Exhibit R-2, **RDT&E Budget Item Justification:** PB 2019 Air Force										**Date:** February 2018	

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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	4.123	4.899	4.303	0.000	4.303	4.383	4.460	4.552	4.635	Continuing	Continuing
670374: *Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt*	-	4.123	4.899	4.303	0.000	4.303	4.383	4.460	4.552	4.635	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This program, BA 7, PE 0305881F, project 670374, Cyber Capability Support Office, is a new start.

A. Mission Description and Budget Item Justification

A.1. Mission Description.

Program element includes the manpower, equipment, research and development, developmental testing, operational test and evaluation, transition funding to foundational programs, necessary facilities, legal and associated costs supporting cyber innovation through rapid development (days to months), technology transition and/or acquisition of cyber capabilities. Key areas include; defense of the Air Force Network, mission assurance capabilities to protect cyber infrastructure and attack and exploitation of networks and associated systems used by adversaries as directed by the appropriate Combatant Commander or Joint Force Commander. These capabilities will directly support interagency partners and joint forces.

A.2. Other.

May include expedited development of innovative solutions for existing and emerging technologies

A.3. Budget Item Justification.

Rapid Cyber Acquisition (RCA) provides Combatant Commanders with the ability to rapidly respond to merging cyber needs. RCA provides rapid fielding of offensive cyber capabilities in the following areas: attack, exploitation, defense, and command and control of offensive cyber operations 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 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 offensive cyberspace operations: attack, defense, command and control/situational awareness, exploitation, critical infrastructure support, and combat support. 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 material or non-material 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.

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force		Date: February 2018
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*

The Cyber Capability Support Office (CCSO) is a rapid cyber capability development organization charged with meeting AF Offensive Cyber Operations (OCO) mission requirements in support of multi-domain superiority across the 5 Air Force core missions. By utilizing a unique blend of technology, intelligence, and operations Subject Matter Experts, CCSO develops Phase-0 focused capability to enable the achievement of the CCDR's mission requirements.

In FY19, RCA will shift focus from the rapid fielding of capability to funding a standing research and development team to conduct quick look assessments, solution design, rapid prototyping, and field quick reaction capabilities in support of urgent warfighter requirements.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver cyber weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, and 0605898F.

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.

B. Program Change Summary ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	4.280	4.899	4.336	0.000	4.336
Current President's Budget	4.123	4.899	4.303	0.000	4.303
Total Adjustments	-0.157	0.000	-0.033	0.000	-0.033
• 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	-0.157	0.000			
• Other Adjustments	0.000	0.000	-0.033	0.000	-0.033

C. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: RCA Hardware/Software Development **Description:** Hardware and software cyber security enhancement in support of offensive, defensive, command and control/situational awareness weapon system requirements. **FY 2018 Plans:** - Complete development, integration and technical support efforts/activities.	3.923	4.300	0.000	0.000	0.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force		Date: February 2018
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*

C. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
- Complete development of independent operational and technical assessment of cyber capabilities and vulnerabilities. *FY 2019 Base Plans:* N/A *FY 2019 OCO Plans:* N/A *FY 2018 to FY 2019 Increase/Decrease Statement:* Funding decrease due to realignment of FY19 funds to the Cyber Capability Support Office effort.					
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 2018 Plans:* - Complete integration and technical support of select Air Force developmental technologies and operational capabilities. - Complete independent operational and technical assessments of cyberspace capabilities. *FY 2019 Base Plans:* N/A *FY 2019 OCO Plans:* N/A *FY 2018 to FY 2019 Increase/Decrease Statement:* Funding decrease due to realignment of FY19 funds to the Cyber Capability Support Office effort.	0.100	0.499	0.000	0.000	0.000
Title: Test and Evaluation *Description:* Provides a secure network environment to support developmental testing in preparation for the fielding of RCA efforts.	0.100	0.100	0.000	0.000	0.000

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force		Date: February 2018
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*	

C. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
FY 2018 Plans: - Complete developmental testing of developed capabilities. ***FY 2019 Base Plans:*** N/A ***FY 2019 OCO Plans:*** N/A. ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Funding decrease due to realignment of FY19 funds to the Cyber Capability Support Office effort.					
Title: Cyber Capability Support Office ***Description:*** Provide a standing research and development team to conduct quick look assessments, solution design, rapid prototyping, and field quick reaction capabilities. ***FY 2018 Plans:*** N/A. ***FY 2019 Base Plans:*** - Will provide professional and technical subject matter expertise to deliver direction and guidance for Offensive Cyber Operations and Computer Network Exploitation information systems to support the Air Force's mission objectives - Will develop a highly skilled rapid reaction team to prototype and deliver capability within 0-60 days, and perform quick look operational and technical assessments of cyber capabilities - Will implement a multidisciplinary targeting cell to execute target systems analysis and developmental planning in support of the USAF offensive cyber operations mission - Will provide a secure network environment to support research, prototyping, development, and testing of offensive cyber capabilities ***FY 2019 OCO Plans:*** N/A. ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Funding increased to stand up Cyber Capability Support Office efforts.	0.000	0.000	4.303	0.000	4.303
Accomplishments/Planned Programs Subtotals	4.123	4.899	4.303	0.000	4.303

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2019 Air Force	**Date:** February 2018
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*

D. Other Program Funding Summary ($ in Millions)

 N/A

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, CCSO Indefinite Delivery Indefinite Quantity (IDIQ) contracts, HNCY Cyber 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force												Date: February 2018		
Appropriation/Budget Activity 3600 I 7					**R-1 Program Element (Number/Name)** PE 0305881F I Rapid Cyber Acquisition						**Project (Number/Name)** 670374 I Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt			

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
RCA HW/SW (LOGAN) ACTD	MIPR	AFRL : Rome, NY	-	0.675	Jul 2017	-		-		-		-	Continuing	Continuing	-
RCA HW/SW (Mission Oriented Mapping) CVA/H	C/CPAF	Various : San Antonio, TX	-	3.096	Oct 2016	-		-		-		-	Continuing	Continuing	-
RCA HW Integration	Various	Various : Various	-	0.134	Jan 2018	0.165	May 2018	-		-		-	Continuing	Continuing	-
RCA HW/SW (LOGAN)	MIPR	AFRL : Rome, NY	-	-		2.500	Jan 2018	-		-		-	Continuing	Continuing	-
RCA HW/SW (Architecture Development)	Various	Various : Various	-	-		1.800	Jun 2018	-		-		-	Continuing	Continuing	-
Subtotal			-	3.905		4.465		-		-		-	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Cyber Capabilities Support Office (CCSO)	Various	Various : Various	-	-		-		4.303	Nov 2018	-		4.303	Continuing	Continuing	-
Subtotal			-	-		-		4.303		-		4.303	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA - Engineering and Technical Support Services (FFRDC)	C/CPFF	MITRE : Hanscom, MA	-	0.150	Jan 2017	0.200	Mar 2018	-		-		-	Continuing	Continuing	-
PMA Acquisition Support	Various	Various : San Antonio, TX	-	0.068	Jan 2017	0.234	Mar 2018	-		-		-	Continuing	Continuing	-
Subtotal			-	0.218		0.434		-		-		-	Continuing	Continuing	N/A

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2019 Air Force			**Date:** February 2018

Appropriation/Budget Activity 3600 *I* 7	R-1 Program Element (Number/Name) PE 0305881F *I Rapid Cyber Acquisition*	Project (Number/Name) 670374 *I Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks
No PMA expenses prior to FY17. PMA support begins in FY17.

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	4.123		4.899		4.303		-		4.303	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2019 Air Force		**Date:** February 2018
Appropriation/Budget Activity 3600 *I* 7	**R-1 Program Element (Number/Name)** PE 0305881F *I Rapid Cyber Acquisition*	**Project (Number/Name)** 670374 *I Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt*

	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Rapid Cyber Acquisition																												
RCA HW/SW Development						█	█	█																				
RCA HW/SW (SWIC/NetCDS) C3MS		█																										
RCA HW/SW (Deployed Access) CVA/H			█																									
RCA HW/SW (LOGAN) Development ACTD		█	█	█	█	█																						
RCA HW/SW (Mission Oriented Mapping) CVA/H	█	█	█	█																								
RCA HW Integraton					█	█																						
RCA HW/SW (Architecture Development)					█	█																						
Cyber Capability Support Office																												
CCSO Technical Direction									█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Internal Development Cell									█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Due Diligence Research & Analysis									█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Cyber Capability & Design Team									█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Joint Information Operations Range Development Environment									█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305881F / *Rapid Cyber Acquisition*	**Project (Number/Name)** 670374 / *Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Rapid Cyber Acquisition				
RCA HW/SW Development	1	2018	4	2018
RCA HW/SW (SWIC/NetCDS) C3MS	2	2017	2	2017
RCA HW/SW (Deployed Access) CVA/H	3	2017	3	2017
RCA HW/SW (LOGAN) Development ACTD	3	2017	3	2018
RCA HW/SW (Mission Oriented Mapping) CVA/H	1	2017	1	2018
RCA HW Integraton	2	2018	4	2018
RCA HW/SW (Architecture Development)	1	2018	4	2018
Cyber Capability Support Office				
CCSO Technical Direction	1	2019	4	2023
Internal Development Cell	1	2019	4	2023
Due Diligence Research & Analysis	1	2019	4	2023
Cyber Capability & Design Team	1	2019	4	2023
Joint Information Operations Range Development Environment	1	2019	4	2023