance architectures that provide a robust system applicable in the most demanding missile applications. Demonstrate existing and future integrated sensors in highly flexible and mobile range safety instrumentation.									
(U)	In FY 2005: Not Applicable.									
(U)										
(U)	CONGRESSIONAL ADD: Common Aerospace Vehicle (CAV), Small Launch Vehicle (SLV), Minuteman III (MMIII) Critical Technology Development.							0.000	2.974	0.000
(U)	In FY 2003: Not Applicable.									
(U)	In FY 2004: Initiate ground testing of critical advanced vehicle preliminary hardware designs and structures required for CAV control. Initiate ground testing of accurate and robust guidance hardware designed for future small launch vehicles and MMIII critical technology development. Verify that critical elements and components are capable of meeting accuracy requirements over extended ranges while reducing maintenance costs and increasing mean time between failures.									
(U)	In FY 2005: Not Applicable.									
(U)	Total Cost							12.795	11.402	0.000
(U)	<b><u>C. Other Program Funding Summary (\$ in Millions)</u></b>									
		<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>FY 2009</u>	<u>Cost to</u>	<u>Total Cost</u>
		<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U)	Related Activities:									
(U)	PE 0602204F, Aerospace Sensors.									
	This project has been coordinated through the									
(U)	Reliance process to harmonize efforts and eliminate duplication.									
(U)	<b><u>D. Acquisition Strategy</u></b>									

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY

03 Advanced Technology Development (ATD)

PE NUMBER AND TITLE

0603311F Ballistic Missile  
Technology

PROJECT NUMBER AND TITLE

4091 Missile Electronics

Not Applicable.