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PE NUMBER: 0305116F
PE TITLE: AERIAL TARGETS

Exhibit R-2, RDT&E Budget Item Justification									DATE February 2005																																														
BUDGET ACTIVITY 07 Operational System Development					PE NUMBER AND TITLE 0305116F AERIAL TARGETS																																																		
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	0.000	5.132	6.641	5.241	5.297	5.348	5.473	5.567	Continuing	TBD																																													
5136 Target Systems Development	0.000	5.132	6.641	5.241	5.297	5.348	5.473	5.567	Continuing	TBD																																													
<p>Prior year (FY03 & FY04) RDT&E funding for Aerial Targets was in PE 64735F/BPAC 652286. In FY 2006 Aerial Targets includes a new start effort.</p> <p>(U) A. Mission Description and Budget Item Justification</p> <p>Full-scale and subscale targets assure warfighters that weapon systems will perform adequately against real-world enemy fighters and cruise missiles. Aerial targets help satisfy public law Title 10, Section 2366 that requires major systems and munitions programs to conduct survivability testing and lethality testing before full-scale production. The Aerial Targets program provides drones to satisfy "Live Fire/Lethality" developmental/operational test requirements. Target drones are used to validate operational missile/weapon system effectiveness and fighter operational flight program (OFP) updates. Target drones are also essential for development testing/operational testing for all air-to-air and ground-to-air missiles, and for the F/A-22, F-16, F-15, etc., aircraft. The objective is to provide realistic targets for missile testing to enable the development of air defense systems capable of defeating changing airborne threats. This funding improves/updates aerial target systems to ensure aerial targets represent enemy threat airborne systems. This program element also funds development of full-scale/subscale aerial targets and target control systems. Specialized target payload subsystems are developed for requirements such as: missile scoring, electronic attack and infrared (IR) countermeasures, radar and IR signature augmentation, and chaff and flare dispensing systems. In FY06, the Air Force Subscale Aerial Target (AFSAT) program will continue to evaluate product improvement opportunities that will identify areas of needed enhancements to the performance, payload capability, and payload capacity to support growth initiatives which will continue throughout the Future Years Defense Program (FYDP). FY06 will also fund system acquisition and engineering support for studies and analysis of alternatives for the Air Superiority Target which is the planned follow-on full scale target to the QF-4.</p> <p>This program is in budget activity 7 - RDT&E Operational System Development because it provides aerial targets, target payloads and target control systems in support of operational and RDT&E testing.</p> <p>(U) B. Program Change Summary (\$ in Millions)</p> <table style="width: 100%; margin-top: 10px;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY 2004</u></th> <th style="text-align: center;"><u>FY 2005</u></th> <th style="text-align: center;"><u>FY 2006</u></th> <th style="text-align: center;"><u>FY 2007</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">5.178</td> <td style="text-align: center;">5.106</td> <td style="text-align: center;">5.143</td> </tr> <tr> <td>(U) Current PBR/President's Budget</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">5.132</td> <td style="text-align: center;">6.641</td> <td style="text-align: center;">5.241</td> </tr> <tr> <td>(U) Total Adjustments</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">-0.046</td> <td></td> <td></td> </tr> <tr> <td>(U) Congressional Program Reductions</td> <td></td> <td style="text-align: center;">-0.046</td> <td></td> <td></td> </tr> <tr> <td> Congressional Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional Increases</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Reprogrammings</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> SBIR/STTR Transfer</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>(U) Significant Program Changes:</p>												<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	(U) Previous President's Budget	0.000	5.178	5.106	5.143	(U) Current PBR/President's Budget	0.000	5.132	6.641	5.241	(U) Total Adjustments	0.000	-0.046			(U) Congressional Program Reductions		-0.046			Congressional Rescissions					Congressional Increases					Reprogrammings					SBIR/STTR Transfer				
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Exhibit R-2, RDT&E Budget Item Justification		DATE
BUDGET ACTIVITY	PE NUMBER AND TITLE	
07 Operational System Development	0305116F AERIAL TARGETS	
<p>\$1.5M in FY06 is for Air Superiority Target (AST) Analysis of Alternatives</p>		

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Exhibit R-2a, RDT&E Project Justification

DATE

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BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT NUMBER AND TITLE		
07 Operational System Development					0305116F AERIAL TARGETS			5136 Target Systems Development		
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
5136 Target Systems Development	0.000	5.132	6.641	5.241	5.297	5.348	5.473	5.567	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

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

Full-scale and subscale targets assure warfighters that weapon systems will perform adequately against real-world enemy fighters and cruise missiles. Aerial targets help satisfy public law Title 10, Section 2366 that requires major systems and munitions programs to conduct survivability testing and lethality testing before full-scale production. The Aerial Targets program provides drones to satisfy "Live Fire/Lethality" developmental/operational test requirements. Target drones are used to validate operational missile/weapon system effectiveness and fighter operational flight program (OFP) updates. Target drones are also essential for development testing/operational testing for all air-to-air and ground-to-air missiles, and for the F/A-22, F-16, F-15, etc., aircraft. The objective is to provide realistic targets for missile testing to enable the development of air defense systems capable of defeating changing airborne threats. This funding improves/updates aerial target systems to ensure aerial targets represent enemy threat airborne systems. This program element also funds development of full-scale/subscale aerial targets and target control systems. Specialized target payload subsystems are developed for requirements such as: missile scoring, electronic attack and infrared (IR) countermeasures, radar and IR signature augmentation, and chaff and flare dispensing systems. In FY06, the Air Force Subscale Aerial Target (AFSAT) program will continue to evaluate product improvement opportunities that will identify areas of needed enhancements to the performance, payload capability, and payload capacity to support growth initiatives which will continue throughout the Future Years Defense Program (FYDP). FY06 will also fund system acquisition and engineering support for studies and analysis of alternatives for the Air Superiority Target which is the planned follow-on full scale target to the QF-4.

This program is in budget activity 7 - RDT&E Operational System Development because it provides aerial targets, target payloads and target control systems in support of operational and RDT&E testing.

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

	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) Prior year (FY03 & FY04) RDT&E funding for Aerial Targets was in PE 64735F/BPAC 652286.				
(U) Continue Aerial Targets basic operating support.		0.200	0.200	0.200
(U) Continue system acquisition and engineering support to include studies, upgrades for the target control system, the weapon scoring system, payload systems and other aerial targets support systems		1.578	0.941	1.041
(U) Air Superiority Target Analysis of Alternatives			1.500	
(U) Continue product improvement program for the Air Force Subscale Aerial Target (AFSAT) program to include payload and propulsion improvements, radar augmentation, and other objective requirements/enhancements.		3.354	4.000	4.000
(U) Total Cost	0.000	5.132	6.641	5.241

Exhibit R-2a, RDT&E Project Justification

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BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0305116F AERIAL TARGETS

PROJECT NUMBER AND TITLE

5136 Target Systems Development

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

	<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>FY 2010</u>	<u>FY 2011</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>Estimate</u>	<u>Complete</u>	
PE35116F: Appn: Aircraft										
(U) Procurement, AF(APAF), Program Title: Aerial Targets	51.554	73.008	82.907	81.326	83.986	89.055	91.233	92.227	Continuing	TBD
(U) Initial Spares	0.758	0.397	0.478	0.480	0.495	0.511	0.524	0.530	Continuing	TBD
(U) Munitions	2.771	3.322	3.617	3.770	3.888	4.044	4.146	4.195	Continuing	TBD
(U) Electronic Attack Pods	0.000	0.000	4.992	5.407	5.420	5.069	5.302	5.465	Continuing	TBD

(U) D. Acquisition Strategy

The acquisition strategy is competitive, with cost plus and fixed price 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				
07 Operational System Development					0305116F AERIAL TARGETS						5136 Target Systems Development				
(U)	<u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract</u> <u>Method &</u> <u>Type</u>	<u>Performing</u> <u>Activity &</u> <u>Location</u>	<u>Total</u> <u>Prior to FY</u> <u>2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Cost</u>	<u>FY 2004</u> <u>Award</u> <u>Date</u>	<u>FY 2005</u> <u>Cost</u>	<u>FY 2005</u> <u>Award</u> <u>Date</u>	<u>FY 2006</u> <u>Cost</u>	<u>FY 2006</u> <u>Award</u> <u>Date</u>	<u>FY 2007</u> <u>Cost</u>	<u>FY 2007</u> <u>Award</u> <u>Date</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>	<u>Target</u> <u>Value of</u> <u>Contract</u>
(U)	<u>Product Development</u>														
	Composite Engineering Inc.	CPFF		0.000	0.000		3.354	Feb-05	4.000	Nov-05	4.000	Nov-06		11.354	
	TBD - AST Analysis of Alternatives	TBD							1.500	Mar-06				1.500	
	Subtotal Product Development			0.000	0.000		3.354		5.500		4.000		0.000	12.854	0.000
	Remarks:	Spiral Development Program for the BQM-167A (AFSAT) subscale program													
(U)	<u>Support</u>														
	Mission Support	Various	Various	0.000	0.000		0.951		0.750		0.803			2.504	
	Subtotal Support			0.000	0.000		0.951		0.750		0.803		0.000	2.504	0.000
	Remarks:														
(U)	<u>Test & Evaluation</u>														
	Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000		0.000	0.000	0.000
	Remarks:														
(U)	<u>Management</u>														
	System Acq and Engineering Support	Various	Various	0.000	0.000		0.827		0.391		0.438			1.656	
	Subtotal Management			0.000	0.000		0.827		0.391		0.438		0.000	1.656	0.000
	Remarks:														
(U)	Total Cost			0.000	0.000		5.132		6.641		5.241		0.000	17.014	0.000

Exhibit R-4, RDT&E Schedule Profile

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07 Operational System Development

PE NUMBER AND TITLE

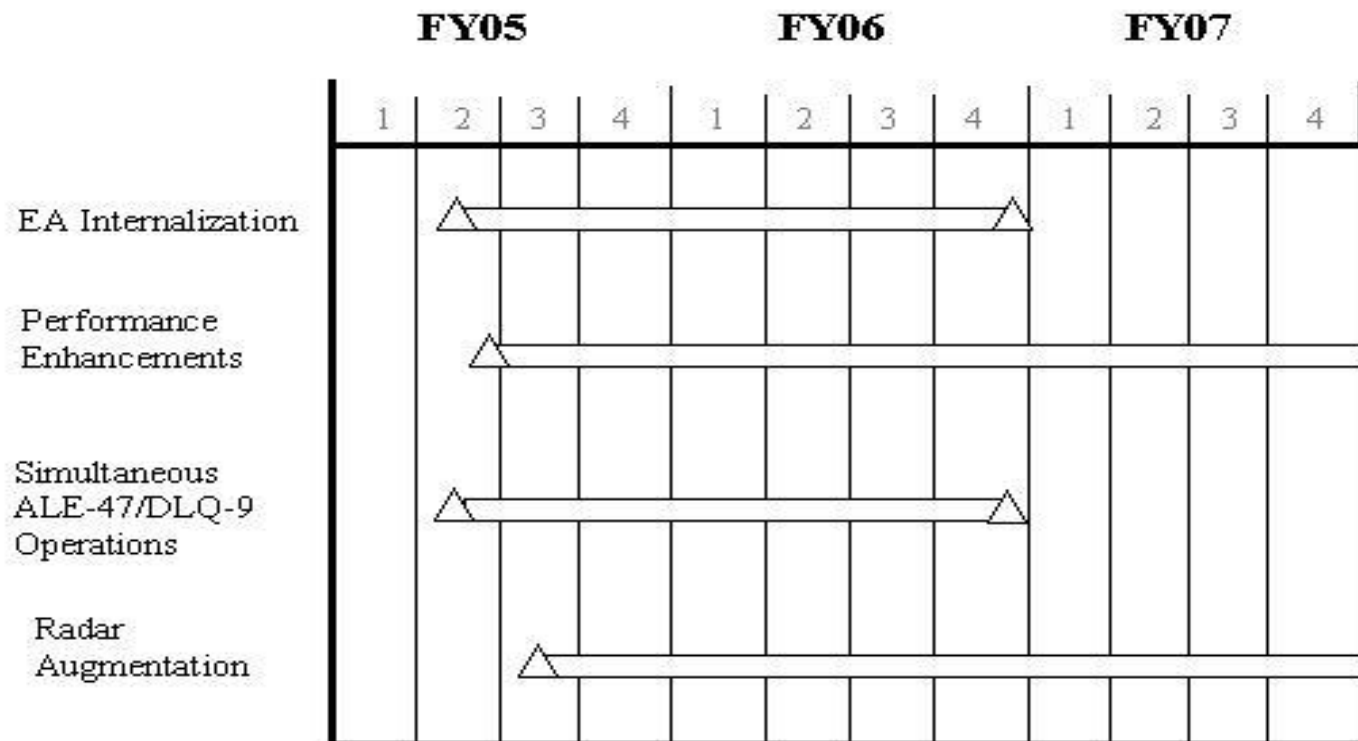
0305116F AERIAL TARGETS

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5136 Target Systems Development



BQM-167A Spiral Development Roadmap



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Exhibit R-4a, RDT&E Schedule Detail

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0305116F AERIAL TARGETS

PROJECT NUMBER AND TITLE

5136 Target Systems Development

(U) Schedule ProfileFY 2004FY 2005FY 2006FY 2007

(U) EA Internalization Modification for the BQM-167A

2Q

(U) BQM-167A Performance Enhancements

2Q

(U) Simultaneous ALE-47/DLQ-9 Operations for BQM-167A

2Q