

UNCLASSIFIED

PE NUMBER: 0603311F

PE TITLE: Ballistic Missile Technology

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2005

BUDGET ACTIVITY

03 Advanced Technology Development (ATD)

PE NUMBER AND TITLE

0603311F Ballistic Missile Technology

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	11.104	11.597	0.000	0.000	0.000	0.000	0.000	0.000	0.000	47.294
4091 Missile Electronics	11.104	11.597	0.000	0.000	0.000	0.000	0.000	0.000	0.000	47.294

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 for range safety instrumentation. In FY 2005, Congress added \$10.0 million for Ballistic Missiles Technology Common Advanced Guidance Technology and \$1.7 million for Pacific Ballistic Missile Technology Program. 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 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Previous President's Budget	11.402	0.000	0.000	0.000
(U) Current PBR/President's Budget	11.104	11.597	0.000	0.000
(U) Total Adjustments	-0.298	11.597		
(U) Congressional Program Reductions				
Congressional Rescissions			-0.103	
Congressional Increases			11.700	
Reprogrammings				
SBIR/STTR Transfer	-0.298			

(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.

C. Performance Metrics

(U) Under Development.

Exhibit R-2a, RDT&E Project Justification

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0603311F Ballistic Missile
Technology

PROJECT NUMBER AND TITLE

4091 Missile Electronics

Cost (\$ in Millions)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total
4091 Missile Electronics	11.104	11.597	0.000	0.000	0.000	0.000	0.000	0.000	0.000	47.294
Quantity of RDT&E Articles	0	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 for range safety instrumentation. In FY 2005, Congress added \$10.0 million for Ballistic Missiles Technology Common Advanced Guidance Technology and \$1.7 million for Pacific Ballistic Missile Technology Program. 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. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) CONGRESSIONAL ADD: Ballistic Missile Technology Common Advanced Guidance Technology.	8.208	9.912	0.000	0.000
(U) In FY 2004: Developed, integrated, and demonstrated critical ballistic missile technologies related to advanced guidance, range safety instrumentation, and guidance sensors. Extended testing of innovative accelerometer, gyroscope, and flight computer instrumentation to strategic radiation levels. Integrated the instruments with guidance architectures that provide a robust system applicable in the most demanding missile applications. Demonstrated integrated sensors in highly flexible and mobile range safety instrumentation.				
(U) In FY 2005: Continue development, integration, and demonstration of ballistic missile technologies related to advanced guidance, range safety instrumentation, and guidance sensors. Conduct development testing and evaluate the capability of innovative accelerometer, gyroscope, and flight computer instrumentation to meet performance goals at strategic radiation levels. Evaluate the performance of instruments integrated with guidance architectures that provide a robust system applicable in the most demanding missile applications. Conduct acceptance testing of existing and future integrated sensors in highly flexible and mobile range safety instrumentation.				
(U) In FY 2006: Not Applicable.				
(U) In FY 2007: Not Applicable.				
(U) CONGRESSIONAL ADD: Common Aerospace Vehicle (CAV), Small Launch Vehicle (SLV), Minuteman III (MMIII) Critical Technology Development.	2.896	0.000	0.000	0.000
(U) In FY 2004: Initiated ground testing of critical advanced vehicle preliminary hardware designs and structures required for CAV control. Initiated ground testing of accurate and robust guidance hardware designed for future small launch vehicles and MMIII critical technology development. Verified that critical elements and components are capable of meeting accuracy requirements over extended ranges,				

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4091 Missile Electronics

while reducing maintenance costs and increasing mean time between failures.

(U) In FY 2005: Not Applicable.

(U) In FY 2006: Not Applicable.

(U) In FY 2007: Not Applicable.

(U)

(U) CONGRESSIONAL ADD: Pacific Ballistic Missile Technology Program.

0.000

1.685

0.000

0.000

(U) In FY 2004: Not Applicable.

(U) In FY 2005: Initiate development, demonstration, acceptance testing, and environmental assessment of ballistic missile range safety technologies at the Pacific Missile Range Facility in support of Air Force Space Command requirements.

(U) In FY 2006: Not Applicable.

(U) In FY 2007: Not Applicable.

(U) Total Cost

11.104

11.597

0.000

0.000

(U) **C. Other Program Funding Summary (\$ in Millions)**FY 2004
ActualFY 2005
EstimateFY 2006
EstimateFY 2007
EstimateFY 2008
EstimateFY 2009
EstimateFY 2010
EstimateFY 2011
EstimateCost to
CompleteTotal Cost

(U) Related Activities:

(U) PE 0602204F, Aerospace

(U) Sensors.

This project has been
coordinated through the(U) Reliance process to
harmonize efforts and
eliminate duplication.(U) **D. Acquisition Strategy**

Not Applicable.