

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2007</b>
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<b>BUDGET ACTIVITY</b> <b>05 System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604604F Submunitions</b>
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Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	5.368	8.327	1.988	1.750	1.854	1.716	1.745	1.779	Continuing	TBD
3166 Joint Smart Munitions Test and Evaluation	5.368	8.327	1.988	1.750	1.854	1.716	1.745	1.779	Continuing	TBD

The FY03 National Defense Authorization Act language directed Test & Evaluation (T&E) centers to charge only direct costs beginning in FY06. This resulted in a zero balance transfer (ZBT) of funding over the FYDP from the customer accounts (for indirect test costs) to T&E support, PE 65807F. For this PE, the T&E funding alignment begins in FY08.

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

This program element provides support for smart munitions and related technologies test and evaluation (T&E) activities, including T&E support for programs in engineering and manufacturing development. Project 3166 provides RDT&E support for developmental smart munitions acquisition programs. Project 3166 (project Chicken Little) evaluates developmental smart munitions and related emerging technology with applications against vehicle targets and Theater Air Defense units by determining performance against actual foreign targets in realistic environments and in the presence of countermeasures. Data gathered is used to meet developmental decision points requiring highly reliable, realistic performance data. The project is a major focal point for joint Air Force and other Services target signature collection and dissemination for development and exploitation purposes. The program provides best value test and evaluation support for submunition development and weaponization studies and modeling and simulation capabilities to augment a limited number of measurement and open air tests of smart weapons and related technologies.

This program is funded in BA5 - System Development and Demonstration (SDD) because it supports development programs prior to full rate production decision.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	5.397	5.759	1.983	1.741
(U) Current PBR/President's Budget	5.368	8.327	1.988	1.750
(U) Total Adjustments	-0.029	2.568		
(U) Congressional Program Reductions	0.000	0.000		
Congressional Rescissions	0.000	-0.320		
Congressional Increases	0.000	2.600		
Reprogrammings	-0.014	0.000		
SBIR/STTR Transfer	-0.015	0.000		

**(U) Significant Program Changes:**

Congress added \$2.6M in the FY07 Appn for "Virtual Teleoperation for Unmanned Aerial Vehicles."

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## Exhibit R-2a, RDT&amp;E Project Justification

DATE

February 2007

BUDGET ACTIVITY		PE NUMBER AND TITLE						PROJECT NUMBER AND TITLE		
<b>05 System Development and Demonstration (SDD)</b>		<b>0604604F Submunitions</b>						<b>3166 Joint Smart Munitions Test and Evaluation</b>		
Cost (\$ in Millions)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
3166 Joint Smart Munitions Test and Evaluation	5.368	8.327	1.988	1.750	1.854	1.716	1.745	1.779	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0		

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

This program element provides support for smart munitions and related technologies test and evaluation (T&E) activities, including T&E support for programs in engineering and manufacturing development. Project 3166 provides RDT&E support for developmental smart munitions acquisition programs. Project 3166 (project Chicken Little) evaluates developmental smart munitions and related emerging technology with applications against vehicle targets and Theater Air Defense units by determining performance against actual foreign targets in realistic environments and in the presence of countermeasures. Data gathered is used to meet developmental decision points requiring highly reliable, realistic performance data. The project is a major focal point for joint Air Force and other Services target signature collection and dissemination for development and exploitation purposes. The program provides best value test and evaluation support for submunition development and weaponization studies and modeling and simulation capabilities to augment a limited number of measurement and open air tests of smart weapons and related technologies.

This program is funded in BA5 - System Development and Demonstration (SDD) because it supports development programs prior to full rate production decision.

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

	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Continue weapon effectiveness evaluation and weaponization studies	0.765	0.776	0.298	0.267
(U) Develop, validate, and accredit improved models and simulation for assessment of alternatives and force on force studies	0.342	0.358	0.123	0.108
(U) Increase utility of lethality/vulnerability and signature database through addition of modern threat systems and secure datalink	1.557	1.667	0.572	0.503
(U) Plan and conduct captive carry flight tests and signature collection for seeker/sensor evaluations and algorithm development	1.300	1.390	0.477	0.418
(U) Characterize performance of advanced and programmable warheads to access potential for increasing lethality of weapons	0.267	0.310	0.096	0.084
(U) Perform vulnerability analysis of upgraded/advanced Suppression of Enemy Air Defense (SEAD) and Advanced Hardened Targets (AHT)	1.137	1.226	0.422	0.370
(U) Virtual Teleoperation for Unmanned Aerial Vehicle	0.000	2.600	0.000	0.000
(U) Total Cost	5.368	8.327	1.988	1.750

R-1 Line Item No. 83

Page-2 of 6

Project 3166

Exhibit R-2a (PE 0604604F)

1048

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification

DATE

February 2007

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604604F Submunitions

PROJECT NUMBER AND TITLE

3166 Joint Smart Munitions Test and Evaluation

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

	<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>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Complete</u>							

(U) None

(U) **D. Acquisition Strategy**

Funds are executed organically in support of test and evaluation activities including studies, analyses, flight tests, model building and simulation. Almost all of the work is performed in-house by the 46th Test Wing.

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Exhibit R-3, RDT&E Project Cost Analysis												DATE February 2007		
BUDGET ACTIVITY 05 System Development and Demonstration (SDD)						PE NUMBER AND TITLE 0604604F Submunitions				PROJECT NUMBER AND TITLE 3166 Joint Smart Munitions Test and Evaluation				
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2006 Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) <u>Support</u> Macaulay Brown/ANSTEC	FFP	Technical Analysis and Test Support, Eglin AFB, FL	1.806	0.080	Apr-05	0.000	N/A	0.000	N/A	0.000	N/A	0.000	1.886	1.886
Eglin Range O&M Contract	CPIF	Maintenance, Western Test Range, NV	0.491	0.300	Jan-06	0.100	Jan-07	0.000	N/A	0.000	N/A	0.000	0.891	0.891
Subtotal Support			2.297	0.380		0.100		0.000		0.000		0.000	2.777	2.777
Remarks:	CPIF = Cost Plus Incentive Fee; FFP = Firm Fixed Price													
(U) <u>Test &amp; Evaluation</u> Sverdrup	CPIF	Technical Analysis and Test Support, Eglin AFB, FL	11.316	0.433	Jun-01	0.000	N/A	0.000	N/A	0.000	N/A	0.000	11.749	11.749
46th Test Wing (46 OG and 46 TW)	N/A	Conducting Tests and Analysis, Eglin AFB, FL	80.530	4.306	N/A	5.384	N/A	1.692	N/A	1.486	N/A	Continuing	TBD	TBD
AFRL and University of Iowa (Virtual Teleoperation for Unmanned Aerial Vehicle)	N/A	AFRL, Wright Patterson AFB, OH (Most work performed by University of Iowa)	0.000	0.000	N/A	2.600	N/A	0.000	N/A	0.000	N/A	0.000	2.600	TBD
Subtotal Test & Evaluation			91.846	4.739		7.984		1.692		1.486		Continuing	TBD	TBD
Remarks:	46th Test Wing is the Program Office which conducts inhouse testing. Contract type and award date is N/A.													
(U) <u>Management</u> 46 Test Wing (46 OG)	N/A		6.950	0.249	N/A	0.243	N/A	0.296		0.264	N/A	Continuing	TBD	TBD
Subtotal Management			6.950	0.249		0.243		0.296		0.264		Continuing	TBD	TBD
Remarks:	46th Test Wing is the Program Office which conducts inhouse testing. Contract type and award date is N/A.													
(U) Total Cost			101.093	5.368		8.327		1.988		1.750		Continuing	TBD	TBD

## Exhibit R-4, RDT&amp;E Schedule Profile

DATE

February 2007

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604604F Submunitions

PROJECT NUMBER AND TITLE

3166 Joint Smart Munitions Test and Evaluation

**SCHEDULE**

Project 3166, Joint Smart Munition Test and Evaluation program (project Chicken Little) does not execute in accordance with established acquisition milestones. Chicken Little is a continuing test effort: Target/warhead evaluation/analysis, signature tests, and captive carry flight tests are ongoing throughout the year and continue through the FYDP. The type of activities is given in Section B. The timing, duration, and level of effort is decided at the annual Steering Committee meetings.

<b>Exhibit R-4a, RDT&amp;E Schedule Detail</b>	DATE <b>February 2007</b>
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BUDGET ACTIVITY <b>05 System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604604F Submunitions</b>	PROJECT NUMBER AND TITLE <b>3166 Joint Smart Munitions Test and Evaluation</b>
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<b>(U) <u>Schedule Profile</u></b>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Target/warhead evaluation/analysis, signature test, captive carry flight tests	1-4Q	1-4Q	1-4Q	1-4Q