Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy											**Date:** March 2019	

| **Appropriation/Budget Activity** 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)* | | | | | | **R-1 Program Element (Number/Name)** PE 0306250M *I (U)Cyber Operations Technology Development* | | | | | | |

COST ($ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	0.000	2.960	6.808	26.406	-	26.406	26.322	29.431	30.379	29.527	Continuing	Continuing
2958: *Cyberspace Activities*	0.000	2.960	6.808	26.406	-	26.406	26.322	29.431	30.379	29.527	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element supports cost associated with research, development, and modification of cyber technologies supporting Marine Corps Cyber Mission Forces (CMF) and missions assigned by USCYBERCOM.

The Strategic Cyber Security Operations Development is an initiative to conduct engineering and manufacturing development tasks aimed at the attainment and maintenance of the security properties of the Marine Corps and its assets against relevant security risks within the cyber environment. This project includes cyber security tools system development, integration, enhancement and demonstrations designed at protecting and defending the Marine Corps Enterprise Network (MCEN); defending national interests against cyberattacks of significant consequence; and providing integrated cyber capabilities to support military operations and contingency plans. The project incorporates development of strategic partnerships with defense intelligence agencies and commercial cyber security developers in order to leverage current and emerging cyber security technologies in defensive/offensive tools, policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, and best practices that can be used to protect the Marine Corps' cyber domain; organization and user's assets. Marine Corps' organization and user's assets include connected computing devices, infrastructure, applications, services, telecommunications systems, and the totality of transmitted and/or stored information in the cyber environment.

B. Program Change Summary ($ in Millions)

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	4.502	6.808	6.910	-	6.910
Current President's Budget	2.960	6.808	26.406	-	26.406
Total Adjustments	-1.542	0.000	19.496	-	19.496
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.117	0.000			
• Program Adjustments	0.000	0.000	-0.504	-	-0.504
• Rate/Misc Adjustments	0.000	0.000	20.000	-	20.000
• Congressional Directed Reductions Adjustments	-1.425	-	-	-	-

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2020 Navy		**Date:** March 2019
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0306250M *I (U)Cyber Operations Technology Development*	

<u>Change Summary Explanation</u>

The FY2020 funding request was reduced by $0.50M to account for the availability of prior year execution balances.

The FY 2020 funding request was increased by $19.598M. This funding will develop tools, platforms and infrastructure for various Offensive Cyberspace Operations (OCO) requirements to encourage an appropriate Service-Level capability for the Joint Mission Operations Center (JMOC) Meade requirement in support of United States Cyberspace Command (USCC) and Joint Forces Headquarters Cyber (JFHQ-c) mission.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019	
Appropriation/Budget Activity 1319 / 5				**R-1 Program Element (Number/Name)** PE 0306250M / (U)Cyber Operations Technology Development						**Project (Number/Name)** 2958 / Cyberspace Activities	

COST ($ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
2958: *Cyberspace Activities*	0.000	2.960	6.808	26.406	-	26.406	26.322	29.431	30.379	29.527	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program element supports cost associated with research, development, and modification of cyber technologies supporting Marine Corps Cyber Mission Forces (CMF) and missions assigned by USCYBERCOM.

The Strategic Cyber Security Operations Development is an initiative to conduct engineering and manufacturing development tasks aimed at the attainment and maintenance of the security properties of the Marine Corps and its assets against relevant security risks within the cyber environment. This project includes cyber security tools system development, integration, enhancement and demonstrations designed at protecting and defending the Marine Corps Enterprise Network (MCEN); defending national interests against cyber attacks of significant consequence; and providing integrated cyber capabilities to support military operations and contingency plans. The project incorporates development of strategic partnerships with defense intelligence agencies and commercial cyber security developers in order to leverage current and emerging cyber security technologies in defensive/offensive tools, policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, and best practices that can be used to protect the Marine Corps' cyber domain; organization and user's assets. Marine Corps' organization and user's assets include connected computing devices, infrastructure, applications, services, telecommunications systems, and the totality of transmitted and/or stored information in the cyber environment.

The FY 2020 funding request was increased by $19.598M. This funding will develop tools, platforms, and infrastructure for various Offensive Cyberspace Operations (OCO) requirements to enable appropriate Service-Level capability for the Joint Mission Operations Center (JMOC) Meade requirement in support of United States Cyberspace Command (USCC) and Joint Forces Headquarters Cyber (JFHQ-c) mission.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Cyber Tool Development	2.960	6.808	6.808	0.000	6.808
Articles:	-	-	-	-	-

FY 2019 Plans:
Continued the cyber tool development process for MARFORCYBERCOM. The task requires complex and experienced skill sets in order to write code and perform: technology research, software and engineering development, integration of systems concepts, prevention of adversary presence, product development. The increase of $3.848M from FY18 to FY19 is to provide the full requirement of tool, platform and infrastructure development capability.

FY 2020 Base Plans:

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0306250M / (U)Cyber Operations Technology Development	**Project (Number/Name)** 2958 / Cyberspace Activities

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Continue the cyber tool development process for MARFORCYBERCOM. The task requires complex and experienced skill sets in order to write code and perform: technology research, software and engineering development, integration of systems concepts, prevention of adversary presence, product development. ***FY 2020 OCO Plans:*** N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** There was no increase/decrease from FY19 to FY20.					
Title: Common Access Platform	0.000	0.000	19.598	0.000	19.598
Articles:	-	-	-	-	-
FY 2019 Plans: N/A ***FY 2020 Base Plans:*** Starting in Fiscal Year 2020, MARFORCYBER was directed to man, train and equip a Joint Mission Operation Center (JMOC) at Fort Meade. This is one of four JMOCs in support of United States Cyberspace Command (USCC) and Joint Forces Headquarters Cyber (JFHQ-C) mission. The FY 2020 funding request was increased by $19.598M. This funding will develop tools, platforms and infrastructure for various Offensive Cyberspace Operations (OCO) requirements to encourage an appropriate Service-Level capability for the Joint Mission Operations Center (JMOC) Meade requirement in support of United States Cyberspace Command (USCC) and Joint Forces Headquarters Cyber (JFHQ-c) mission. ***FY 2020 OCO Plans:*** N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** The FY 2020 funding request was increased by $19.598M. This funding will develop tools, platforms and infrastructure for various Offensive Cyberspace Operations (OCO) requirements to encourage an appropriate Service-Level capability for the Joint Mission Operations Center (JMOC) Meade requirement in support of United States Cyberspace Command (USCC) and Joint Forces Headquarters Cyber (JFHQ-c) mission.					
Accomplishments/Planned Programs Subtotals	2.960	6.808	26.406	0.000	26.406

C. Other Program Funding Summary ($ in Millions)
 N/A

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Navy		**Date:** March 2019
Appropriation/Budget Activity 1319 **/** 5	**R-1 Program Element (Number/Name)** PE 0306250M **/** *(U)Cyber Operations Technology Development*	**Project (Number/Name)** 2958 **/** *Cyberspace Activities*

C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

 The funding will be used for contracted tool developers located at Fort Meade, Maryland and through the establishment of a contract with SPAWAR PACIFIC for the preponderance of the work. However,other vendors or government activities that are yet to be determined will be used in further infrastructure development for the cyber environment. Per This funding will develop tools, platforms and infrastructure for various Offensive Cyberspace Operations (OCO) requirements to encourage an appropriate Service-Level capability for the Joint Mission Operations Center (JMOC) Meade requirement in support of United States Cyberspace Command (USCC) and Joint Forces Headquarters Cyber (JFHQ-c) mission.

E. Performance Metrics

 Program/Technical reviews

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy														**Date:** March 2019

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0306250M *I (U)Cyber Operations Technology Development*	Project (Number/Name) 2958 *I Cyberspace Activities*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Tool Development	Various	Various : Various	0.000	2.960	Oct 2017	6.808	Dec 2018	6.808	Sep 2020	-		6.808	Continuing	Continuing	Continuing
Common Access Platform	Various	TBD : TBD	0.000	0.000		0.000		19.598	Sep 2020	-		19.598	Continuing	Continuing	Continuing
Subtotal			0.000	2.960		6.808		26.406		-		26.406	Continuing	Continuing	N/A

Remarks

MARFORCYBER will continue previous efforts such as providing tool developers, supporting other environment development efforts, and developing software capabilities to enable the completion of offensive and defensive cyberspace operations mission requirements and protect the Marine Corps cyber domain and infrastructure. The FY 2020 funding request was increased by $19.598M per PDM20 700A1 as directed by United States Cyberspace Command (USCC). This funding will develop tools, platforms, and infrastructure for various Offensive Cyberspace Operations (OCO) requirements to enable an appropriate Service-Level capability for the Joint Mission Operations Center (JMOC) Meade requirement in support of United States Cyberspace Command (USCC) and Joint Forces Headquarters Cyber (JFHQ-c) mission.

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	2.960	6.808	26.406	-	26.406	Continuing	Continuing	N/A

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2020 Navy		**Date:** March 2019
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0306250M / (U)Cyber Operations Technology Development	**Project (Number/Name)** 2958 / Cyberspace Activities

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
Proj 2958																												
Tool Development																												

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		**Date:** March 2019
Appropriation/Budget Activity 1319 / 5	**R-1 Program Element (Number/Name)** PE 0306250M / (U)Cyber Operations Technology Development	**Project (Number/Name)** 2958 / Cyberspace Activities

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2958				
Tool Development	3	2018	4	2024