Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0605049A I Missile Warning System Modernization (MWSM)

Development & Demonstration (SDD)

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	-	0.000	0.000	55.810	-	55.810	31.823	131.827	99.826	0.000	Continuing	Continuing
XT4: Advanced Threat Detection System (ATDS)	-	0.000	0.000	55.810	-	55.810	31.823	131.827	99.826	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Advanced Threat Detection Systems (ATDS) is anticipated to be an ACAT IC program. It is the next generation fleet-wide threat detection component to the Aircraft Survivability Equipment suite. ATDS will replace the Common Missile Warning System (CMWS). Primary capability achieved through ATDS is the agility necessary to more quickly react to new threats.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	55.810	-	55.810
Total Adjustments	0.000	0.000	55.810	-	55.810
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments 1	0.000	0.000	55.810	-	55.810

Change Summary Explanation

Funding was transferred from Program Element 0605051A project ER8 (Common Missile Warning System (CMWS)) to Program Element 0605049A project XT4 for FY18 and beyond for more efficient and effective program management.

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Exhibit R-2A, RDT&E Project Ju		Date: May 2017										
2040 / 5					R-1 Program Element (Number/Name) PE 0605049A I Missile Warning System Modernization (MWSM)				Project (Number/Name) XT4 I Advanced Threat Detection System (ATDS)			
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
XT4: Advanced Threat Detection System (ATDS)	-	0.000	0.000	55.810	-	55.810	31.823	131.827	99.826	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Funding was transferred from Program Element 0605051A project ER8 (Common Missile Warning System (CMWS)) to Program Element 0605049A project XT4 for FY18 and beyond for more efficient and effective program management.

A. Mission Description and Budget Item Justification

Advanced Threat Detection Systems (ATDS) is anticipated to be an ACAT IC program. It is the next generation fleet-wide threat detection component to the Aircraft Survivability Equipment suite. ATDS will replace the Common Missile Warning System (CMWS). Primary capability achieved through ATDS is the agility necessary to more quickly react to new threats.

Justification:

FY 2018 Base Research Development Test and Evaluation (RDTE) dollars in the amount of \$55.810 million fund development to include resources to support systems test and evaluation (ST&E) and program planning for an advanced missile warning system.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: ATDS	-	-	55.810
Description: Develop, test, integrate, and field an advanced missile warning system.			
FY 2018 Plans: FY 2018 Base RDTE dollars in the amount of \$55.810 million will fund development to include resources to support systems test and evaluation (ST&E) and program planning for an advanced missile warning system.			
Accomplishments/Planned Programs Subtotals	-	-	55.810

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

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Army			Date: May 2017
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605049A I Missile Warning System Modernization (MWSM)	- , (umber/Name) anced Threat Detection System
D Acquisition Strategy	·		

D. Acquisition Strategy

ATDS Program of Record (PoR) will pursue a tailored acquisition approach to expedite capability to the field. Current strategy assumes that mature technology exists and will enable entry at Milestone B. First Unit Equipped (FUE) is projected for FY2025.

Milestone Development Decision (MDD) is tentatively scheduled for 3QFY2017.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E F	Project C	ost Analysis: FY 2	018 Army									Date:	May 2017	7	
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605049A I Missile Warning System Modernization (MWSM) Project (Number/Name) XT4 I Advanced Threat Detection (ATDS)							tection S	ystem	
Management Services (\$ in Millions)			FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
ATDS Systems Engineering Program Management	TBD	PM ASE : HSV, AL	0.000	-		-		1.550	Jan 2018	-		1.550	0.000	1.550	Continuing
		Subtotal	0.000	-		-		1.550		-		1.550	0.000	1.550	-
Product Developmer	nt (\$ in M	illions)		FY	2016	FY:	2017		2018 ise		2018 CO	FY 2018 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
ATDS ST&E Development	TBD	PM ASE : HSV, AL	0.000	-		-		14.774	Mar 2018	-		14.774	0.000	14.774	Continuing
ATDS Software for ST&E	TBD	PM ASE : HSV, AL	0.000	-		-		7.930	Mar 2018	-		7.930	0.000	7.930	Continuing
		Subtotal	0.000	-		-		22.704		-		22.704	0.000	22.704	-
Support (\$ in Millions	s)			FY 2	2016	FY:	2017		2018 ise		2018 CO	FY 2018 Total			
Cost Category Item ATDS Matrix Support	Contract Method & Type	Performing Activity & Location PM ASE : HSV, AL	Prior Years	Cost	Award Date	Cost	Award Date	Cost 3.840	Award Date Jan 2018	Cost	Award Date	Cost 3.840	Cost To Complete	Total Cost	Target Value of Contract
THE STREET		Subtotal	0.000	_		-		3.840	00.1.20.10	_		3.840	0.000	3.840	-
Test and Evaluation	(\$ in Milli	ions)		FY:	2016	FY:	2017		2018 ise		2018 CO	FY 2018 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
ATDS Government System Test and Evaluation	TBD	PM ASE : HSV, AL	0.000	-		-		19.930	Mar 2018	-		19.930	0.000	19.930	Continuing
ATDS Threat Asset Acquisition	TBD	PM ASE : HSV, AL	0.000	-		-		2.930	Mar 2018	-		2.930	0.000	2.930	Continuing
ATDS Lab Support	TBD	PM ASE : HSV, AL	0.000	-		-		2.926	Mar 2018	-		2.926	0.000	2.926	Continuing
ATDS SIL Development	TBD	PM ASE : HSV, AL	0.000	-		-		1.930	Mar 2018	-		1.930	0.000	1.930	Continuing

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Exhibit R-3, RDT&E	ibit R-3, RDT&E Project Cost Analysis: FY 2018 Army										Date: May 2017					
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605049A I Missile Warning System Modernization (MWSM)					, · · · · · · · · · · · · · · · · · · ·				ystem		
Test and Evaluation	(\$ in Milli	ons)		FY 2	2016	FY 2	2017	_	2018 ase		2018 CO	FY 2018 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	
		Subtotal	0.000	-		-		27.716		-		27.716	0.000	27.716	-	
			Prior Years	FY 2	2016	FY 2	2017	1	2018 ase		2018 CO	FY 2018 Total	Cost To	Total Cost	Target Value of Contract	
		Project Cost Totals	0.000	-		0.000		55.810		-		55.810	0.000	55.810	-	

Remarks

Exhibit R-4, RDT&E Schedule Profile: FY 2018 A		INCLASSII IL			D	ate: May 2017	
Appropriation/Budget Activity 2040 / 5	R-1 Program PE 0605049 Modernization	n Element (Numb A <i>I Missile Warnin</i> on (MWSM)	oer/Name) ng System	Project (Number/Name) XT4 I Advanced Threat Detection Syste (ATDS)			
Event Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	1 2 3 4	1 2 3 4	1 2 3 4 1	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
EMD Phase							
(1) MDD		<u> </u>					
(2) Milestone B					A		
(3) CDR						<u> </u>	
(4) Prototype Deliveries							4
	-						

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Army			Date: May 2017
1	, ,	, ,	umber/Name) anced Threat Detection System

Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
EMD Phase	3	2020	2	2023	
MDD	3	2017	3	2017	
Milestone B	3	2020	3	2020	
CDR	4	2021	4	2021	
Prototype Deliveries	2	2022	2	2022	