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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 1203940F I Space Situation Awareness Operations							
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	-	92.482	99.984	19.572	0.000	19.572	20.314	20.689	19.750	20.110	Continuing	Continuing
670004: Other STRATCOM Activities	-	71.118	71.340	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
67A017: Sensor Service Life Extension Program	-	21.364	28.644	19.572	0.000	19.572	20.314	20.689	19.750	20.110	Continuing	Continuing

A. Mission Description and Budget Item Justification

Space Situational Awareness (SSA) is knowledge of all aspects of space related to operations. As the foundation for space control, SSA encompasses surveillance of all space objects and activities; detailed reconnaissance of specific space assets; monitoring space environmental conditions; monitoring cooperative space assets; gathering intelligence on adversary space operations; and conducting integrated command, control, communications, processing, analysis, dissemination, and archiving activities. SSA also encompasses the integration, exploitation and delivery of data sources to facilitate the battle management and command and control of space forces. This program element fields, upgrades, modifies, modernizes, operationalizes, operates and maintains Air Force sensors and information integration capabilities within the SSA Space Surveillance network (SSN) while companion program element 1206425F, Space Situational Awareness Systems, develops new network sensors and improved information integration capabilities across the network. Activities funded in this program element (1203940F) focus on surveillance of objects in earth orbit to aid tasks including satellite tracking; space object identification; tracking and cataloging; satellite attack warning; notification of satellite flyovers to U.S. forces; space treaty monitoring; and technical intelligence gathering.

The 67A017 project funds efforts to upgrade, operationalize and extend the life of operational SSA sensors, as needed. Through Service Life Extension Programs (SLEPs) the following types of activities are performed, but are not limited to, programs that extend the serviceable life of assets and maintain critical capability by replacing aging and increasingly unsustainable components with modern and sustainable equipment. In addition, the SLEP itself may be designed to increase capabilities not currently realized. As the need arises in the execution year, funds in this project may be used to begin SLEPs on additional efforts. These efforts may include prototyping and technology demonstrations.

Global Sensor Watch Program provides an integrated SSA Tip and Cue capability that implements a survivable architecture which provides overlapping, assured, and viable surveillance options for executing event response (demonstrated by the SSA Ops Demo), multiple level security processing of SSA data and automated cross-sensor tipping and cueing around the globe. Other efforts to support Battle Management Command & Control (BMC2) in space include developing & deploying advanced software algorithms to identify, acquire, characterize, and maintain custody of deep space (S)High Inclination Orbits(HIO); optimizing intelligence community & Missile Defense Agency (MDA) sensors to better support BMC2; developing & executing Joint Functional Component Command (JFCC) for Space exercises such as Joint Space Operations Center (JSPOC) Experimentation, Test and Training Initiative (JETTI) to test & optimize Space Control capabilities, concept of operations (CONOPS) development to increase probability of survival for blue assets, and refining requirements across space enterprise; enhancing sensor performance to close the solar exclusion gap leveraging technologies such as optical daylight tracking; and improving legacy communication paths to support bi-directional machine-to-machine sensor communications enabling a more complete BMC2 capability.

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Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 1203940F I Space Situation Awareness Operations				
Ground Based Radar Upgrades improve the sensitivity, search capabilities and CONOPS of existing SSA sensors to better support custody and fire control timelines.						
The current and future space domain demands that space systems be responsive to new and changing threats, and can rapidly integrate new capabilities to make our warfighting force more resilient in a contested battlespace. This agility, survivability, and rapid reconstitution must extend through the entire space warfighting enterprise, to include how we learn about the threat; develop solutions; acquire, test, deploy, train, operate and integrate new systems into the greater system of systems; and ensure our space mission force is ready to defeat a thinking adversary in a complex, multi-domain battlespace. The enterprise will use all of its elements to accelerate decision-making, prototype potential solutions, rapidly integrate decision-making tools and sustain a war-winning capability by delivering multi-domain effects in, from, and through space and cyberspace enabling battle management and resilience options to "fight through."						
This program element may include necessary civilian pay expenses required to manage, execute, and deliver X-XX weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 1206392F and 1206398F.						
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. Program Change Summary (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget		93.802	99.984	50.241	0.000	50.241
Current President's Budget		92.482	99.984	19.572	0.000	19.572
Total Adjustments		-1.320	0.000	-30.669	0.000	-30.669
• 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		1.907	0.000			
• SBIR/STTR Transfer		-3.227	0.000			
• Other Adjustments		0.000	0.000	-30.669	0.000	-30.669
Change Summary Explanation						
FY 2017: +\$1.907M increase to fully fund Ground-Based Electro Optics Deep Space Surveillance (GEODSS) Phase II SLEP						
FY 2019: \$30.522M transferred to PE 1203620F to consolidate National Space Defense Center (NSDC) funds						

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force										Date: February 2018		
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 1203940F / Space Situation Awareness Operations				Project (Number/Name) 670004 / Other STRATCOM Activities			
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
670004: Other STRATCOM Activities	-	71.118	71.340	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The National Space Defense Center (NSDC), formerly the Joint Interagency Combined Space Operations Center (JICSpOC), seeks to improve unity of effort and information sharing across the national security space community to effectively respond to potential future space threat events. The NSDC requires effective battle management, command and control (BMC2) to integrate and synchronize space and cyber forces and the intelligence community with efforts across all domains and to execute unity of effort through the core command and control functions of: situation monitoring, planning, decision making, space force management and space force direction. The NSDC will have the capability to develop, test, and integrate new space system tactics, techniques and procedures (TTPs) in support of both DoD and Intelligence Community (IC) operations. Lessons learned from NSDC experimentation will inform requirements development for future BMC2 architectures.

Beginning with FY2019, NSDC funding in PE 1203940F is transferred to PE 1203620F, National Space Defense Center.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2017	FY 2018	FY 2019
Title: NSDC Infrastructure Description: Develop and field space battle management, command and control (BMC2) infrastructure. FY 2018 Plans: Conduct space defense experimentation and exercises to further refine necessary capabilities and tactics, techniques, and procedures to enable the NSDC to conduct the space defense mission. Continue prototyping efforts to develop tools to fill capability gaps uncovered in experimentation. FY 2018 to FY 2019 Increase/Decrease Statement: N/A	71.118	31.340	-
Title: SpODC Development Description: Development of the Space Operations Development Center (SpODC) modeling and simulation infrastructure FY 2018 Plans: Build hardware and software applications to create capability to perform future space experimentation, technology maturation, and operating training. FY 2018 to FY 2019 Increase/Decrease Statement:	-	40.000	-

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 1203940F / <i>Space Situation Awareness Operations</i>	Project (Number/Name) 670004 / <i>Other STRATCOM Activities</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018
N/A			
Accomplishments/Planned Programs Subtotals		71.118	71.340
			-
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
The Accelerated Space BMC2 JEON (ST-0006) is led by AFRL/RV and will utilize existing contracts (e.g. Space Security and Defense Program (SSDP) and SMC/SY) and provide funds to other AF/DoD organizations to execute on their contracts. Additionally, AFRL/RV will initiate and utilize commercial consortiums to deliver capabilities.			
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: PB 2019 Air Force												Date: February 2018			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 1203940F / Space Situation Awareness Operations				Project (Number/Name) 670004 / Other STRATCOM Activities					
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
SYSTEM ENGINEERING AND INTEGRATION	Various	VARIOUS : COLORADO SPRINGS, CO	-	3.425	Oct 2016	6.425	Oct 2017	-		-		-	Continuing	Continuing	-
SPACE OPERATIONAL DEVELOPMENT CENTER DESIGN AND EXPERIMENTATION	Various	VARIOUS : COLORADO SPRINGS, CO	-	62.118	Oct 2016	34.590	Oct 2017	-		-		-	Continuing	Continuing	-
COMMUNICATIONS ARCHITECTURE DESIGN AND DEVELOPMENT	Various	VARIOUS : COLORADO SPRINGS, CO	-	3.575	Oct 2016	4.575	Oct 2017	-		-		-	Continuing	Continuing	-
APPLICATION DEVELOPMENT	Various	VARIOUS : COLORADO SPRINGS, CO	-	-		22.750	Oct 2017	-		-		-	Continuing	Continuing	-
Subtotal			-	69.118		68.340		-		-		-	Continuing	Continuing	N/A
Remarks FY17 includes \$58.8M Request for Additional Appropriations for emergency warfighting readiness requirements.															
Management Services (\$ 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
A&AS	Various	VARIOUS : COLORADO SPRINGS, CO	-	0.500	May 2017	1.000	Oct 2017	-		-		-	Continuing	Continuing	-
FFRDC	SS/FP	MITRE : COLORADO SPRINGS, CO	-	1.500	Oct 2016	2.000	Oct 2017	-		-		-	Continuing	Continuing	-
Subtotal			-	2.000		3.000		-		-		-	Continuing	Continuing	N/A

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Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 1203940F / Space Situation Awareness Operations					Project (Number/Name) 670004 / Other STRATCOM Activities						
				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				-	71.118		71.340		-		-		-	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force										Date: February 2018	
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 1203940F / <i>Space Situation Awareness Operations</i>					Project (Number/Name) 670004 / <i>Other STRATCOM Activities</i>	

	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
No project title.																												
NSDC Infrastructure Development																												
NSDC Experimentation																												
NSDC Capabiity Development																												
SpODC Development																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 1203940F / <i>Space Situation Awareness Operations</i>	Project (Number/Name) 670004 / <i>Other STRATCOM Activities</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>No project title.</i>				
NSDC Infrastructure Development	1	2017	4	2022
NSDC Experimentation	1	2017	4	2022
NSDC Capabiity Development	1	2017	4	2022
SpODC Development	1	2017	4	2022

Note

NSDC efforts transferred to PE 1203620F beginning in FY2019.

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Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 1203940F / Space Situation Awareness Operations				Project (Number/Name) 67A017 / Sensor Service Life Extension Program			
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
67A017: Sensor Service Life Extension Program	-	21.364	28.644	19.572	0.000	19.572	20.314	20.689	19.750	20.110	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Space Situational Awareness (SSA) is knowledge of all aspects of space related to operations. As the foundation for space control, SSA encompasses surveillance of all space objects and activities; detailed reconnaissance of specific space assets; monitoring space environmental conditions; monitoring cooperative space assets; gathering intelligence on adversary space operations; and conducting integrated command, control, communications, processing, analysis, dissemination, and archiving activities. SSA also encompasses the integration, exploitation and delivery of data sources to facilitate the battle management and command and control of space forces. This program element fields, upgrades, modifies, modernizes, operationalizes, operates and maintains Air Force sensors and information integration capabilities within the SSA Space Surveillance network (SSN) while companion program element 1206425F, Space Situational Awareness Systems, develops new network sensors and improved information integration capabilities across the network. Activities funded in this program element (1203940F) focus on surveillance of objects in earth orbit to aid tasks including satellite tracking; space object identification; tracking and cataloging; satellite attack warning; notification of satellite flyovers to U.S. forces; space treaty monitoring; and technical intelligence gathering.

The 67A017 project funds efforts to upgrade, operationalize and extend the life of operational SSA sensors, as needed. Through Service Life Extension Programs (SLEPs) the following types of activities are performed, but is not limited to, programs that extend the serviceable life of assets and maintain critical capability by replacing aging and increasingly unsustainable components with modern and sustainable equipment. In addition, the SLEP itself may be designed to increase capabilities not currently realized. As the need arises in the execution year, funds in this project may be used to begin SLEPs on additional efforts. These efforts may include prototyping and technology demonstrations.

Global Sensor Watch Program provides an integrated SSA Tip and Cue capability that implements a survivable architecture which provides overlapping, assured, and viable surveillance options for executing event response (demonstrated by the SSA Ops Demo), multiple level security processing of SSA data and automated cross-sensor tipping and cueing around the globe. Other efforts to support Battle Management Command & Control (BMC2) in space include developing & deploying advanced software algorithms to identify, acquire, characterize, and maintain custody of deep space (S)High Inclination Orbits(HIO); optimizing intelligence community & Missile Defense Agency (MDA) sensors to better support BMC2; developing & executing Joint Functional Component Command (JFCC) for Space exercises such as Joint Space Operations Center (JSPOC) Experimentation, Test and Training Initiative (JETTI) to test & optimize Space Control capabilities, concept of operations (CONOPS) development to increase probability of survival for blue assets, and refining requirements across space enterprise; enhancing sensor performance to close the solar exclusion gap leveraging technologies such as optical daylight tracking; and improving legacy communication paths to support bi-directional machine-to-machine sensor communications enabling a more complete BMC2 capability.

Ground Based Radar Upgrades improve the sensitivity, search capabilities and CONOPS of existing SSA sensors to better support custody and fire control timelines.

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Air Force		Date: February 2018		
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 1203940F / Space Situation Awareness Operations	Project (Number/Name) 67A017 / Sensor Service Life Extension Program		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019
<p>Title: Global Sensor Watch Program</p> <p>Description: Global Sensor Watch Program provides an integrated SSA Tip and Cue capability that implements a survivable architecture which provides overlapping, assured, and viable surveillance options for executing event response (demonstrated by the SSA Ops Demo), multiple level security processing of SSA data and automated cross-sensor tipping and cueing around the globe. Other efforts to support Battle Management Command & Control (BMC2) in space include developing & deploying advanced software algorithms to identify, acquire, characterize, and maintain custody of deep space (S)HIOs; optimizing intelligence community & MDA sensors to better support BMC2; developing & executing JFCC Space exercises such as JETTI to test & optimize Space Control capabilities, CONOPS development to increase probability of survival for blue assets, and refining requirements across space enterprise; enhancing sensor performance to close the solar exclusion gap leveraging technologies and improving legacy communication paths to support bi-directional machine-to-machine sensor communications enabling a more complete BMC2 capability.</p> <p>FY 2018 Plans: Provide findings from SSA Operations Demonstration to the office of the Secretary of Defense/Cost Assessment and Program Evaluation Office (OSD/CAPE), refine processing algorithms, address communications network findings , refine CONOPS/TTPs with operational community, and deliver final reports.</p> <p>FY 2019 Plans: Continue GSW operationalization effort for more situational sensors. Rapidly respond to implement system resiliency and situational awareness necessary to operate in the contested space domain. Activities may include, but are not limited to program office support, studies, technical analysis, prototyping, etc.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: FY 2019 increased compared to FY 2018 by \$0.956M. Justification for this increase is described in plans above.</p>		11.564	18.616	19.572
<p>Title: Ground Radar Upgrades</p> <p>Description: This effort improves the sensitivity, search capability and CONOPS of existing SSA sensors to better support fire control timelines.</p> <p>FY 2018 Plans: Field capability improvements for existing SSA sensors and system tactics to improve custody of resident space objects (RSOs). Continue GSW operationalization effort for more situational sensors. Continue program office support and other activities that may include, but are not limited to studies, technical analysis, etc. Rapidly respond to implement Space Warfighting Construct (SWC) system resiliency and situational awareness necessary to operate in the contested space domain. These activities may include, but are not limited studies, technical analysis, prototyping, etc. Continue GSW operationalization effort for more</p>		9.800	10.028	-

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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 1203940F / <i>Space Situation Awareness Operations</i>	Project (Number/Name) 67A017 / <i>Sensor Service Life Extension Program</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018
situational sensors. Continue program office support and other activities that may include, but are not limited to studies, technical analysis, etc. <i>FY 2018 to FY 2019 Increase/Decrease Statement:</i> FY 2019 decreased compared to FY 2018 by \$10.028M. Justification for decrease is that GRU is an RMD funded two-year effort with funding ending in FY18.			
Accomplishments/Planned Programs Subtotals		21.364	28.644
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
The acquisition strategies for Global Sensor Watch program and Ground Radar Upgrades include a mix of modifications to existing Air Force contracts and directing funds to other AF or DoD organizations for contract support.			
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: PB 2019 Air Force												Date: February 2018			
Appropriation/Budget Activity 3600 / 7						R-1 Program Element (Number/Name) PE 1203940F / <i>Space Situation Awareness Operations</i>				Project (Number/Name) 67A017 / <i>Sensor Service Life Extension Program</i>					
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
GEODSS SLEP	C/CPIF	Harris/TBD : Colorado Springs, CO	-	1.347	Sep 2017	0.000		0.000		0.000		0.000	Continuing	Continuing	-
GSW Operationalization	C/TBD	Multiple : Colorado Springs, CO	-	5.147	Jan 2017	11.044	Dec 2017	12.262	Dec 2018	-		12.262	Continuing	Continuing	-
GSW SW Development 1	Various	AFRL : Various	-	1.504	Mar 2017	2.500	Nov 2017	2.500	Nov 2018	-		2.500	Continuing	Continuing	-
GSW SW Development 2	Various	MIT/LL : Lexington, MA	-	2.200	Jan 2017	3.000	Nov 2017	2.500	Nov 2018	-		2.500	Continuing	Continuing	-
GSW SW Development 3	Various	Sandia National Labs : Albuquerque, NM	-	0.300	Sep 2017	0.500	Nov 2017	0.500	Nov 2018	-		0.500	Continuing	Continuing	-
Ground Radar Upgrades	Various	Multiple : Colorado Springs, CO	-	9.082	Sep 2017	8.990	Mar 2018	0.000		0.000		0.000	Continuing	Continuing	-
Subtotal			-	19.580		26.034		17.762		0.000		17.762	Continuing	Continuing	N/A
Management Services (\$ 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
FFRDC	SS/FP	Multiple : Lexington, MA	-	0.637	Jun 2017	1.250	Oct 2017	0.690	Oct 2018	-		0.690	Continuing	Continuing	-
A&AS	C/Various	Multiple : Various	-	0.997	May 2017	1.200	Dec 2017	1.020	Dec 2018	-		1.020	Continuing	Continuing	7.788
Other Support	Various	Muple : Lexington,MA ColSpgs,CO	-	0.150	Nov 2017	0.160	Oct 2017	0.100	Oct 2018	-		0.100	Continuing	Continuing	16.626
Subtotal			-	1.784		2.610		1.810		-		1.810	Continuing	Continuing	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			-	21.364		28.644		19.572		0.000		19.572	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Air Force							Date: February 2018			
Appropriation/Budget Activity 3600 / 7				R-1 Program Element (Number/Name) PE 1203940F / Space Situation Awareness Operations			Project (Number/Name) 67A017 / Sensor Service Life Extension Program			
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Air Force										Date: February 2018									
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 1203940F / <i>Space Situation Awareness Operations</i>					Project (Number/Name) 67A017 / <i>Sensor Service Life Extension Program</i>									

	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
Sensor SLEP																												
Global Sensor Watch (GSW) Program																												
GSW Operationalization																												
GSW SW Development 1																												
GSW SW Development 2																												
GSW SW Development 3																												
Ground Radar Upgrades																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 1203940F / <i>Space Situation Awareness Operations</i>	Project (Number/Name) 67A017 / <i>Sensor Service Life Extension Program</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Sensor SLEP				
Global Sensor Watch (GSW) Program	1	2017	4	2023
GSW Operationalization	1	2018	4	2019
GSW SW Development 1	1	2018	1	2020
GSW SW Development 2	2	2020	4	2022
GSW SW Development 3	1	2023	4	2023
Ground Radar Upgrades	2	2017	4	2018