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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0604445F I Wide Area Surveillance							
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	6.836	17.639	46.695	16.247	0.000	16.247	0.000	0.000	0.002	0.000	0.000	87.419
675895: Wide Area Surveillance	6.836	17.639	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	24.477
675899: Wide Area Surveillance	0.000	0.000	46.695	16.247	0.000	16.247	0.000	0.000	0.000	0.000	0.000	62.942

Program MDAP/MAIS Code: 519

A. Mission Description and Budget Item Justification

Wide Area Surveillance (WAS) consists of two advanced sensor systems, the Stateside Affordable Radar System (STARS) and Scorpion, incorporated into a single WAS System. Based on existing technological capabilities, WAS will detect/track low, slow and other asymmetrical threats in the airspace and meet the user needs of sensing stressing airborne targets in complex environments with affordable sensors. The sensor outputs will be incorporated into the Battle Control Systems-Fixed (BCS-F) air picture and utilized as the North American Aerospace Defense Command/ Northern Command (NORAD/NORTHCOM) Command and Control (C2) air surveillance system of record.

In FY2017, Special Program efforts were transferred to PE 0604445F, Wide Area Surveillance, Project 675899, Wide Area Surveillance in order to centrally fund and manage efforts.

In FY2017, Project 675895, Wide Area Surveillance was terminated.

Some aspects of the WAS program are classified and will be provided on a need-to-know basis. Contact Major Willie Mims (SAF/AQID), 202-404-3331, for additional information.

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.

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development		PE 0604445F I Wide Area Surveillance			
B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	22.577	46.695	83.044	0.000	83.044
Current President's Budget	17.639	46.695	16.247	0.000	16.247
Total Adjustments	-4.938	0.000	-66.797	0.000	-66.797
• 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	-4.251	0.000			
• SBIR/STTR Transfer	-0.687	0.000			
• Other Adjustments	0.000	0.000	-66.797	0.000	-66.797
Change Summary Explanation					
- FY16 \$4.251M reprogramming for higher AF priorities.					
- FY18 \$5.344M RDT&E reduction to match Service Cost Position (SCP).					
- FY18 \$61.5M funding transferred to OPAF in order to support WAS fielding.					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0604445F / Wide Area Surveillance				Project (Number/Name) 675895 / Wide Area Surveillance			
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
675895: Wide Area Surveillance	6.836	17.639	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	24.477
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Wide Area Surveillance (WAS) consists of two advanced sensor systems, the Stateside Affordable Radar System (STARS) and Scorpion, incorporated into a single WAS System. Based on existing technological capabilities, WAS will detect/track low, slow and other asymmetrical threats in the airspace and meet the user needs of sensing stressing airborne targets in complex environments with affordable sensors. The sensor outputs will be incorporated into the Battle Control Systems-Fixed (BCS-F) air picture and utilized as the North American Aerospace Defense Command/ Northern Command (NORAD/NORTHCOM) Command and Control (C2) air surveillance system of record.

Some aspects of the WAS program are classified and will be provided on a need-to-know basis. Contact Major Willie Mims (SAF/AQID), 202-404-3331, for additional information.

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. Accomplishments/Planned Programs (\$ in Millions)

	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Development, Test & Fielding	17.639	0.000	0.000	0.000	0.000
Description: Development, Test & Fielding					
FY 2016 Accomplishments: Activities included, but were not limited to: - Development, integration and testing of sensors - Continued studies, analysis, and risk mitigation activities to support testing, modeling and simulation, system engineering analysis and site specific requirements, such as security, site maintenance, equipment maintenance, material shipping, site analysis/studies & environmental analysis/studies - Develop and test software builds to feed into the system of record, Battle Control Systems Fixed.					
FY 2017 Plans: N/A					
FY 2018 Base Plans:					

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force				Date: May 2017	
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0604445F / <i>Wide Area Surveillance</i>		Project (Number/Name) 675895 / <i>Wide Area Surveillance</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO
N/A					
FY 2018 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals		17.639	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions) N/A					
Remarks					
D. Acquisition Strategy The Wide Area Surveillance (WAS) strategy is a single step acquisition approach for full capability to develop, produce, and field highly capable and sustainable advanced sensors in the National Capitol Region. Science & Technology contracts were let prior to the Engineering and Manufacturing Development phase for both sub-systems. The ongoing contract for the Stateside Affordable Radar System (STARS) was awarded to a single developer to design, build, integrate, and test the STARS system. Air Force Program Executive Officer (PEO) for Battle Management (AFPEO BM) is the PEO for WAS. Air Force Life Cycle Management Center (AFLCMC) is the Contracting Authority for the WAS program and provides contracts, legal, and comptroller support. The Secretary of the Air Force for Acquisition (SAF/AQ) is the program's Milestone Decision Authority (MDA).					
E. 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.					

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Air Force												Date: May 2017			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0604445F / Wide Area Surveillance				Project (Number/Name) 675895 / Wide Area Surveillance					
Product Development (\$ 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
Wide Area Surveillance (WAS)	Various	Various : Various	0.936	11.360	Jul 2016	0.000		0.000		0.000		0.000	0.000	12.296	-
Subtotal			0.936	11.360		0.000		0.000		0.000		0.000	0.000	12.296	-
Support (\$ 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
Direct Mission	Various	Various : Various	0.480	2.679	Dec 2015	0.000		0.000		0.000		0.000	0.000	3.159	-
Subtotal			0.480	2.679		0.000		0.000		0.000		0.000	0.000	3.159	-
Test and Evaluation (\$ 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
Test Support	Various	46 TS : Eglin AFB, FL	0.000	0.500	Jan 2016	0.000		0.000		0.000		0.000	0.000	0.500	-
Subtotal			0.000	0.500		0.000		0.000		0.000		0.000	0.000	0.500	-
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
Program Management Administration	Various	AFLCMC/HBDB : Hanscom AFB, MA	5.420	3.100	Oct 2015	0.000		0.000		0.000		0.000	0.000	8.520	-
Subtotal			5.420	3.100		0.000		0.000		0.000		0.000	0.000	8.520	-
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			6.836	17.639		0.000		0.000		0.000		0.000	0.000	24.475	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Air Force							Date: May 2017		
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0604445F / <i>Wide Area Surveillance</i>		Project (Number/Name) 675895 / <i>Wide Area Surveillance</i>			
	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Remarks									

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)	
3600 / 7	PE 0604445F / Wide Area Surveillance	675895 / Wide Area Surveillance	

	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	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Program Transferred to Air Force (Oct 2015)																												
Development, Integration and Testing																												

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0604445F / <i>Wide Area Surveillance</i>	Project (Number/Name) 675895 / <i>Wide Area Surveillance</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Program Transferred to Air Force (Oct 2015)	1	2016	1	2016
Development, Integration and Testing	1	2016	4	2016

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Air Force										Date: May 2017		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0604445F / Wide Area Surveillance				Project (Number/Name) 675899 / Wide Area Surveillance			
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
675899: Wide Area Surveillance	0.000	0.000	46.695	16.247	0.000	16.247	0.000	0.000	0.000	0.000	0.000	62.942
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Wide Area Surveillance (WAS) consists of two advanced sensor systems, the Stateside Affordable Radar System (STARS) and Scorpion, incorporated into a single WAS System. Based on existing technological capabilities, WAS will detect/track low, slow and other asymmetrical threats in the airspace and meet the user needs of sensing stressing airborne targets in complex environments with affordable sensors. The sensor outputs will be incorporated into the Battle Control Systems-Fixed (BCS-F) air picture and utilized as the North American Aerospace Defense Command/ Northern Command (NORAD/NORTHCOM) Command and Control (C2) air surveillance system of record.

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. Accomplishments/Planned Programs (\$ in Millions)

	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Title: Development, Test & Fielding	0.000	46.695	16.247	-	16.247
Description: Development, Test & Fielding					
FY 2016 Accomplishments: N/A					
FY 2017 Plans: Items include but are not limited to: - Continue to develop, integrate and test sensors for STARS and Scorpion systems. - Continue to integrate and test track feeds into systems of record, Battle Control System-Fixed - Continue studies, analysis, and risk mitigation activities to support testing, modeling & simulation, system engineering - Continue to establish site specific requirements to include but not limited to security, maintenance, material shipping, site/environmental analysis and studies for the Regional Support Facility for both STARS and Scorpion - Continue to develop, test software and integrate builds to feed into the system of record, Battle Control Systems-Fixed.					
FY 2018 Base Plans: Will include but are not limited to:					

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B. Accomplishments/Planned Programs (\$ in Millions)								FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
<ul style="list-style-type: none"> - Will complete development, integration and testing of final Stateside Affordable Radar System (STARS) in preparation for Milestone C approval. - Will complete development, integration and testing of a Regional Support Facility supporting both STARS and Scorpion systems. - Will provide pre-operational support to fielded STARS and Scorpion systems. - Will continue to integrate and test track feeds into systems of record, Battle Control System-Fixed. - Will continue to establish site specific requirements to include but not limited to security, maintenance, material shipping and site/environmental analysis for both STARS and Scorpion. Will develop technical data and maintenance manuals, continue to study, analyze, and mitigate risk activities to support Full Operational Capability (FOC) objectives, execute Test and Evaluation (T&E) and continue Reliability, Availability, and Maintainability (RAM) data collection. - Will develop/test software and integrate builds to feed into the system of record, Battle Control Systems-Fixed. 												
Accomplishments/Planned Programs Subtotals								0.000	46.695	16.247	-	16.247
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• OPAF: BA03: Line Item # 834240: <i>Wide Area Surveillance</i>	0.000	6.943	62.087	0.000	62.087	77.760	27.425	27.917	28.420	0.000	230.552	
Remarks												
D. Acquisition Strategy												
<p>The Wide Area Surveillance (WAS) strategy is a single step acquisition approach for full capability to develop, produce, and field highly capable and sustainable advanced sensors in the National Capital Region. Science & technology contracts were let prior to the Engineering and Manufacturing Development phase for both sub-systems. The ongoing Cost Plus Fixed-Fee (CPFF) contract for Stateside Affordable Radar System (STARS) was awarded to a single developer to design, build, integrate, and test the STARS system. A subsequent task order will be awarded (May 17) to include pre-operational site support. The ongoing CPFF contract for Scorpion was awarded to a single developer to complete the design, build, integration, and testing of the Scorpion system, and conduct pre-operational site support. The pre-operational site support for both the STARS and Scorpion contracts will transition to Interim Contract Support (ICS) in FY2018.</p> <p>Air Force Program Executive Officer (PEO) for Battle Management (AFPEO BM) is the PEO for WAS. Air Force Life Cycle Management Center (AFLCMC) is the Contracting Authority for the WAS program and provides contracts, legal, and comptroller support. The Secretary of the Air Force for Acquisition (SAF/AQ) is the program's Milestone Decision Authority (MDA).</p>												

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E. 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.

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Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 0604445F / Wide Area Surveillance				Project (Number/Name) 675899 / Wide Area Surveillance					
Product Development (\$ 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
Wide Area Surveillance (WAS)	Various	Various : Various	0.000	0.000		35.280	Feb 2017	12.340	Feb 2018	0.000		12.340	180.260	227.880	46.000
Subtotal			0.000	0.000		35.280		12.340		0.000		12.340	180.260	227.880	46.000
Support (\$ 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
Direct Mission	Various	Various : Various	0.000	0.000		4.614	Nov 2016	1.021	Oct 2017	0.000		1.021	10.000	15.635	-
Subtotal			0.000	0.000		4.614		1.021		0.000		1.021	10.000	15.635	-
Test and Evaluation (\$ 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
Test Support	Various	46 TS : Eglin AFB, FL	0.000	0.000	Dec 2017	1.825	Dec 2016	0.800		0.000		0.800	4.680	7.305	-
Subtotal			0.000	0.000		1.825		0.800		0.000		0.800	4.680	7.305	-
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
Program Management Administration	Various	AFLCMC/HBDB : Hanscom AFB, MA	0.000	0.000		4.976	Jan 2017	2.086	Oct 2017	0.000		2.086	19.904	26.966	-
Subtotal			0.000	0.000		4.976		2.086		0.000		2.086	19.904	26.966	-
			Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.000		46.695		16.247		0.000		16.247	214.844	277.786	-

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Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 0604445F / <i>Wide Area Surveillance</i>		Project (Number/Name) 675899 / <i>Wide Area Surveillance</i>				
	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Air Force																Date: May 2017			
Appropriation/Budget Activity								R-1 Program Element (Number/Name)								Project (Number/Name)			
3600 / 7								PE 0604445F / Wide Area Surveillance								675899 / Wide Area Surveillance			

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Air Force			Date: May 2017
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0604445F / <i>Wide Area Surveillance</i>	Project (Number/Name) 675899 / <i>Wide Area Surveillance</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Development, Integration and Testing	1	2017	4	2018
Initial Operational Capability (IOC) (Dec 2018)	1	2019	1	2019