Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army

Date: February 2018

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 7: Operational

PE 0605024A I Anti-Tamper Technology Support

Systems Development

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	-	3.498	4.094	4.254	-	4.254	7.017	6.384	6.571	6.698	Continuing	Continuing
FB1: Anti-Tamper Technology Support	-	3.498	4.094	4.254	-	4.254	7.017	6.384	6.571	6.698	Continuing	Continuing

#### Note

Prior to FY17, the Anti-Tamper Technology Support program was funded under APE 0605801A M46.

### A. Mission Description and Budget Item Justification

Anti-Tamper (AT) Technology Support. The Protective Technologies (PT) organization is the Army's Technical Center for the DoD AT program, which is focused on preventing exploitation reverse engineering (RE) of U.S. systems lost or captured on the battlefield or sold via Foreign Military Sales (FMS) or Direct Commercial Sales (DCS). In support of this mission, PT's classified efforts are focused on AT Validation and Verification (V&V) activities with Army programs, AT/RE Lab facilities and equipment and AT/RE Lab assessments.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	3.638	4.094	4.362	-	4.362
Current President's Budget	3.498	4.094	4.254	-	4.254
Total Adjustments	-0.140	0.000	-0.108	-	-0.108
<ul> <li>Congressional General Reductions</li> </ul>	-0.002	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.136	-			
<ul> <li>Adjustments to Budget Years</li> </ul>	-0.002	-	-0.108	-	-0.108

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army									Date: February 2018			
Appropriation/Budget Activity 2040 / 7								lumber/Name) -Tamper Technology Support				
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
FB1: Anti-Tamper Technology Support	-	3.498	4.094	4.254	-	4.254	7.017	6.384	6.571	6.698	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

### A. Mission Description and Budget Item Justification

Anti-Tamper (AT) Technology Support. The Protective Technologies (PT) organization is the Army's Technical Center for the DoD AT program, which is focused on preventing exploitation reverse engineering (RE) of U.S. systems lost or captured on the battlefield or sold via Foreign Military Sales (FMS) or Direct Commercial Sales (DCS). In support of this mission, PT's classified efforts are focused on AT Validation and Verification (V&V) activities with Army programs, AT/RE Lab facilities and equipment and AT/RE Lab assessments.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2017	FY 2018	FY 2019
Title: Anti-Tamper (AT) Technology Support	3.498	4.094	4.254
<b>Description:</b> AT is a DoD program that encompasses the systems engineering activities intended to prevent and/or delay exploitation of critical technologies in U.S. weapon systems. These activities involve the entire life-cycle of systems acquisition, including research, development, implementation, and testing of AT measures.			
FY 2018 Plans:  Maintain the core team of subject matter experts (SMEs) available for this mission to support the development of and evaluate the AT designs for Army programs, and in support of that primary mission, conduct technical assessments of micro-electronic parts used in the electronic designs of a number of critical Army weapons systems.			
FY 2019 Plans: Will build and maintain the PT core team of subject matter experts (SMEs) available for this mission to support the development of and evaluate the AT designs for Army programs. In support of that primary mission, will continue to build state-of-the-art RE capabilities to facilitate technical assessments of micro-electronic parts used in the electronic designs of critical Army weapons systems.			
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 adjustment supports current senior leader strategy/priorities.			
Accomplishments/Planned Programs Subtotals	3.498	4.094	4.254

## C. Other Program Funding Summary (\$ in Millions)

N/A

Army

PE 0605024A: Anti-Tamper Technology Support

**UNCLASSIFIED** 

Page 2 of 6 R-1 Line #183

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army	Date: February 2018				
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0605024A I Anti-Tamper Technology Support	Project (Number/Name) FB1 / Anti-Tamper Technology Support			
C. Other Program Funding Summary (\$ in Millions)	,	,			
<u>Remarks</u>					
D. Acquisition Strategy N/A					
E. Performance Metrics N/A					
N/A					

PE 0605024A: *Anti-Tamper Technology Support* Army

UNCLASSIFIED
Page 3 of 6

Exhibit R-3, RDT&E	Project C	ost Analysis: PR 2	019 Arm	v								Date:	February	2018	
Appropriation/Budget Activity 2040 / 7						R-1 Program Element (Number/Name) PE 0605024A I Anti-Tamper Technology Support					Project (Number/Name) FB1 / Anti-Tamper Technology Support				
Product Developme	nt (\$ in M	illions)		FY 2	2017	FY 2018		FY 2019 Base			2019 CO	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	Total Cost	Target Value o Contrac
AT V&V Activities	Various	Redstone Arsenal & Prime Contract locations : Redstone Arsenal	-	1.267	Jun 2017	2.092	Jul 2018	2.040	Sep 2019	-		2.040	0.000	5.399	-
		Subtotal	-	1.267		2.092		2.040		-		2.040	0.000	5.399	N/
Support (\$ in Millior	ıs)			FY 2	2017	FY 2	018		2019 ise		2019 CO	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	Total Cost	Target Value of Contract
AT/RE Lab Facilities & Equipment	Various	Redstone Arsenal, AL : Redstone Arsenal, AL	-	1.598	Sep 2017	1.230	Jul 2018	1.352	Sep 2019	-		1.352	0.000	4.180	-
		Subtotal	-	1.598		1.230		1.352		-		1.352	0.000	4.180	N/
Test and Evaluation	(\$ in Milli	ions)		FY 2	2017	FY 2	018		2019 ise		2019 CO	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	Total Cost	Target Value o Contrac
AT/RE Laboratory Assessments	Various	Redstone Arsenal, AL : Redstone Arsenal, AL	-	0.633	Jun 2017	0.772	Jul 2018	0.862	Sep 2019	-		0.862	0.000	2.267	-
		Subtotal	-	0.633		0.772		0.862		-		0.862	0.000	2.267	N/
			Prior Years	FY 2	2017	FY 2	2018	Ва	2019 ise		2019 CO	FY 2019 Total	Cost To	Total Cost	Target Value o Contrac
		Project Cost Totals	_	3.498		4.094		4.254	1	_	1	4.254	0.000	11.846	N/

PE 0605024A: *Anti-Tamper Technology Support* Army

**UNCLASSIFIED** 

R-1 Line #183

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army

Appropriation/Budget Activity

2040 / 7

R-1 Program Element (Number/Name)
PE 0605024A / Anti-Tamper Technology
Support

PB1 / Anti-Tamper Technology Support



Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army		Date: February 2018
	 - 3 (	umber/Name) Tamper Technology Support

# Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
AT V&V Activities	1	2017	4	2021	
AT/RE Lab Facilities and Equipment	1	2017	4	2021	
AT/RE Laboratory Assessments	1	2017	4	2021	