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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605054A / Emerging Technology Initiatives							
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	-	0.000	0.000	42.866	-	42.866	41.726	35.576	40.537	40.527	0.000	201.232
FI3: Rapid Capability Development and Maturation	-	0.000	0.000	42.866	-	42.866	41.726	35.576	40.537	40.527	0.000	201.232
Note PE0605054A project FI3 is a realignment from project PE0604798A FG7 for greater transparency of the Army's Rapid Capability Office (RCO) efforts.												
A. Mission Description and Budget Item Justification Emerging Technology Initiatives, will fund prototyping and demonstration of selected technology enabled capabilities to defeat emerging threats against ground, aviation, command, control, communications & reconnaissance systems and equipment, precision weapons, and Soldier equipment. Funding facilitates maturation and demonstration of emerging technologies and systems in relevant varied environments and tactical/operational scenarios. The focus is to mature technologies with a goal of initial production, limited fielding, and transition to a Program of Record in an Army or DoD Program Management Office.												
B. Program Change Summary (\$ in Millions)				FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total				
Previous President's Budget				0.000	0.000	0.000	-	0.000				
Current President's Budget				0.000	0.000	42.866	-	42.866				
Total Adjustments				0.000	0.000	42.866	-	42.866				
• Congressional General Reductions				-	-							
• Congressional Directed Reductions				-	-							
• Congressional Rescissions				-	-							
• Congressional Adds				-	-							
• Congressional Directed Transfers				-	-							
• Reprogrammings				-	-							
• SBIR/STTR Transfer				-	-							
• Adjustments to Budget Years				-	-	2.875	-	2.875				
• Transfer funding from PE0604798A (FG7) to PE060505A (FI3)				-	-	39.991	-	39.991				
Change Summary Explanation FY 2019 program change reflects the \$39.991 million of funding under project PE0604798A FG7 moving to PE0605054A project FI3 for greater transparency of the Army's Rapid Capability Office (RCO) efforts. In FY 2019, an additional \$2.875 million was added to support RCO.												

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Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605054A / <i>Emerging Technology Initiatives</i>				Project (Number/Name) FI3 / <i>Rapid Capability Development and Maturation</i>			
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
FI3: <i>Rapid Capability Development and Maturation</i>	-	0.000	0.000	42.866	-	42.866	41.726	35.576	40.537	40.527	0.000	201.232
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

PE0605054A project FI3 is a realignment from project PE0604798A FG7 for greater transparency of the Army's Rapid Capability Office (RCO) efforts.

A. Mission Description and Budget Item Justification

This Project funds the prototyping and demonstration of selected technology enabled capabilities to support advanced Soldier, ground, aviation, and Command, Control, Communications, Computers Intelligence & Reconnaissance (C4ISR) systems and equipment.

The Primary goal is to take technologies to Technology Readiness Level (TRL) 7 and 8 through a collaborative and accelerated acquisition process. Technologies will be demonstrated in relevant environments, performing tactical/operational scenarios. Efforts will focus on high-priority, threat-based projects with the intent to deliver an operationally effective capability within one to five years. Efforts will include accelerated material development and competitive prototyping based on anticipated and emerging threats and opportunities. This Project provides the Army an improved mechanism to effectively confront emerging threats and advance America's military dominance. Efforts include development, acquisition, assessment, maturation, and transition of prototype technologies to acquisition programs in Cyber; Electronic Warfare (EW); Positioning, Navigation and Timing (PNT); Survivability and other high priority emerging threats and opportunities. Funds may also allow for acceleration of critical Program of Record capabilities to counter urgent and emerging threats. The Army Rapid Capabilities Office (RCO) assesses the provided capabilities to improve future solutions, to inform future Army capability requirements, and to potentially transition the capability to an Army acquisition program.

The Army RCO expedites the provisioning and fielding of critical combat materiel capabilities to the Warfighter to meet Combatant Commanders' needs. The Army RCO was established per Headquarters, Department of the Army, memo, SUBJECT: Establishment of the Army Rapid Capabilities Office, signed by the Secretary of the Army: Eric K. Fanning, dated 11 August 2016.

The RCO assesses Commercial-Off-The Shelf (COTS), Government Off-The- Shelf (GOTS), and Non-Developmental Item (NDI) (non-standard equipment) solutions for modification and/or integration to address changes in contested environments with enduring materiel solutions for forces deployed globally. Procure prototypes and evaluate solutions to be fielded and transition to an acquisition program for production and sustainment.

The RCO capabilities focus areas are:

- Cyber
- Electronic Warfare (EW)
- Position, Navigation and Timing (PNT)
- Survivability
- Operational Needs Statements (ONS)
- Any other operational needs that become a priority as designated by the Army Board of Directors (BOD)

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date: February 2018	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605054A / <i>Emerging Technology Initiatives</i>	Project (Number/Name) F13 / <i>Rapid Capability Development and Maturation</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018
<p>Title: Maturation, Prototyping, Assessment, and Integration of Emerging and Essential Technologies</p> <p>Description: This effort selects technologies that show high promise for advancing and accelerating capabilities required under acquisition programs and develops and evaluates associated prototypes for accelerated identification, assessment, and transition to an acquisition program for production and fielding. It also demonstrates integrated technologies within a high fidelity and realistic operating environment and transitions them to a formal program of record on an accelerated basis. This effort also includes analysis, integration and evaluation of emerging capabilities on air and ground platforms to reduce risk and support technology insertions.</p> <p>FY 2019 Plans: These funds will be used to identify, develop, procure, modify, and evaluate prototypes providing capability prioritized by the Board of Directors (BOD) in the areas of Cyber, EW, PNT, Survivability, and other critical capability gaps. Funding supports development and procurement of prototypes, system modification, engineering support, platform integration, integration materials, field service representation, early acquisition documentation, training, and developmental and operational testing needed to initiate limited fielding and/or transition to a procurement ready solution for acquisition. Funds may be used to obtain resources or subject matter expertise to support the execution of an initiative.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: Funding from PE0604798A project FG7 was realigned to PE0605054A Emerging Technologies Initiatives in FY2019 for greater transparency of the Army Rapid Capabilities Office (RCO) effort.</p>		-	-
Accomplishments/Planned Programs Subtotals		-	-
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
The Army RCO capitalizes on current and emerging technologies to provide rapid solutions to address emerging threats and high impact capability opportunities of U.S. Army Forces deployed globally. This is accomplished in one of two ways: 1) adapting COTS/GOTS/NDI equipment to meet operational needs and 2) developing emerging deployable capability through research and development organizations, academia, and industry. The RCO uses streamlined acquisition methods, processes and techniques to rapidly acquire capability; these methods vary by project. The Rapid Capabilities Office will have a dedicated contracting staff, with the flexibility to use both traditional and non-traditional contracting approaches. To reach non-traditional vendors, RCO will use non-standard contracting methods, such as Other Transaction Authority instruments. Where practicable, prototypes will be acquired using competitive procedures. Projects will be transitioned to an approved acquisition			

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program for production and sustainment. Operational assessments will be conducted to provide feedback in support of Army requirements generation, prototype maturation, and future capability development.		
E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army												Date: February 2018			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605054A / Emerging Technology Initiatives				Project (Number/Name) FI3 / Rapid Capability Development and Maturation					
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Emerging Technologies Development	Various	TBD : Various	-	-		-		22.000		-		22.000	0.000	22.000	-
OSD - EW/Cyber Ground PoDs Development	Various	TBD : Various	-	-		-		8.800		-		8.800	0.000	8.800	-
Subtotal			-	-		-		30.800		-		30.800	0.000	30.800	N/A
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Emerging Technologies Engineering Support	TBD	TBD : Various	-	-		-		2.066		-		2.066	0.000	2.066	-
Subtotal			-	-		-		2.066		-		2.066	0.000	2.066	N/A
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
OSD - EW/Cyber Ground PoDs Test	TBD	TBD : Various	-	-		-		2.000		-		2.000	0.000	2.000	-
OSD - UCIDS Test	TBD	TBD : Various	-	-		-		2.000		-		2.000	0.000	2.000	-
Emerging Technologies Test	TBD	TBD : Various	-	-		-		6.000		-		6.000	0.000	6.000	-
Subtotal			-	-		-		10.000		-		10.000	0.000	10.000	N/A
			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			-	-		0.000		42.866		-		42.866	0.000	42.866	N/A
Remarks															

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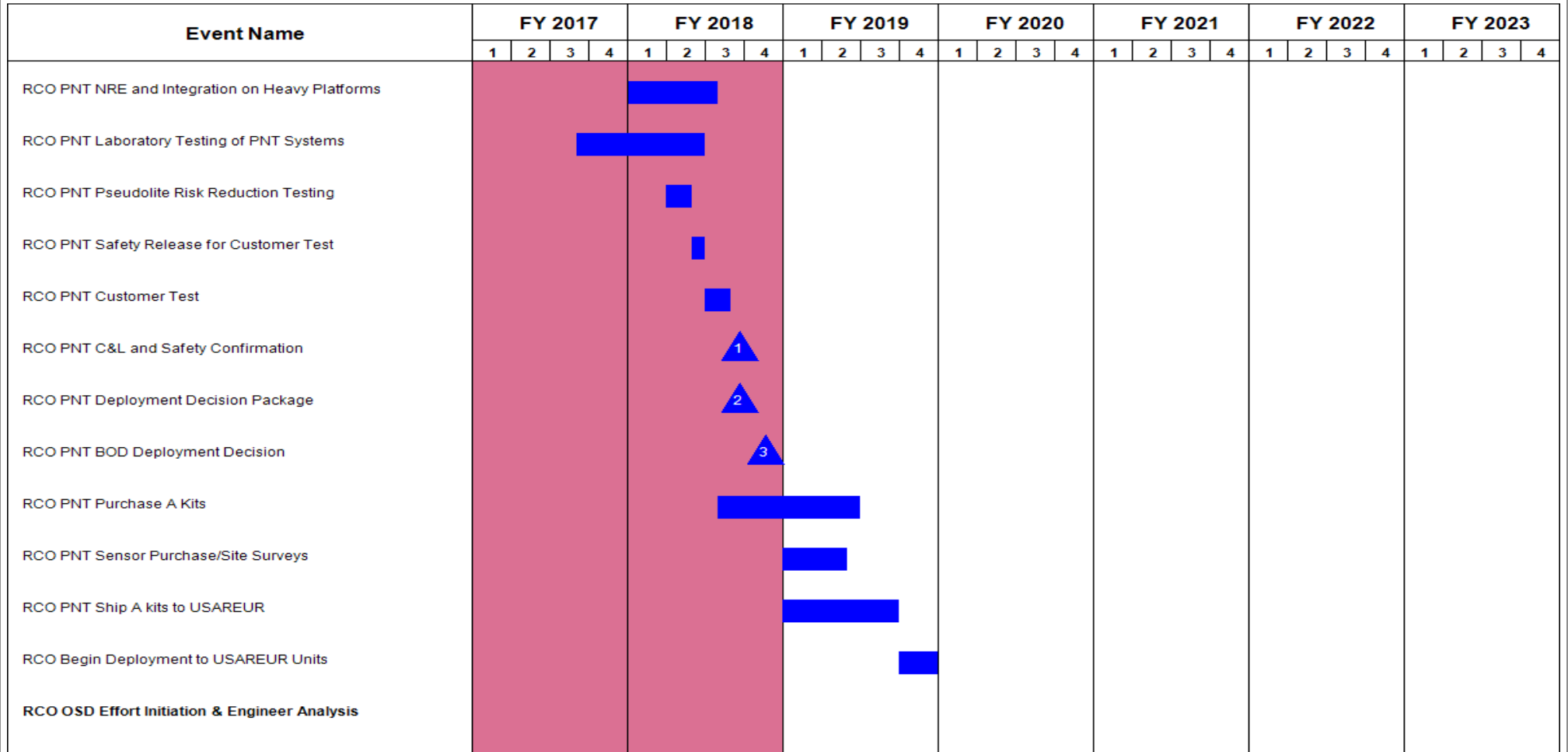
Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army			Date: February 2018		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605054A / <i>Emerging Technology Initiatives</i>		Project (Number/Name) FI3 / <i>Rapid Capability Development and Maturation</i>	

Event Name	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
RCO EW Phase I Development																												
RCO EW Phase I Lab Based Risk Reduction																												
RCO EW Phase I NIE 17.2 NET																												
RCO EW Phase I NIE 17.2 VALEX																												
RCO EW Phase I NIE 17.2 EW Dry Run																												
RCO EW Saber Guardian 17																												
RCO EW Phase I NIE 17.2 EW Assessment																												
RCO EW Phase I YPG C&L Test																												
RCO EW Phase I Deployment																												
RCO EW Phase II Development																												
RCO PNT Sensor Development (fixed and mobile)																												
RCO PNT Test Planning																												
RCO PNT NRE and Integration on Stryker Platforms																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army	Date: February 2018
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605054A / <i>Emerging Technology Initiatives</i>	Project (Number/Name) FI3 / <i>Rapid Capability Development and Maturation</i>
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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army

Date: February 2018

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0605054A / *Emerging Technology Initiatives*

Project (Number/Name)

F13 / Rapid Capability Development and Maturation

Event Name	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
RCO OSD Operational Assessment FY19																												
RCO OSD Operational Assessment FY20																												
RCO OSD Residual OA Equipment Maintenance FY21																												
RCO OSD Residual OA Equipment Maintenance FY22																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605054A / <i>Emerging Technology Initiatives</i>	Project (Number/Name) FI3 / <i>Rapid Capability Development and Maturation</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
RCO EW Phase I Development	2	2017	4	2017
RCO EW Phase I Lab Based Risk Reduction	2	2017	3	2017
RCO EW Phase I NIE 17.2 NET	3	2017	3	2017
RCO EW Phase I NIE 17.2 VALEX	3	2017	3	2017
RCO EW Phase I NIE 17.2 EW Dry Run	4	2017	4	2017
RCO EW Saber Guardian 17	4	2017	4	2017
RCO EW Phase I NIE 17.2 EW Assessment	4	2017	4	2017
RCO EW Phase I YPG C&L Test	4	2017	1	2018
RCO EW Phase I Deployment	2	2018	2	2018
RCO EW Phase II Development	1	2018	4	2018
RCO PNT Sensor Development (fixed and mobile)	4	2017	3	2018
RCO PNT Test Planning	4	2017	2	2018
RCO PNT NRE and Integration on Stryker Platforms	4	2017	3	2018
RCO PNT NRE and Integration on Heavy Platforms	1	2018	3	2018
RCO PNT Laboratory Testing of PNT Systems	3	2017	2	2018
RCO PNT Pseudolite Risk Reduction Testing	2	2018	2	2018
RCO PNT Safety Release for Customer Test	2	2018	2	2018
RCO PNT Customer Test	3	2018	3	2018
RCO PNT C&L and Safety Confirmation	3	2018	3	2018
RCO PNT Deployment Decision Package	3	2018	3	2018
RCO PNT BOD Deployment Decision	4	2018	4	2018
RCO PNT Purchase A Kits	3	2018	2	2019

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army			Date: February 2018	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605054A / Emerging Technology Initiatives		Project (Number/Name) F13 / Rapid Capability Development and Maturation	
	Start		End	
Events	Quarter	Year	Quarter	Year
RCO PNT Sensor Purchase/Site Surveys	1	2019	2	2019
RCO PNT Ship A kits to USAREUR	1	2019	3	2019
RCO Begin Deployment to USAREUR Units	4	2019	4	2019
RCO OSD Effort Initiation & Engineer Analysis	1	2018	4	2018
RCO OSD Operational Assessment FY19	1	2019	4	2019
RCO OSD Operational Assessment FY20	1	2020	4	2020
RCO OSD Residual OA Equipment Maintenance FY21	1	2021	4	2021
RCO OSD Residual OA Equipment Maintenance FY22	1	2022	4	2022