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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2017 Air Force **Date:** February 2016

<b>Appropriation/Budget Activity</b> 3600: <i>Research, Development, Test &amp; Evaluation, Air Force I BA 7: Operational Systems Development</i>	<b>R-1 Program Element (Number/Name)</b> PE 0208059F / <i>Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities)</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	64.751	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	64.751
676002: <i>Cyber Systems Modernization</i>	-	64.751	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	64.751
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-	-	-

**Note**  
 In FY 2016, PE 0208059F, Cyber Command Activities, Project 676002, Cyber Systems Modernization, efforts were transferred to PE 0306250F, Cyber Operations Technology Development, 646008, US CYBER COMMAND Technology Development, to align all USCYBERCOM investment funding into one Program Element and WSC. O&M will remain the only appropriated funding in this PE.

**A. Mission Description and Budget Item Justification**  
 US Cyber Command (USCYBERCOM) plans, coordinates, integrates, synchronizes, and conducts activities to: direct the operations and defense of specified Department of Defense information networks; and prepare to, and when directed, conduct full-spectrum military cyberspace operations in order to enable actions in all domains, ensure US/Allied freedom of action in cyberspace, and deny the same to our adversaries.

USCYBERCOM develops defensive cyber strategies and capabilities to ensure force flow during campaign operations and to expand DoD OCO capabilities. USCYBERCOM researches, develops, and tests technologies and capabilities that enable cyber forces to conduct future offensive and defensive cyber operations in support of COCOMs, to include title 10 infrastructures and cross-cutting technologies. USCYBERCOM will also provide the resources for other COCOMs to conduct Offensive Cyber Operations/Defensive Cyber Operations (OCO/DCO) planning. An in-house integration team (Special Projects Vulnerability Assessment Team) performs research, small scale prototyping, and integration as required to support the mission. Further detail is classified and can be provided upon request. Additionally, this team will re-tool existing offensive and defensive capabilities to satisfy immediate USCYBERCOM operational needs. Finally, USCYBERCOM will delegate resources to the Army, Navy, and Air Force Cyber Service components to develop deconflicted offensive cyber capabilities.

Activities also include studies and analysis to support current program planning and execution.

This program is in Budget Activity 7, Operational System Development because this budget activity funds various development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
Previous President's Budget	67.057	0.000	0.000	0.000	0.000
Current President's Budget	64.751	0.000	0.000	0.000	0.000
Total Adjustments	-2.306	0.000	0.000	0.000	0.000
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-2.306	0.000			
• Other Adjustments	0.000	0.000	0.000	0.000	0.000

**Change Summary Explanation**

In FY 2016, 676002, Cyber Systems Modernization, efforts were transferred to PE 0306250F, Cyber Operations Technology Development, 646008, US CYBER COMMAND Technology Development, to align all USCYBERCOM investment funding into one Program Element and WSC.

<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<p><b>Title:</b> Combatant Command Support</p> <p><b>Description:</b> Funding supported development and testing of various tools critical to achieve COCOM military objectives. Development efforts included research, studies, integration, analysis, access development, and operational assessment of cyberspace capabilities, methodologies, and tactics in support of COCOM objectives.</p> <p><b>FY 2015 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>- Supported studies, analysis, testing and development of cyber operations capabilities and tools in support of Combatant Command military objectives</li> <li>- Supported advanced reverse engineering efforts, development of Electronic Warfare (EW) and cyberspace targeting efforts, a framework to underpin analytic and targeting efforts and seed funding for cyber capabilities and tools in support of cyber operations requirements</li> </ul>	22.409	-	-
<p><b>Title:</b> Defend the Nation Capabilities</p> <p><b>Description:</b> Supported the development of a diverse cyber capability portfolio to enable SEE, BLOCK, and MANEUVER efforts in order to defeat a wide variety of cyber attacks. Efforts included research, integration, analysis, access development, training, testing, and assessments for offensive, defensive, and situational awareness capabilities.</p>	22.216	-	-

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<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>	FY 2015	FY 2016	FY 2017
<p><b><i>FY 2015 Accomplishments:</i></b></p> <ul style="list-style-type: none"> <li>- Supported development, prototyping, and testing of tools to support Defend the Nation requirements and cyber operations</li> <li>- Supported technology research for critical infrastructure protection, and advanced development, transition and technology assessment of a joint cyber operations infrastructure</li> <li>- Provided technical and subject matter expertise for systems engineering and technical assurance, cyber capability strategy, guidance, and requirements</li> </ul>			
<p><b><i>Title:</i></b> Operate and Defend the DoDIN and CYBER Situational Awareness</p> <p><b><i>Description:</i></b> Funding supported engineering and development of tools, data strategy, and management of a common operating picture support operations focused on cyber key terrain at the global and national level and for cyber situational awareness for the services and COCOMs to support operations focused on cyber key terrain at the global and national level.</p> <p><b><i>FY 2015 Accomplishments:</i></b></p> <ul style="list-style-type: none"> <li>- Supported cyber operations tools development, engineering, data strategy, and development of a common operating picture that enables USCYBERCOM to conduct operations in defense of specified Department of Defense information networks</li> <li>- Supported tool development for Joint Cyber Centers with an event detection capability and engineering support to ensure smooth integration and development</li> <li>- Supported efforts to solve operational limitations, vulnerabilities and requirements</li> </ul>	20.126	-	-
<b>Accomplishments/Planned Programs Subtotals</b>	64.751	-	-

<b>D. Other Program Funding Summary (\$ in Millions)</b>											
Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• O&M: BA07: PE 0208059F: <i>Operation &amp; Maintenance</i>	98.367	166.533	149.893	0.000	149.893	141.661	121.354	121.991	124.140	Continuing	Continuing
• OPAF: BA03: Line Item # 837300: <i>Base Comm Infrastructure</i>	0.000	3.439	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-
• OPAF: BA03: Line Item # 833140: <i>Strategic Command &amp; Control</i>	0.975	7.948	7.872	0.000	7.872	5.905	0.000	0.000	0.000	-	-

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

<u>Line Item</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u> <u>Base</u>	<u>FY 2017</u> <u>OCO</u>	<u>FY 2017</u> <u>Total</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
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**Remarks**

**E. Acquisition Strategy**

Contracts will be awarded under full and open competition whenever possible. Variations of both Fixed Price (FP) and Cost Plus (CP) contracting vehicles will be used and managed by various Service Components

**F. Performance Metrics**

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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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Air Force												Date: February 2016				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)					Project (Number/Name)							
3600 / 7				PE 0208059F / Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities)					676002 / Cyber Systems Modernization							
<b>Product Development (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Combatant Command Support	Various	Service Partners : Various	-	21.573	Nov 2014	0.000		0.000		0.000		0.000	0.000	21.573	-	
Defend the Nation	Various	Other partners : Various	-	22.216	Dec 2014	0.000		0.000		0.000		0.000	0.000	22.216	-	
Operate and Defend the DoDIN and Cyber Situational Awareness	Various	Other partners : Various	-	14.146	Nov 2014	0.000		0.000		0.000		0.000	0.000	14.146	-	
<b>Subtotal</b>			-	57.935		0.000		0.000		0.000		0.000	0.000	57.935	-	
<b>Support (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-	
<b>Test and Evaluation (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
<b>Subtotal</b>			-	-		-		-		-		-	-	-	-	
<b>Management Services (\$ in Millions)</b>				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
PMA - FFRDC	C/CPAF	Various : Ft Meade, Md	-	6.816	Oct 2014	0.000		0.000		0.000		0.000	0.000	6.816	-	
<b>Subtotal</b>			-	6.816		0.000		0.000		0.000		0.000	0.000	6.816	-	





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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2017 Air Force		<b>Date:</b> February 2016
<b>Appropriation/Budget Activity</b> 3600 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0208059F / <i>Service Support to Other Core Missions - STRATCOM (CYBERCOM Activities)</i>	<b>Project (Number/Name)</b> 676002 / <i>Cyber Systems Modernization</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Combat Command Support	1	2015	4	2015
Defend the Nation Support	1	2015	4	2015
GIG Ops and Defense and Situational Awareness	1	2015	4	2015