Exhibit R-2, **RDT&E Budget Item Justification:** FY 2018 Air Force										**Date:** May 2017	

Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 7: *Operational Systems Development*						**R-1 Program Element (Number/Name)** PE 0305881F *I Rapid Cyber Acquisition*					

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	3.036	4.280	4.899	0.000	4.899	4.336	4.416	4.493	4.585	Continuing	Continuing
670374: *Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt*	-	3.036	4.280	4.899	0.000	4.899	4.336	4.416	4.493	4.585	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Rapid Cyber Acquisition (RCA) provides combatant commanders with the ability to rapidly respond to emerging cyber needs. RCA provides rapid fielding of capabilities in three areas: defend the Air Force portion of the DoD Global Information Grid (GIG) in response to emerging threats; network attack and cyber exploitation capabilities through all phases of warfare; and new cyber operational capabilities that address cyber gaps in evolving mission areas.

RCA delivers operational cyber capabilities to 24th Air Force (24 AF) warfighters in mission-relevant timeframes. RCA provides capabilities in support of US national security interests, to counter current and future cyber threats, and to enhance the nation's ability to operate in cyberspace. It expedites cyber development and modifications of USAF and DoD cyber capabilities. RCA provides solution sets for cyberspace operations: attack, defense, command and control/situational awareness, exploitation, critical infrastructure support, combat support and cybersecurity products and services. RCA provides integration, and technical support to other Service and Government Agency activities to leverage select Air Force-developed technologies and/or operational capabilities. RCA will develop materiel or non-materiel cyber solutions, conduct rapid prototyping, integration and transition activities for cyber systems. Activities include, but are not limited to: development of software/hardware systems; integration and transition of lab-developed cyber capabilities to the warfighter; testing and evaluation; program management administration, studies, analysis, pilots, demonstrations, and risk reduction for emerging technologies.

This program is in Budget Activity 7, Operational System Development because this budget activity includes 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.

Exhibit R-2, **RDT&E Budget Item Justification:** FY 2018 Air Force				**Date:** May 2017	
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B. Program Change Summary ($ in Millions)	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**
Previous President's Budget	3.149	4.280	4.885	0.000	4.885
Current President's Budget	3.036	4.280	4.899	0.000	4.899
Total Adjustments	-0.113	0.000	0.014	0.000	0.014
• 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	-0.113	0.000			
• Other Adjustments	0.000	0.000	0.014	0.000	0.014

C. Accomplishments/Planned Programs ($ in Millions)	**FY 2016**	**FY 2017**	**FY 2018**
Title: RCA Hardware/Software Development	3.036	4.080	4.300

Description: Hardware and software cyber security enhancement in support of offensive, defensive, command and control/ situational awareness weapon system requirements.

FY 2016 Accomplishments:
- Developed urgent cyber operational capabilities:
-- Cyber Operations Research Terminals (details classified)
-- Developed Secure data warehouse
-- Automated Compliance Tracking
-- CMF Team Site Infrastructure
- Provided technical support to other Services

FY 2017 Plans:
- Continue development of:
-- Strategic Worldwide Integration Capability (SWIC)/Net-Cross Domain Solutions (NetCDS) effort in support of the Cyber Command Control System (C3MS).
-- Automated Cyber Tool Development (ACTD) in support of OCO.
-- Developed Access in support of the Cyber Vulnerability Assessment/Hunter (CVA/H) weapon system
- Begin development of:
-- Mission Oriented Mapping (MOM) in support of CVA/H weapon system.
-- Single Sign-On and Router Defense Phase 1 in support of the Air Force Cyber Defense (ACD) weapon system

Exhibit R-2, **RDT&E Budget Item Justification:** FY 2018 Air Force	**Date:** May 2017
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C. Accomplishments/Planned Programs ($ in Millions)	**FY 2016**	**FY 2017**	**FY 2018**
-- Voice Over Internet Protocol (VOIP) Monitoring in support of Cyberspace Defense Analysis (CDA) weapon system -- Router Defense Phase 1 for ACD weapon system -- Network Vulnerability Assessment in support of the Cyber Security Control System (CSCS) weapon system - Continue to provide technical support efforts to other Services - Begin to provide technical support to other Government Agencies *FY 2018 Plans:* - Will continue testing of capabilities developed prior to future fielding - Will continue actions to provide a secure network environment for required test events - Will continue to provide independent operational and technical assessments of cyber capabilities and vulnerabilities			
Title: RCA Hardware Integration *Description:* Integrates organically developed and/or acquired capabilities for the following AF Weapon System Sustainment (WSS) programs: Cyberspace Vulnerability Assessment/Hunter (CVA/H), Cyber Security Control System (CSCS), Cyberspace Defense Analysis (CDA), Air Force Cyber Defense (ACD), and Cyber Command and Control Mission System (C3MS). *FY 2016 Accomplishments:* - N/A *FY 2017 Plans:* - Begin integration efforts and technical support to the fielding of RCA efforts to the Air Force other Services, and other Government Agencies - Begin leveraging select Air Force developed technologies and/or operational capabilities *FY 2018 Plans:* - Will continue testing of capabilities developed prior to future fielding - Will continue actions to provide a secure network environment for required test events - Will continue to provide independent operational and technical assessments of cyber capabilities and vulnerabilities	0.000	0.100	0.499
Title: Test & Evaluation *Description:* Provides a secure network environment to support testing in preparation for the fielding of RCA efforts. *FY 2016 Accomplishments:* - N/A *FY 2017 Plans:*	0.000	0.100	0.100

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C. Accomplishments/Planned Programs ($ in Millions)	**FY 2016**	**FY 2017**	**FY 2018**
- Begin test of and technical support to the fielding of RCA efforts to the Air Force, other Services, and other Government Agencies - Begin leveraging and evaluating select Air Force developed technologies and/or operational capabilities ***FY 2018 Plans:*** - Will continue testing of capabilities developed prior to future fielding - Will continue actions to provide a secure network environment for required test events - Will continue to provide independent operational and technical assessments of cyber capabilities and vulnerabilities			
Accomplishments/Planned Programs Subtotals	3.036	4.280	4.899

D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
• N/A: *N/A*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	-

Remarks

E. Acquisition Strategy

Rapid Cyber Acquisition utilizes a tailorable acquisition strategy that facilitates rapid delivery of material and non-material solutions to solve operational cyber needs. This approach allows flexibility for solutions to enter into the acquisitions process at any phase of the acquisitions life cycle management system. These plans meet the written acquisition planning requirements and guidance. All plans will contain sufficient information for the Milestone Decision Authority to determine readiness to enter into the applicable phase of the acquisition process. Rapid Cyber Acquisition considers existing contracting vehicles, including but not limited to: Network Centric Solutions (NETCENTS), NETCENTS 2, Information Technology Enterprise Solutions-2 (ITES-2), Government-Wide Acquisition Contract vehicles (Alliant, Encore II, Solutions for Enterprise-Wide Procurement IV (SEWP IV)), General Services Administration Federal Supply Schedules, HNCY Cyber Indefinite Delivery Indefinite Quantity (IDIQ) contract, National Security Agency vehicles and Cyber Warfare Systems Branch Class Justification and Approval document. Multiple award contractual vehicles, such as National Aeronautics and Space Administration's SEWP IV, provide a wide range of commercially-available products and services that should be able to meet many requirements related to Rapid Cyber Acquisition. These multiple-award vehicles have already met the statutory requirements of the Competition in Contracting Act and only require that Rapid Cyber Acquisition provide a fair opportunity to all contract holders, in accordance with Federal Acquisition Regulation 16.505, unless an exception to fair opportunity applies.

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.