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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2012 Air Force	<b>DATE:</b> February 2011
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<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0901226F: <i>AF STUDIES AND ANALYSIS AGENCY</i>
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<b>COST (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	-	0.928	-	0.928	1.050	1.035	1.197	1.385	Continuing	Continuing
676009: <i>M &amp; S DEVELOPMENT</i>	-	-	0.928	-	0.928	1.050	1.035	1.197	1.385	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

HQ USAF/A9, Studies & Analyses, Assessments and Lessons Learned (L2), provides Air Force senior leadership (up to and including the SECAF/CSAF) with independent and objective analytic insights, risk assessments, and lessons learned. AF/A9 also provides analyses to underpin strategic planning, operational requirements, modernization and recapitalization of systems and programs, and the Planning, Programming, Budgeting and Execution (PPBE) processes. AF/A9 is the lead of the AF Analytic Community and the Secretary for the Air Force Standard Analysis Toolkit. AF/A9 staff champions AF efforts with the DoD modeling community through the DoD Analytic Agenda.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
Previous President's Budget	-	-	-	-	-
Current President's Budget	-	-	0.928	-	0.928
Total Adjustments	-	-	0.928	-	0.928
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	0.928	-	0.928

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Air Force								DATE: February 2011				
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0901226F: AF STUDIES AND ANALYSIS AGENCY				PROJECT 676009: M & S DEVELOPMENT				
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost	
676009: M & S DEVELOPMENT	-	-	0.928	-	0.928	1.050	1.035	1.197	1.385	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0			
A. Mission Description and Budget Item Justification												
HQ USAF/A9, Studies & Analyses, Assessments and Lessons Learned (L2), provides Air Force senior leadership (up to and including the SECAF/CSAF) with independent and objective analytic insights, risk assessments, and lessons learned. AF/A9 also provides analyses to underpin strategic planning, operational requirements, modernization and recapitalization of systems and programs, and the Planning, Programming, Budgeting and Execution (PPBE) processes. AF/A9 is the lead of the AF Analytic Community and the Secretary for the Air Force Standard Analysis Toolkit. AF/A9 staff champions AF efforts with the DoD modeling community through the DoD Analytic Agenda.												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Title: Modeling & Simulation Development								-	-	0.928	-	0.928
Description: Models and simulations (M&S) are key ingredients that allow the analytic community to advise decision-makers with repeatable, high quality, quantifiable and justifiable information/options to use in evaluating alternatives and assessing risks. HQ USAF/A9 uses and has developed a wide range of Engagement, Mission and Campaign level tools to assist analysts in examining a wide range of problems (e.g. STORM, CFAM, BRAWLER, etc) and then presenting results to a wide audience up to and including the SecAF/CSAF. These tools serve across the entire AF Analytic Community and many are also staples across all of DoD. As new technologies are introduced to the battlefield (Digital Electronic Jammers, maneuvering Surface-to-Surface Missiles, Directed Energy Weapons, etc.)along with evolving warfighting techniques and support operations, the range covered by existing analytic tools needs to be expanded as well. M&S creation and enhancement can require extensive research in how to implement the emerging weapons capabilities as well as demand development of software techniques to implement the changes.												
Additionally, new focus areas such as Space, Irregular Warfare, Information Operations, Cyberwarfare and ISR are mandating tools of their own to examine and these also require new exploration and development. These focus areas will need to be examined in isolation and cross-domain through populating data in existing models.												
FY 2010 Accomplishments:												
FY 2011 Plans:												
FY 2012 Base Plans:												

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2012 Air Force				<b>DATE:</b> February 2011	
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		<b>R-1 ITEM NOMENCLATURE</b> PE 0901226F: <i>AF STUDIES AND ANALYSIS</i> AGENCY		<b>PROJECT</b> 676009: <i>M &amp; S DEVELOPMENT</i>	

  

<b><u>B. Accomplishments/Planned Programs (\$ in Millions)</u></b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012 Base</b>	<b>FY 2012 OCO</b>	<b>FY 2012 Total</b>
FY12 efforts will have 3 focus areas. The first focus area will be researching how to effectively upgrade existing major use military models (like STORM, CFAM, BRAWLER) so they will not only be ready to examine emerging weapons technologies for near term analytic requirements, but meet the long term challenges for the analytic community as well. This research will then transition to developing new techniques to keep the existing tools at the cutting edge of analysis. The second focus area will be to research, better define and then examine all space asset missions followed by developing techniques to make better tradeoffs in terrestrial/space cross-mission analyses. The final focus area will be to explore new modeling techniques to build better, quicker and more verifiable data to support existing tools. This will likely entail creating smaller process-based models that will be easier to operate and update by government personnel.  <b><i>FY 2012 OCO Plans:</i></b>					
<b>Accomplishments/Planned Programs Subtotals</b>	-	-	0.928	-	0.928

  

<b><u>C. Other Program Funding Summary (\$ in Millions)</u></b>											
	<b><u>FY 2010</u></b>	<b><u>FY 2011</u></b>	<b><u>FY 2012 Base</u></b>	<b><u>FY 2012 OCO</u></b>	<b><u>FY 2012 Total</u></b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015</u></b>	<b><u>FY 2016</u></b>	<b><u>Cost To Complete</u></b>	<b><u>Total Cost</u></b>
• N/A:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

  

<b><u>D. Acquisition Strategy</u></b> All efforts will be awarded under existing Task Order contracts capable of accepting R&D dollars. Due to size of effort (small) and need for flexibility (high) to adjust R&D to emerging capabilities (friendly and enemy), AF/A9 does not see awarding a specific contract in the first year of this effort (FY12).
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<b><u>E. Performance Metrics</u></b> Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.
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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2012 Air Force											<b>DATE:</b> February 2011		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0901226F: <i>AF STUDIES AND ANALYSIS</i> AGENCY				<b>PROJECT</b> 676009: <i>M &amp; S DEVELOPMENT</i>					
<b>Product Development (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000
<b>Support (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Software Development	TBD	Not specified.:	-	-		0.928	Jan 2012	-		0.928	0.000	0.928	0.000
<b>Subtotal</b>			-	-		0.928		-		0.928	0.000	0.928	0.000
<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000
<b>Management Services (\$ in Millions)</b>				<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000
			<b>Total Prior Years Cost</b>	<b>FY 2011</b>		<b>FY 2012 Base</b>		<b>FY 2012 OCO</b>		<b>FY 2012 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			-	-		0.928		-		0.928	0.000	0.928	0.000
<b>Remarks</b>													

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Exhibit R-4, RDT&E Schedule Profile: PB 2012 Air Force		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0901226F: <i>AF STUDIES AND ANALYSIS</i> AGENCY	PROJECT 676009: <i>M &amp; S DEVELOPMENT</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2012 Air Force			<b>DATE:</b> February 2011
<b>APPROPRIATION/BUDGET ACTIVITY</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0901226F: <i>AF STUDIES AND ANALYSIS</i> AGENCY	<b>PROJECT</b> 676009: <i>M &amp; S DEVELOPMENT</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Modeling & Simulation Development	1	2012	2	2013

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