

UNCLASSIFIED

PE NUMBER: 0603851F
 PE TITLE: ICBM - DEM/VAL

Exhibit R-2, RDT&E Budget Item Justification	DATE May 2009
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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603851F ICBM - DEM/VAL
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Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	26.069	70.237	66.079	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
1020 ICBM Guidance Applications	7.185	22.722	16.387	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
1021 ICBM Propulsion Applications	9.456	34.422	41.365	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
1022 ICBM Reentry Vehicle Applications	3.932	5.398	5.471	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
1023 Rocket System Launch Program	0.026	0.027	0.026	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
4209 Long Range Planning (LRP)	5.470	7.668	2.830	0.000	0.000	0.000	0.000	0.000	Continuing	TBD

(U) **A. Mission Description and Budget Item Justification**
 This program ensures a responsive design and development engineering infrastructure to address emerging issues and technology insertion within the current Intercontinental Ballistic Missile (ICBM) force and other common mission areas, where appropriate, to develop enhanced multi-use capabilities. Efforts identify methods to reduce life cycle costs, improve nuclear safety and surety, and ensure strategic missile viability. Demonstration and validation projects include guidance applications, reentry vehicles, assessment of current and future propulsion systems, development of enhanced command/control capabilities, and Long Range Planning efforts.

This program is in Budget Activity 04 - Advanced Component Development and Prototypes because the efforts demonstrate technology, component and subsystem maturity, and provide risk reduction.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Previous President's Budget	31.121	65.629	67.089
(U) Current PBR/President's Budget	26.069	70.237	66.079
(U) Total Adjustments	-5.052	4.608	
(U) Congressional Program Reductions			
Congressional Rescissions		-0.192	
Congressional Increases		4.800	
Reprogrammings	-3.172		
SBIR/STTR Transfer	-1.880		

(U) **Significant Program Changes:**
 FY09: \$4.8M Congressional Increase for Conventional Strike Mission Integration Demo//FY09: -\$6M BTR not reflected in docs

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)					PE NUMBER AND TITLE 0603851F ICBM - DEM/VAL			PROJECT NUMBER AND TITLE 1020 ICBM Guidance Applications		
Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
1020 ICBM Guidance Applications	7.185	22.722	16.387	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The Guidance Applications Program ensures the development of strategic capability in response to the Nuclear Posture Review, recommendations of the United States Strategic Command (USSTRATCOM) Strategic Advisory Group, Commander, USSTRATCOM guidance, and the Defense Science Board Task Force on Nuclear Deterrence. Efforts are focused on current and future requirements and technologies, reduced life cycle costs, and increased nuclear surety and safety. Activities leverage the efforts of the Science and Technology community and are coordinated with the Navy strategic application program to enhance synergy and avoid duplication. Key elements include developing responsive technologies with common applications for future strategic guidance capabilities.

This program is in Budget Activity 04 - Advanced Component Development and Prototypes because the efforts demonstrate technology, component, and subsystem maturity, and provide risk reduction.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Develop, prototype, and test solid-state instrument technologies (accelerometers and gyros)	4.429	14.318	7.575
(U) Develop, analyze, evaluate, prototype, and test advanced solid-state inertial measurement unit concepts	1.800	4.513	6.585
(U) Continue assessment, evaluation, and test of radiation hard electronics for strategic guidance applications	0.180	0.500	0.365
(U) Conduct precision inertial navigation system experiment to demonstrate future strategic system concepts	0.000	1.000	0.000
(U) Conduct assessment, development, and implementation of test options to demonstrate future strategic system concepts	0.000	1.000	0.730
(U) Program Office Support	0.776	1.391	1.132
(U) Total Cost	7.185	22.722	16.387

(U) C. Other Program Funding Summary (\$ in Millions)

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) None.										

(U) D. Acquisition Strategy

Accomplish studies, analyses, and limited engineering/pre-prototype hardware development; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive cost plus contracts.

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Exhibit R-3, RDT&E Project Cost Analysis

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BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE				
04 Advanced Component Development and Prototypes (ACD&P)				0603851F ICBM - DEM/VAL					1020 ICBM Guidance Applications				
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2008 Cost</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>FY 2010 Cost</u>	<u>FY 2010 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>	
(U) <u>Product Development</u> Develop, analyze, evaluate, prototype, test instrument technologies; IMU concepts	Various	AFRL, Kirtland AFB NM; Honeywell, Redmond WA, Clearwater FL, Phoenix AZ; Orbital Sciences, Chandler AZ	0.000	6.229	Feb-08	18.831	Nov-08	14.160	Jan-10	Continuing	TBD	TBD	
Assess, develop and implement precision inertial navigation system experiment						1.000	Nov-08	0.000	N/A		1.000	1.000	
Assess, evaluate and test of radiation hard electronics			0.000	0.180	Jan-08	0.500	Jan-09	0.365	Jan-10	Continuing	TBD	TBD	
Subtotal Product Development			0.000	6.409		20.331		14.525		Continuing	TBD	TBD	
Remarks:													
(U) <u>Support</u> Other Program Support	Various	SMC, Los Angeles CA; 526 ICBMSG, Hill AFB UT	0.000	0.776	Jan-08	1.391	Jan-09	1.132	Jan-10	Continuing	TBD	TBD	
Subtotal Support			0.000	0.776		1.391		1.132		Continuing	TBD	TBD	
Remarks:													
(U) <u>Test & Evaluation</u> Test	C/CPAF	Northrop Grumman, Clearfield UT	0.000	0.000	Jan-08	1.000	Jan-09	0.730	Jan-10	Continuing	TBD	TBD	
Subtotal Test & Evaluation			0.000	0.000		1.000		0.730		Continuing	TBD	TBD	
Remarks:													
(U) <u>Reprogrammed for higher priorities</u>											0.000		
Subtotal Reprogrammed for higher priorities			0.000	0.000		0.000		0.000		0.000	0.000	0.000	
Remarks:													
(U) Total Cost			0.000	7.185		22.722		16.387		Continuing	TBD	TBD	

Exhibit R-4, RDT&E Schedule Profile

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May 2009

BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

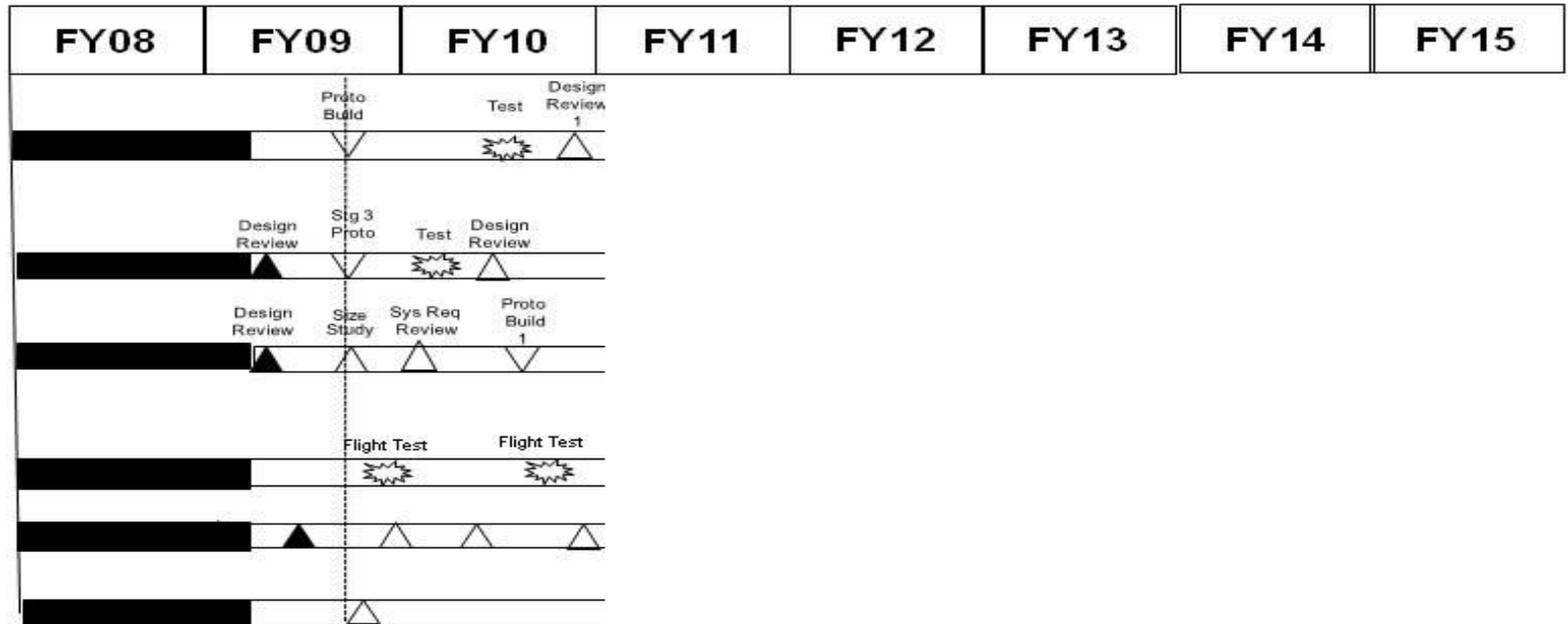
PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

1020 ICBM Guidance Applications

Guidance Applications Program



△ Report/Review/Analysis

⚡ Major Test Event

▽ Prototype/Hardware Delivery

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Exhibit R-4a, RDT&E Schedule Detail

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BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

1020 ICBM Guidance Applications

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Schedule Profile			
(U) IMU Prototype Build		4Q	
(U) IMU Test			3Q
(U) IMU Design Reviews			4Q
(U) Gyro/Accelerometer Prototypes		4Q	4Q
(U) Gyro/Accelerometer Design Reviews		2Q	1,3Q
(U) Gyro/Accelerometer Tests			1Q
(U) Flight/Sled Tests		4Q	4Q

Exhibit R-2a, RDT&E Project Justification

DATE
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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)						PE NUMBER AND TITLE 0603851F ICBM - DEM/VAL			PROJECT NUMBER AND TITLE 1021 ICBM Propulsion Applications		
Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total	
1021 ICBM Propulsion Applications	9.456	34.422	41.365	0.000	0.000	0.000	0.000	0.000	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0			

(U) A. Mission Description and Budget Item Justification

(U) The ICBM Propulsion Application Program develops strategic propulsion capability through projects exploring improvements and/or alternatives to current propulsion systems, conducting studies assessing application of new technologies to meet future common propulsion system requirements, assessing opportunities for applying common materials and technology between the ICBM, submarine-launched ballistic missile (SLBM) propulsion systems, and other solid rocket motor propulsion capabilities to demonstrate a potential family of motors capability.

This program is in Budget Activity 04 - Advanced Component Development and Prototypes because the efforts demonstrate technology, component, and subsystem maturity, and provide risk reduction.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Assess, develop, evaluate, integrate, and demonstrate common solid propulsion technology and manufacturing leading to static fire/test launch	6.417	31.547	35.079
(U) Continue assessment and demonstration of ordnance and post-boost technology development	2.850	1.500	3.600
(U) Continue evaluation of hazard classification methods for common propulsion system motors	0.000	0.000	1.000
(U) Program Office Support	0.189	1.375	1.686
(U) Total Cost	9.456	34.422	41.365

(U) C. Other Program Funding Summary (\$ in Millions)

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) None										

(U) D. Acquisition Strategy

Studies, analyses, and motor test firings will be accomplished; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive cost plus contracts.

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Exhibit R-3, RDT&E Project Cost Analysis

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BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
04 Advanced Component Development and Prototypes (ACD&P)				0603851F ICBM - DEM/VAL					1021 ICBM Propulsion Applications			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2008 Cost	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	FY 2010 Cost	FY 2010 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) <u>Product Development</u> Evaluation and test of solid propulsion technologies	Various	AFRL, Edwards AFB CA; Aerojet, Sacramento CA; ATK Thiokol, Corrinne UT; Navy	0.000	6.891	Jan-08	32.447	Jan-09	20.279	Jan-10	Continuing	TBD	TBD
Assess and demonstrate ordnance and post-boost components		Aerojet, Sacramento CA	0.000	2.350	Jan-08	0.000	N/A	3.600	N/A	Continuing	TBD	TBD
Evaluation of hazard classification methods		TBD	0.000	0.000	Jan-08	0.000	N/A	1.000	Jan-10	Continuing	TBD	TBD
Subtotal Product Development			0.000	9.241		32.447		24.879		Continuing	TBD	TBD
Remarks:												
(U) <u>Support</u> Other Program Support	Various	AFRL, Edwards AFB CA; 526 ICBMSG, Hill AFB UT	0.000	0.189	Jan-08	1.375	Jan-09	1.686	Jan-10	Continuing	TBD	TBD
Subtotal Support			0.000	0.189		1.375		1.686		Continuing	TBD	TBD
Remarks:												
(U) <u>Test & Evaluation</u> Static Fire (Edwards/AEDC)	C/CPAF	Edwards/AED C	0.000	0.026	Nov-07	0.600	Nov-08	14.800	Jan-10	Continuing	TBD	TBD
Subtotal Test & Evaluation			0.000	0.026		0.600		14.800		Continuing	TBD	TBD
Remarks:												
(U) <u>Reprogrammed for higher priorities</u>											0.000	
Subtotal Reprogrammed for higher priorities			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	9.456		34.422		41.365		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

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04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

1021 ICBM Propulsion Applications

Propulsion Apps Program

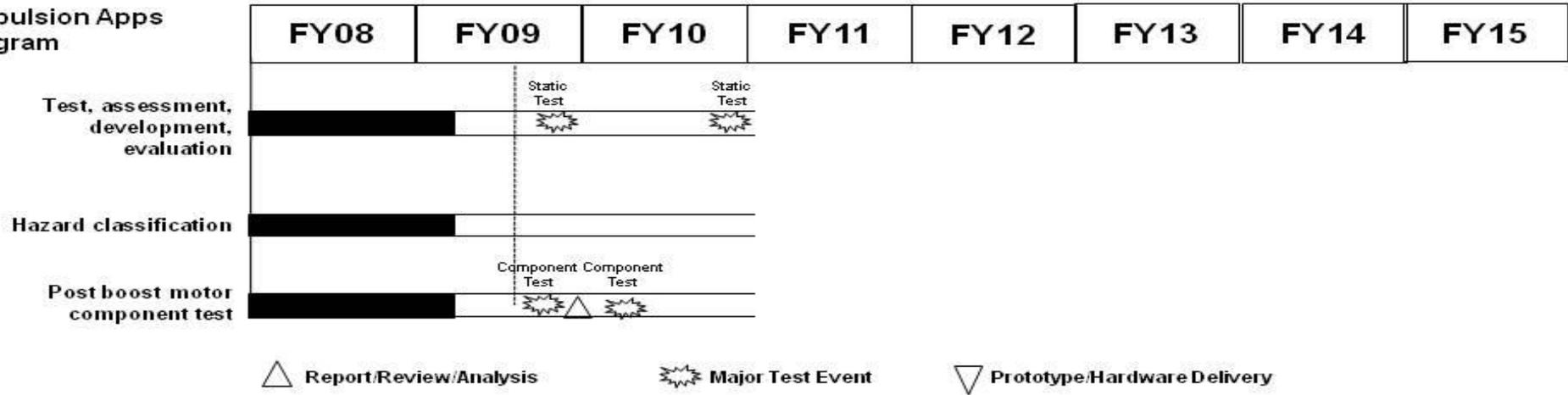


Exhibit R-4a, RDT&E Schedule Detail

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BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

1021 ICBM Propulsion Applications

(U) Schedule Profile

FY 2008

FY 2009

FY 2010

(U) Solid rocket motor static test fire

4Q

4Q

(U) Post Boost Motor Component test

3Q

2Q

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)					PE NUMBER AND TITLE 0603851F ICBM - DEM/VAL			PROJECT NUMBER AND TITLE 1022 ICBM Reentry Vehicle Applications		
Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
1022 ICBM Reentry Vehicle Applications	3.932	5.398	5.471	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The ICBM Reentry Vehicle (RV) Applications Program ensures the ICBM force is equipped with the safest and most reliable RVs and explores options for common, multi-mission capabilities. The program enables a responsive engineering infrastructure to support RVs beyond their original design life by addressing operational system issues and ensuring the availability of long-lead components/materials while identifying life cycle cost reduction methods. The program also develops and tests advanced RV technologies to meet future requirements. The program leverages investments by the Science & Technology community and Navy reentry systems applications program. Products are tested on a space available basis on Minuteman and Trident Force Development Evaluation (FDE) flights.

This program is in Budget Activity 04 - Advanced Component Development and Prototypes because the efforts demonstrate technology, component, and subsystem maturity, and provide risk reduction.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Continue development, evaluation and testing of Reentry Vehicle materials and technologies	3.269	4.709	4.768
(U) Program Office Support	0.663	0.689	0.703
(U) Total Cost	3.932	5.398	5.471

(U) C. Other Program Funding Summary (\$ in Millions)

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) None										

(U) D. Acquisition Strategy

Studies, analyses, limited engineering, and pre-prototype hardware development will be accomplished; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive cost plus contracts.

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Exhibit R-3, RDT&E Project Cost Analysis

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BUDGET ACTIVITY				PE NUMBER AND TITLE						PROJECT NUMBER AND TITLE			
04 Advanced Component Development and Prototypes (ACD&P)				0603851F ICBM - DEM/VAL						1022 ICBM Reentry Vehicle Applications			
<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2008 Cost</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>FY 2010 Cost</u>	<u>FY 2010 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>	
(U) <u>Product Development</u> Continue development, evaluation and testing of Reentry Vehicle materials and technologies	Various	Northrop Grumman, Clearfield UT; FMI/Boeing	0.000	2.569	Dec-07	2.111	Nov-08	3.655	Nov-09	Continuing	TBD	TBD	
Subtotal Product Development			0.000	2.569		2.111		3.655		Continuing	TBD	TBD	
Remarks:										Continuing	TBD	TBD	
(U) <u>Support</u> SPO/Other Program Support	Various	526 ICBMSG, Hill AFB UT	0.000	0.663	Jan-08	0.689	Jan-09	0.703	Jan-10	Continuing	TBD	TBD	
Subtotal Support			0.000	0.663		0.689		0.703		Continuing	TBD	TBD	
Remarks:										Continuing	TBD	TBD	
(U) <u>Test & Evaluation</u> Materials & Arc Jet Test	MIPR	AFRL Materials Lab, Wright-Patterson AFB;	0.000	0.700	Dec-07	1.000	Dec-08	1.000	Dec-09	Continuing	TBD	TBD	
Ground Testing	PO	Arnold Engineering & Development Center	0.000		N/A	0.110	Jan-09	0.113	Jan-10	Continuing	TBD	TBD	
TPS Testing	MIPR	Dryden Flight Research Center	0.000	0.000	N/A	1.488	Feb-09	0.000	N/A		1.488		
Subtotal Test & Evaluation			0.000	0.700		2.598		1.113		Continuing	TBD	TBD	
Remarks:													
(U) <u>Reprogrammed for higher priorities</u>											0.000		
Subtotal Reprogrammed for higher priorities			0.000	0.000		0.000		0.000		0.000	0.000	0.000	
Remarks:													
(U) Total Cost			0.000	3.932		5.398		5.471		Continuing	TBD	TBD	

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

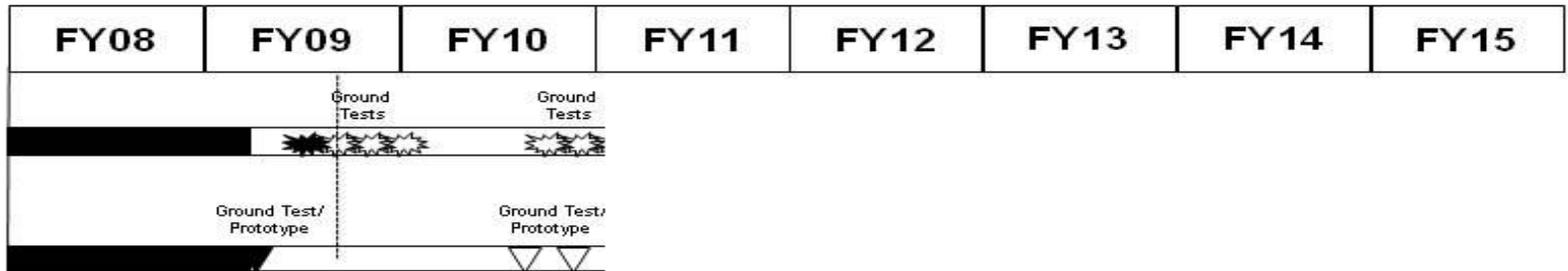
PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

1022 ICBM Reentry Vehicle Applications

Reentry Vehicle Program



△ Report/Review/Analysis

⚡ Major Test Event

▽ Prototype/Hardware Delivery

Exhibit R-4a, RDT&E Schedule Detail

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BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

1022 ICBM Reentry Vehicle Applications

(U) Schedule Profile

FY 2008

FY 2009

FY 2010

(U) Reentry Vehicle Thermal Protection Material Testing

1-4Q

2-4Q

3,4Q

(U) Fuze Prototype Testing

2Q

2Q

3,4Q

(U) Flight Tests

4Q

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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)					PE NUMBER AND TITLE 0603851F ICBM - DEM/VAL			PROJECT NUMBER AND TITLE 1023 Rocket System Launch Program		
Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
1023 Rocket System Launch Program	0.026	0.027	0.026	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

(U) A. Mission Description and Budget Item Justification

The purpose of the ICBM Rocket System Launch Program is to perform studies and analyses that determine the most constructive and cost effective use of missile assets after they are deactivated or considered excess and added to the RSLP inventory.

This program is in Budget Activity 04 - Advanced Component Development and Prototypes because the efforts demonstrate technology, component, and subsystem maturity, and provide risk reduction.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Continue on-going study/analysis for the adoption of low cost front-end systems for use on deactivated missile assets	0.026	0.027	0.026
(U) Total Cost	0.026	0.027	0.026

(U) C. Other Program Funding Summary (\$ in Millions)

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) None										

(U) D. Acquisition Strategy

Studies and analyses will be performed primarily in-house augmented with contractor support as required. Any special projects funded under this project that will require development and/or evaluation of hardware along with the associated employment concepts, will be awarded to qualified industry sources following open competition. Type of contract used (e.g., CPIF, FPIF, etc) will be that deemed most advantageous to the government, generally using cost plus contracts.

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BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE				
04 Advanced Component Development and Prototypes (ACD&P)				0603851F ICBM - DEM/VAL					1023 Rocket System Launch Program				
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2008 Cost</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>FY 2010 Cost</u>	<u>FY 2010 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>	
(U) <u>Product Development</u>													
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000	0.000	0.000	
Remarks:													
(U) <u>Support</u>													
Engineering Support	Various	Space Development and Test Wing, Kirtland AFB NM	0.000	0.026	Jan-08	0.027	Jan-09	0.026	Jan-10	Continuing	TBD	TBD	
Subtotal Support			0.000	0.026		0.027		0.026		Continuing	TBD	TBD	
Remarks:													
(U) <u>Reprogrammed for higher priorities</u>													
Subtotal Reprogrammed for higher priorities			0.000	0.000		0.000		0.000		0.000	0.000	0.000	
Remarks:													
(U) Total Cost			0.000	0.026		0.027		0.026		Continuing	TBD	TBD	

Exhibit R-4, RDT&E Schedule Profile

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04 Advanced Component Development and Prototypes (ACD&P)

PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

1023 Rocket System Launch Program

Rocket System Launch Program	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
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Analyze, evaluate concepts



△ Report/Review/Analysis

☼ Test Event

▽ Prototype/Hardware Delivery

Exhibit R-4a, RDT&E Schedule Detail

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PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

1023 Rocket System Launch Program

(U) Schedule Profile

FY 2008

FY 2009

FY 2010

(U) Annual Study/Analysis

4Q

4Q

4Q

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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)							PE NUMBER AND TITLE 0603851F ICBM - DEM/VAL			PROJECT NUMBER AND TITLE 4209 Long Range Planning (LRP)	
Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total	
4209 Long Range Planning (LRP)	5.470	7.668	2.830	0.000	0.000	0.000	0.000	0.000	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0			

(U) A. Mission Description and Budget Item Justification

The Long Range Planning (LRP) task analyzes systems to identify common potential modifications required to meet user objectives relative to long term sustainment, technology insertion, employment, and force structure. The studies focus on system supportability, operability, reliability, and maintainability. Options/concepts generated by these studies are evaluated for feasibility, system impacts, and cost. The LRP also lays the groundwork for analysis supporting future weapon systems development and deployment.

This program is in Budget Activity 04 - Advanced Component Development and Prototypes because the efforts demonstrate technology, component, and subsystem maturity, and provide risk reduction.

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

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Continue support of the consolidated long range plan	0.160	0.160	0.171
(U) Continue feasibility and life extension studies	0.307	2.000	1.946
(U) Conduct Conventional Strike Missile capability demonstration (Cong. Add)	4.718	0.000	0.000
(U) Conduct Conventional Strike Mission integration demonstration (Cong. Add)	0.000	4.800	0.000
(U) Program Office Support	0.285	0.708	0.713
(U) Total Cost	5.470	7.668	2.830

(U) C. Other Program Funding Summary (\$ in Millions)

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							
(U) None										

(U) D. Acquisition Strategy

Studies and analyses will be accomplished; efforts will be conducted using contracting strategies deemed most appropriate, generally using competitive cost plus contracts.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis

DATE

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BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
04 Advanced Component Development and Prototypes (ACD&P)				0603851F ICBM - DEM/VAL					4209 Long Range Planning (LRP)			
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior to FY 2008 Cost</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>FY 2010 Cost</u>	<u>FY 2010 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u> Long range plan	C/CPAF	Northrop Grumman, Clearfield UT	0.000	0.160	Jan-08	0.160	Jan-09	0.171	Jan-10	Continuing	TBD	TBD
Conventional Strike Missile capability demo	C/CPAF	Northrop Grumman, San Bernardino CA	0.000	4.718	Oct-08	0.000	N/A	0.000	N/A	0.000	4.718	11.185
Conventional Strike Mission integration demo	Various	Various	0.000	0.000	N/A	4.800	May-09	0.000	N/A	0.000	4.800	5.000
Studies	Various	Various	0.000	0.307	Jan-08	2.000	Jan-09	1.946	Jan-10	Continuing	TBD	TBD
Subtotal Product Development			0.000	5.185		6.960		2.117		Continuing	TBD	TBD
Remarks:												
(U) <u>Support</u> Other program support	Various	526 ICBMSG, Hill AFB UT	0.000	0.285	Jan-08	0.708	Jan-09	0.713	Jan-10	Continuing	TBD	TBD
Subtotal Support			0.000	0.285		0.708		0.713		Continuing	TBD	TBD
Remarks:												
(U) <u>Reprogrammed for higher priorities</u>											0.000	
Subtotal Reprogrammed for higher priorities			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	5.470		7.668		2.830		Continuing	TBD	TBD

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY

04 Advanced Component Development and Prototypes (ACD&P)

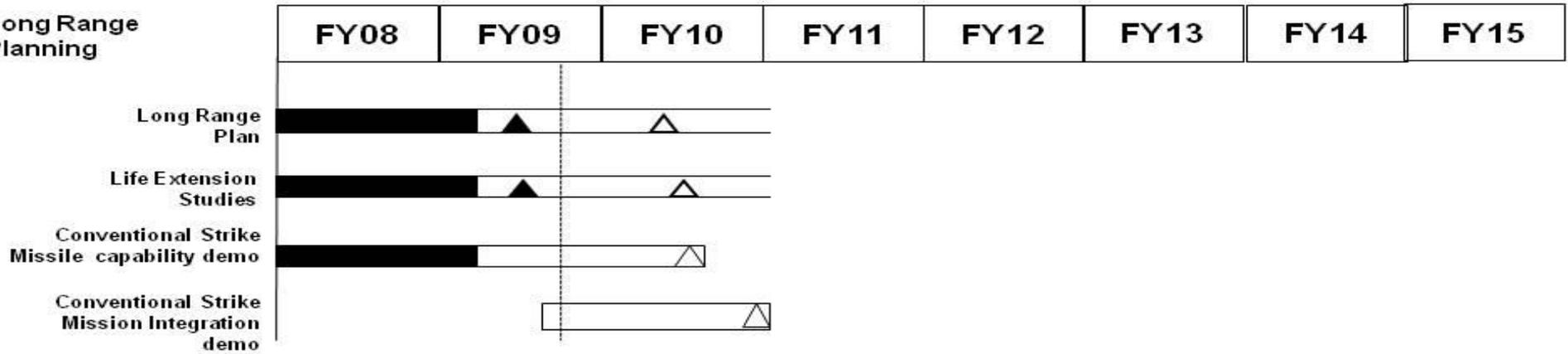
PE NUMBER AND TITLE

0603851F ICBM - DEM/VAL

PROJECT NUMBER AND TITLE

4209 Long Range Planning (LRP)

Long Range Planning



△ Report/Review/Analysis

⚡ Major Test Event

▽ Prototype/Hardware Delivery

Exhibit R-4a, RDT&E Schedule Detail

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BUDGET ACTIVITY 04 Advanced Component Development and Prototypes (ACD&P)	PE NUMBER AND TITLE 0603851F ICBM - DEM/VAL	PROJECT NUMBER AND TITLE 4209 Long Range Planning (LRP)
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(U) <u>Schedule Profile</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Long Range Plan	2Q	2Q	2Q
(U) Studies	2Q	2Q	2Q
(U) Conventional Strike Missile Capability Demo -- Mission Planning, C2 Architecture, and CONOPS Delivered			2Q
(U) Conventional Strike Mission Integration Demo -- Mission Integration/Planning and C2 Demo			4Q

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