Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force											Date: February 2019	
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 1203940F / *Space Situation Awareness Operations*							
COST ($ in Millions)	**Prior Years**	**FY 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Cost To Complete**	**Total Cost**
Total Program Element	-	86.173	19.572	17.834	0.000	17.834	30.401	22.950	20.110	20.472	Continuing	Continuing
670004: *Other STRATCOM Activities*	-	57.934	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
67A017: *Sensor Service Life Extension Program*	-	28.239	19.572	17.834	0.000	17.834	30.401	22.950	20.110	20.472	Continuing	Continuing

Note

Beginning in FY 2019, National Space Defense Center (NSDC) funding in PE 1203940F is transferred to PE 1203620F, National Space Defense Center.

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.

Service Life Extension Programs (SLEPs) (Project 67A017) are efforts to upgrade, operationalize and extend the life of operational SSA sensors, as needed. These SLEPs 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 SLEPs themselves 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 that provides overlapping, assured, and viable surveillance options for executing event response, 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 Super High Interest Objects (SHIO); optimizing intelligence community & Missile Defense Agency sensors to better support BMC2; developing & executing Joint Functional Component Command (JFCC) for Space exercises such as Combined Space Operations Center (CSpOC) Experimentation, Test and Training Initiative (JETTI) to test & optimize Space Control capabilities, concepts of operations (CONOPS) development to increase probability of survival for blue assets, and refining requirements across the space enterprise; enhancing sensor performance to close the solar exclusion

gap by 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 improves the sensitivity, search capabilities and CONOPS of existing ground-based SSA sensors to better support custody and fire control timelines.

The FY 2020 funding request was reduced by $8.000 million to account for the availability of prior year execution balances.

Space acquisition must respond with speed and agility to emerging adversary threats. Space & Missile Systems Center (SMC) is transforming the organization and implementation of space acquisition to an enterprise approach, maximizing innovation and resiliency, leveraging international, commercial, and mission partnerships, and managing program/project priorities according to an integrated unclassified/classified enterprise space architecture. Expanding the appropriate acquisition authorities and contract mechanisms to deliver capability sooner, SMC will strategically execute experimentation, prototyping, risk reduction, and other efforts to develop new or repurpose capabilities.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver 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.

As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is $14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.

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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	99.984	19.572	20.314	0.000	20.314
Current President's Budget	86.173	19.572	17.834	0.000	17.834
Total Adjustments	-13.811	0.000	-2.480	0.000	-2.480
• Congressional General Reductions	-0.406	0.000			
• Congressional Directed Reductions	-4.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	0.000			
• Congressional Directed Transfers	0.000	0.000			
• Reprogrammings	-8.000	0.000			
• SBIR/STTR Transfer	-1.405	0.000			
• Other Adjustments	0.000	0.000	-2.480	0.000	-2.480

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force	Date: February 2019
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1203940F / *Space Situation Awareness Operations*

Change Summary Explanation

FY 2018: -$4.000M Congressional reduction - excess to need; -$8.000M reprogramming for higher Air Force priorities

FY 2020: +$5.520M increase for completion of Space Surveillance Telescope (SST) testing; -$8.000M reduction to account for availability of prior year execution balances

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force			Date: February 2019
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 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
670004: *Other STRATCOM Activities*	-	57.934	0.000	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 in FY 2019, National Space Defense Center (NSDC) funding in PE 1203940F is transferred to PE 1203620F, National Space Defense Center.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
Title: NSDC Infrastructure ***Description:*** Develop and field space battle management, command and control (BMC2) infrastructure. ***FY 2019 Plans:*** N/A ***FY 2020 Plans:*** N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** N/A	25.934	0.000	0.000
Title: SpODC Development ***Description:*** Development of the Space Operations Development Center (SpODC) modeling and simulation infrastructure ***FY 2019 Plans:*** N/A ***FY 2020 Plans:***	32.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 1203940F / *Space Situation Awareness Operations*	**Project (Number/Name)** 670004 / *Other STRATCOM Activities*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** N/A			
Accomplishments/Planned Programs Subtotals	57.934	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The Accelerated Space BMC2 JEON (ST-0006) is led by AFRL and will utilize existing contracts (e.g. Space Security and Defense Program (SSDP)) and provide funds to other AF/DoD organizations to execute on their contracts. Additionally, AFRL 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force			Date: February 2019
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)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SYSTEM ENGINEERING AND INTEGRATION	Various	VARIOUS : COLORADO SPRINGS, CO	-	6.425	Oct 2017	-		-		-		-	Continuing	Continuing	-
SPACE OPERATIONAL DEVELOPMENT CENTER DESIGN AND EXPERIMENTATION	Various	VARIOUS : COLORADO SPRINGS, CO	-	28.590	Oct 2017	-		-		-		-	Continuing	Continuing	-
COMMUNICATIONS ARCHITECTURE DESIGN AND DEVELOPMENT	Various	VARIOUS : COLORADO SPRINGS, CO	-	4.575	Oct 2017	-		-		-		-	Continuing	Continuing	-
APPLICATION DEVELOPMENT	Various	VARIOUS : COLORADO SPRINGS, CO	-	15.344	Oct 2017	-		-		-		-	Continuing	Continuing	-
		Subtotal	-	54.934		-		-		-		-	Continuing	Continuing	N/A

Remarks

FY17 includes $58.8M Request for Additional Appropriations for emergency warfighting readiness requirements.

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
A&AS	Various	VARIOUS : COLORADO SPRINGS, CO	-	1.000	Oct 2017	-		-		-		-	Continuing	Continuing	-
FFRDC	SS/FP	MITRE : COLORADO SPRINGS, CO	-	2.000	Oct 2017	-		-		-		-	Continuing	Continuing	-
		Subtotal	-	3.000		-		-		-		-	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force			Date: February 2019
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 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	57.934		0.000		-		-		-	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 1203940F / *Space Situation Awareness Operations*	**Project (Number/Name)** 670004 / *Other STRATCOM Activities*

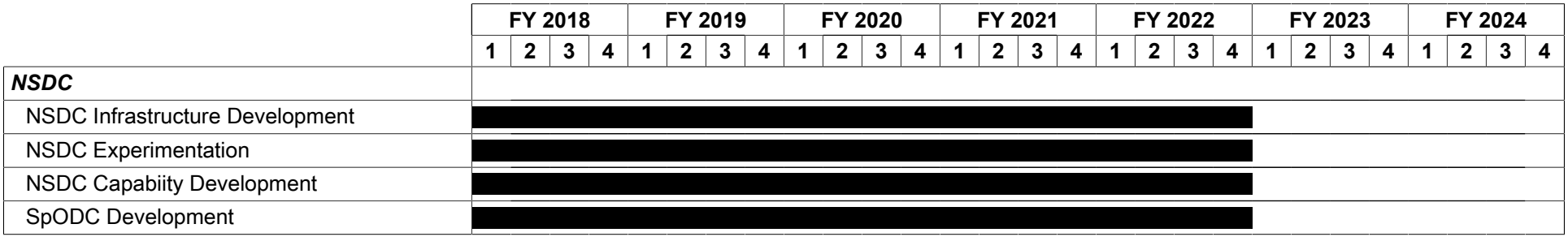

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 1203940F / *Space Situation Awareness Operations*	**Project (Number/Name)** 670004 / *Other STRATCOM Activities*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
NSDC				
NSDC Infrastructure Development	1	2018	4	2022
NSDC Experimentation	1	2018	4	2022
NSDC Capabiity Development	1	2018	4	2022
SpODC Development	1	2018	4	2022

Note

NSDC efforts transferred to USSPACECOM.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force											Date: February 2019	
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 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Cost To Complete**	**Total Cost**
67A017: *Sensor Service Life Extension Program*	-	28.239	19.572	17.834	0.000	17.834	30.401	22.950	20.110	20.472	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.

Service Life Extension Programs (SLEPs) are efforts to upgrade, operationalize and extend the life of operational SSA sensors. These SLEPs 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 SLEPs themselves 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 that provides overlapping, assured, and viable surveillance options for executing event response, 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 Super High Interest Objects (SHIO); optimizing intelligence community & Missile Defense Agency sensors to better support BMC2; developing & executing Joint Functional Component Command (JFCC) for Space exercises such as Combined Space Operations Center (CSpOC) Experimentation, Test and Training Initiative (JETTI) to test & optimize Space Control capabilities, concepts of operations (CONOPS) development to increase probability of survival for blue assets, and refining requirements across the space enterprise; enhancing sensor performance to close the solar exclusion gap by 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 improves the sensitivity, search capabilities and CONOPS of existing ground-based SSA sensors to better support custody and fire control timelines.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019
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*

Programs and projects in the space warfighting enterprise are evaluating ways to maximize innovation, resiliency, and our ability to rapidly respond to known and emerging threats. Space enterprise efforts aim to execute technology risk reduction efforts, integration of new or repurposed capabilities, enterprise decision-making tools, experimentation, and rapid prototyping and fielding via all appropriate acquisition authorities and contract mechanisms.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
Title: Global Sensor Watch Program	18.211	19.572	12.314
Description: Global Sensor Watch (GSW) Program provides an integrated SSA Tip and Cue capability that implements a survivable architecture that provides overlapping, assured, and viable surveillance options for executing event response, 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 SHIOs; 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. ***FY 2019 Plans:*** Continue GSW operationalization effort for more situational sensors. Continue program office support and other related support activities that may include, but are not limited to, studies, technical analysis, prototyping, etc. ***FY 2020 Plans:*** GSW Inclusion of Non-Traditional SSA Sensors will have multiple milestones (scrubbed for classification): Concept-C GSW Operationalization (FY 2020), Concept-T GSW Operationalization (FY 2020), Red Dawn GSW Operationalization (FY 2021), Commercial GSW Interface Operationalization (FY 2021), Mission Partner GSW Interface Operationalization (FY 2023). Rapidly respond to and 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, experimentation, prototyping, etc. ***FY 2019 to FY 2020 Increase/Decrease Statement:*** FY 2020 decreased compared to FY 2019 by $7.258M. Justification for this decrease is described above.			
Title: Space Surveillance Telescope DT&E/OT&E	0.000	0.000	5.520
Description: Space Surveillance Telescope (SST) provides rapid un-cued search, detection and tracking of dim objects in deep space and offers enhanced capabilities addressing critical space situational awareness gaps. SST is being relocated from White Sands Missile Range, NM to Western Australia in FY 2017 with expected IOC in FY 2021. Efforts include executing SST sensor reassembly, subsystem integration and testing subsequent to Australian facility delays. This includes completion of SST			

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019
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 2018	FY 2019	FY 2020
integration into a new facility, SST subsystem and system testing & Developmental Test/Operational Test and Evaluation (DT/OT&E). ***FY 2019 Plans:*** N/A ***FY 2020 Plans:*** Funds US portion of bill for interruption of SST reassembly, subsystem integration, and testing as a result of Australian facility delays; includes facility integration, SST subsystem and system testing, and DT/OT&E. ***FY 2019 to FY 2020 Increase/Decrease Statement:*** FY 2020 increased compared to FY 2019 by $5.520M. Justification for this increase is described above.			
Title: Ground Radar Upgrades ***Description:*** This effort improves the sensitivity, search capability and CONOPS of existing SSA sensors to better support fire control timelines. ***FY 2019 Plans:*** Continue prototyping L-Band solid-state transmitter, operationalize Ultra High Frequency transmitter/receiver upgrade and field a commercial off the shelf (COTS)-based L-band high voltage power supply. Continue program office support and other related support activities that may include, but are not limited to, studies, technical analysis, prototyping, etc. ***FY 2020 Plans:*** N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** N/A	10.028	0.000	0.000
Accomplishments/Planned Programs Subtotals	28.239	19.572	17.834

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.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force		Date: February 2019
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*

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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force			Date: February 2019
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*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
GSW Operationalization	C/TBD	Multiple : Colorado Springs, CO	-	10.639	Dec 2017	12.262	Dec 2018	7.624	Dec 2019	-		7.624	Continuing	Continuing	-
GSW SW Development 1	Various	AFRL : Various	-	2.500	Nov 2017	2.500	Nov 2018	1.000	Nov 2019	-		1.000	Continuing	Continuing	-
GSW SW Development 2	Various	MIT/LL : Lexington, MA	-	3.000	Nov 2017	2.500	Nov 2018	1.000	Nov 2019	-		1.000	Continuing	Continuing	-
GSW SW Development 3	Various	Sandia National Labs : Albuquerque, NM	-	0.500	Nov 2017	0.500	Nov 2018	0.500	Nov 2019	-		0.500	Continuing	Continuing	-
Ground Radar Upgrades	Various	Multiple : Colorado Springs, CO	-	8.990	Jul 2018	-		-		-		-	0.000	8.990	-
Space Surveillance Telescope	Various	Multiple : Exmuth Australia	-	-		-		5.520	Oct 2019	-		5.520	Continuing	Continuing	-
		Subtotal	-	25.629		17.762		15.644		-		15.644	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
A&AS	Various	Multiple : Colorado Springs, CO	-	1.250	Oct 2017	0.690	Oct 2018	1.290	Oct 2019	-		1.290	Continuing	Continuing	-
FFRDC	Various	Multiple : Colorado Springs, CO	-	1.200	Dec 2017	1.020	Dec 2018	0.800	Dec 2019	-		0.800	Continuing	Continuing	7.788
Other Support	Various	Muliple : Colorado Springs, CO	-	0.160	Oct 2017	0.100	Oct 2018	0.100	Oct 2019	-		0.100	Continuing	Continuing	16.626
		Subtotal	-	2.610		1.810		2.190		-		2.190	Continuing	Continuing	N/A

	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	28.239		19.572		17.834		-		17.834	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force		Date: February 2019
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*

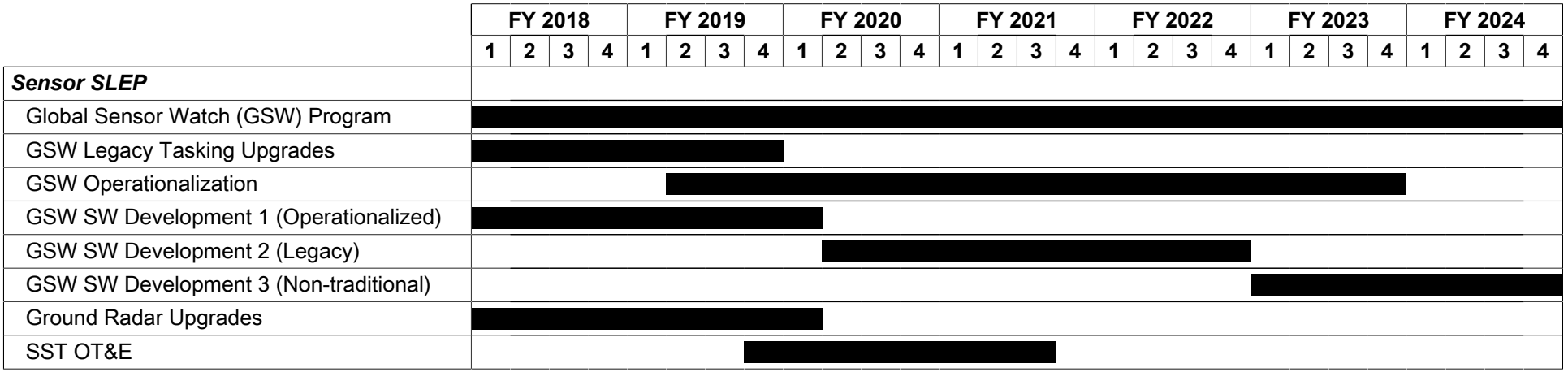

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 1203940F / *Space Situation Awareness Operations*	**Project (Number/Name)** 67A017 / *Sensor Service Life Extension Program*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Sensor SLEP				
Global Sensor Watch (GSW) Program	1	2018	4	2024
GSW Legacy Tasking Upgrades	1	2018	4	2019
GSW Operationalization	2	2019	4	2023
GSW SW Development 1 (Operationalized)	1	2018	1	2020
GSW SW Development 2 (Legacy)	2	2020	4	2022
GSW SW Development 3 (Non-traditional)	1	2023	4	2024
Ground Radar Upgrades	1	2018	1	2020
SST OT&E	4	2019	3	2021