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* / BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0305221F / *Network-Centric Collaborative Targeting*							
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	-	18.088	18.842	14.288	0.000	14.288	14.752	15.077	15.391	15.671	Continuing	Continuing
675197: *NCCT Core Technology*	-	15.593	16.295	14.288	0.000	14.288	14.752	15.077	15.391	15.671	Continuing	Continuing
675275: *SUTER*	-	2.495	2.547	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Note

In FY 2019, PE 0305221F, Network-Centric Collaborative Targeting, Project 675275, SUTER efforts were transferred to PE 0305208F, Distributed Common Ground/ Surface Systems, Project 674826, Common Imagery Ground/Surface Systems, in order to facilitate the development and integration of SUTER as a mission application on Open Architecture (OA) DCGS.

A. Mission Description and Budget Item Justification

Network Centric Collaborative Targeting (NCCT) is the Air Force program of record responsible for developing core technologies and sub-nodal analysis tools to horizontally and/or vertically integrate network collaborative Intelligence, Surveillance and Reconnaissance (ISR) sensor systems within and across intelligence disciplines. Operational uses of core technologies can include, but are not limited to, Signals Intelligence to Signals Intelligence (SIGINT-SIGINT) correlation and Ground Moving Target Indicator to Signals Intelligence (GMTI-SIGINT) correlation. Operational uses of sub-nodal analysis tools can include, but are not limited to, determining which nodes of the adversary's Command, Control, Communications, Computers, Intelligence (C4I) network to engage or protect to achieve desired effects, and modeling execution plans to determine the need to disrupt or monitor the required network aim-points in order to redirect activities based on changing battlefield conditions. NCCT software applications employ Machine-to-Machine (M2M) interfaces and Internet Protocol (IP) connectivity to coordinate sensor cross-cues and collection activities. NCCT correlation and fusion services ingest collection data to produce a single, composite track (geo-location and identification) for high-value targets. NCCT research and development funding supports evolutionary development of the NCCT message set and network management systems (for example Operations Interfaces, Network Controllers, Fusion Engines, Data Guards, Interface to Command & Control, and Interface to Overhead Intelligence Operations (OIO)), the migration of the NCCT technologies to emerging network centric technologies such as Service Oriented Architectures (SOA), global web-enabled services, and satisfying DoD standards and Information Assurance requirements.

NCCT Core Technology develops the hardware and software to horizontally integrate dissimilar Joint and Coalition Battle Management, Command & Control (BMC2), and ISR assets and systems into integrated target tracks shared across networked platforms. NCCT Core Technology includes, but is not limited to, network management software, operator interfaces, standard network messages and formats, correlation software and data rules of interaction, NCCT multi-level security hardware and software items, and platform specific Platform Interface Modules (PIMs). Prospective Coalition, Joint or Service systems are required to fund the integration of PIMs and associated improvements to core technology software for their respective platform. Development funds are required for software modifications and necessary for continuous modernization and software technologies associated with automation, data fusion, and information assurance/cyber security while keeping pace with evolving adversary tactics, techniques, and procedures (TTPs). FY 2018 RDT&E funding addresses Air Combat Command's validated requirement for the continuous operation of NCCT within the current tactical battlespace of today as well as development in the Core Technology to provide enhanced capabilities for the strategy of operating in highly contested and Anti-Access environments.

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* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric Collaborative Targeting*

SUTER develops concepts, Tactics/Techniques/Procedures (TTPs) and technologies for synchronizing the capabilities of ISR and non-kinetic capabilities in a coordinated fashion with traditional kinetic weapons to prosecute targets connected together or dependent upon some form of communications network. Suter's planning, execution and assessment capability is implemented in a virtual architecture available to all Air Operations Centers (AOCs), taking advantage of the military value added from the synergies of Joint composite ISR, non-kinetic, and/or kinetic strike packages operating against networked target sets. This virtualized Service Oriented Architecture (SOA) utilizes software applications which employ Machine-to-Machine (M2M) interfaces and IP communications to impact these target sets by "attacking" or influencing/shaping links, nodes or end points in the network to include: Radio Frequency (RF) and terrestrial links, switches, routers, hubs, servers, IP addresses, cell phones, antennas, radars, microwave relays, Satellite Communications (SATCOM) receivers, transceivers, etc. The three main pieces of the SUTER Concept of Operations (CONOPS) include: first, the use of SUTER's sub-nodal analysis software to determine which nodes of the adversary's C4I network to engage or protect to achieve desired effects; second, the SUTER's distributed operations architecture to tie together relevant planning cells (e.g. AOCs, Joint Information Operations Warfare Center (JIOWC), etc.) so they can collaborate in developing and modeling the execution plan(s) needed to disrupt or monitor the required network aim-points; and third, via SUTER's combined network Graphical User Interface (GUI), all involved "players" monitor the plan's execution, provide Near-Real Time (NRT) updates to the status of on-going activities, provide continuous assessment/updates of the execution of the plan, and, within authorities (Rules of Engagement/ ROEs), re-direct activities based on changing battlefield conditions. SUTER is the technology that assists Combatant Commanders and Components to exercise synchronized dynamic Command and Control (C2) of ISR, kinetic and non-kinetic Joint operations against conventional and terrorist threat networks. SUTER provides decision makers and operators supporting airborne, ship-borne, cyber and land-based C2ISR platforms and at supporting locations continuous Predictive Battlespace Awareness (PBA) of the information superiority fight. It also incorporates the Machine-to-Machine (M2M) capabilities that rapidly synchronize the employment of kinetic weapons, non-kinetic weapons and ISR assets to target challenging threat systems responsively. SUTER depicts a dynamic, multi-security-level picture of current and predicted threat network status, capitalizing on data inputs from sources such as Modernized Intelligence Database (MIDB), Net-Centric Collaborative Targeting (NCCT), Joint Targeting Database (JTDB), Computer Network Operations Database (CNODB), National Air and Space Intelligence Center (NASIC) Links and Nodes, and Integrated Broadcast Service (IBS). SUTER provides a GUI that can be tailored to support the integration of ISR, kinetic, and non-kinetic composite target packages supporting COCOM and Component specified information superiority effects and objectives. FY 2018 funding is dedicated to optimizing the SUTER architecture within a commercial cloud service (C2S) environment and improve machine-to-machine (M2M) data interfaces via several Intelligence Community data sources while updating data models to existing data sources.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver NCCT weapon system capability. The use of such program funds would be in addition to the civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, and 0605898F.

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.

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* / BA 7: *Operational Systems Development*		R-1 Program Element (Number/Name) PE 0305221F / *Network-Centric Collaborative Targeting*			
B. Program Change Summary ($ in Millions)	**FY 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**
Previous President's Budget	22.610	18.842	16.982	0.000	16.982
Current President's Budget	18.088	18.842	14.288	0.000	14.288
Total Adjustments	-4.522	0.000	-2.694	0.000	-2.694
• 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	-4.522	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	-2.694	0.000	-2.694

Change Summary Explanation

FY17: -4.522M BTR to ASIP Inc 1 and 2A

FY19: -2.587M transfer from PE 0305221F, Network-Centric Collaborative Targeting, Project 675275 to PE 0305208F, Distributed Common Ground/Surface Systems, Project 674826, Common Imagery Ground/Surface Systems.

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 0305221F / *Network-Centric Collaborative Targeting*	Project (Number/Name) 675197 / *NCCT Core Technology*	

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
675197: *NCCT Core Technology*	-	15.593	16.295	14.288	0.000	14.288	14.752	15.077	15.391	15.671	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Network Centric Collaborative Targeting (NCCT) is the Air Force program of record responsible for developing core technologies to horizontally and/or vertically integrate network collaborative Intelligence, Surveillance and Reconnaissance (ISR) sensor systems within and across intelligence disciplines. Operational uses of core technologies can include, but are not limited to, Signals Intelligence to Signals Intelligence (SIGINT-SIGINT) correlation and Ground Moving Target Indicator to Signals Intelligence (GMTI-SIGINT) correlation.

NCCT software applications employ Machine-to-Machine (M2M) interfaces and Internet Protocol (IP) connectivity to coordinate sensor cross-cues and collection activities. NCCT correlation and fusion services ingest collection data to produce a single, composite track (geo-location and identification) for high-value targets. NCCT research and development funding supports evolutionary development of the NCCT message set and network management systems. Examples include upgrades to operations interfaces, network controllers, fusion engines, data guards, interface to command & control, interface to Overhead Intelligence Operations (OIO), the migration of NCCT to emerging network centric technologies such as Service Oriented Architectures (SOA), global web-enabled services, and satisfying DoD standards and Information Assurance requirements.

NCCT Core Technology develops the hardware and software to horizontally integrate dissimilar Joint and Coalition Battle Management, Command & Control (BMC2), and ISR assets and systems into integrated target tracks shared across networked platforms. NCCT Core Technology includes, but is not limited to, network management software, operator interfaces, standard network messages and formats, correlation software and data rules of interaction, NCCT multi-level security hardware and software items, and platform specific Platform Interface Modules (PIMs). Prospective Coalition, Joint or Service systems are required to fund the integration of PIMs and associated improvements to core technology software for their respective platform. Development funds are required for software modifications and necessary for continuous modernization and software technologies associated with automation, data fusion, and information assurance/cyber security while keeping pace with evolving adversary tactics, techniques, and procedures (TTPs). FY 2019 RDT&E funding addresses Air Combat Command's validated requirement for the continuous operation of NCCT within the tactical battlespace of today as well as development in the Core Technology to provide enhanced capabilities for the strategy of operating in highly contested and Anti-Access environments.

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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Core Technology	15.593	16.295	14.288	0.000	14.288

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 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 / *NCCT Core Technology*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Description: Accomplishments and planned efforts include development and update of Network-Centric Collaborative Targeting (NCCT) Core Technology; technical support to users, and management activities ***FY 2018 Plans:*** • Completing installation and delivery of NCCT software version 5.1 for track amplification and enhanced track identification and awareness via Link 16 ingest capability • Continuing development efforts for Core Tech Software version 5.2. These efforts include evaluation of additional systems and data types such as OPIR fusion and national data feeds; fusion for the technology enhancements required for NCCT to operate in highly contested and Anti-Access/Area-Denied environments; developing Air track sources for Air Track to SIGINT correlation capability; and interface with DMO/DMT • Began development efforts for Core Tech Software version 5.3 which supports evaluation of commercial cloud services for eventual transition into the cloud environment ***FY 2019 Base Plans:*** • Will complete development efforts for Core Tech Software version 5.2; take first article delivery and begin fielding effort • Will continue development efforts for Core Tech Software version 5.3; moving NCCT into a cloud architecture ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Funding decreased because major development efforts on NCCT software version 5.1 will be completed in FY 2018.					
Accomplishments/Planned Programs Subtotals	15.593	16.295	14.288	0.000	14.288

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPAF 03 Line Item 832070: *Intelligence Comm Equipment*	2.583	3.312	3.095	-	3.095	3.148	3.207	3.264	3.322	Continuing	Continuing

Remarks

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 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 / *NCCT Core Technology*

D. Acquisition Strategy

The Network-Centric Collaborative Targeting (NCCT) Core Technology capabilities are developed, maintained and sustained with baseline/incremental upgrades plus any Quick Reaction Capability (QRC) developments acquired through the 645th Aeronautical System Group (645 AESG) in accordance with their Program Management Directive (PMD), Class Justification and Approval (J&A), and Life Cycle Management Plan (LCMP) across the full spectrum of system life cycle management ("cradle to grave" support concept). Due to the rapidly changing threat environment encountered during our prolonged commitment to Overseas Contingency Operations (OCO), the acquisition program manager has the authority to redirect funding as necessary to meet current stated and emerging/evolving Combatant Commander requirements.

645 AESG, Wright Patterson AFB OH, manages the Cost Plus Fixed Fee (CPFF) contracts used to develop NCCT Core Technology. 645 AESG will develop NCCT Core Technology software on common hardware for systems and platforms designated to field this ISR capability. Individual platform program management offices may contract directly with their prime contractors or through the 645 AESG for integration of NCCT capabilities on their respective systems and platforms.

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 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 / *NCCT Core Technology*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Core Technology Development A	SS/CPFF	L-3 ComCept : Rockwall, TX	-	5.500	May 2017	7.000	Nov 2017	5.000	Nov 2018	-		5.000	Continuing	Continuing	-
Core Technology Development B	SS/CPFF	L-3 ComCept : Rockwall, TX	-	9.093	Jul 2017	8.248	Jul 2018	8.228	Jul 2019	-		8.228	Continuing	Continuing	-
		Subtotal	-	14.593		15.248		13.228		-		13.228	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Security Certification/ Technical Engineering	SS/CPFF	L-3 ComCept : Rockwall, TX	-	0.500	Mar 2017	0.500	Mar 2018	0.500	Mar 2019	-		0.500	Continuing	Continuing	-
		Subtotal	-	0.500		0.500		0.500		-		0.500	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	Allot	645 AESG : Dayton, OH	-	0.500	Mar 2017	0.547	Mar 2018	0.560	Mar 2019	-		0.560	Continuing	Continuing	-
		Subtotal	-	0.500		0.547		0.560		-		0.560	Continuing	Continuing	N/A

	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	15.593		16.295		14.288		-		14.288	Continuing	Continuing	N/A

Remarks

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 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 / *NCCT Core Technology*

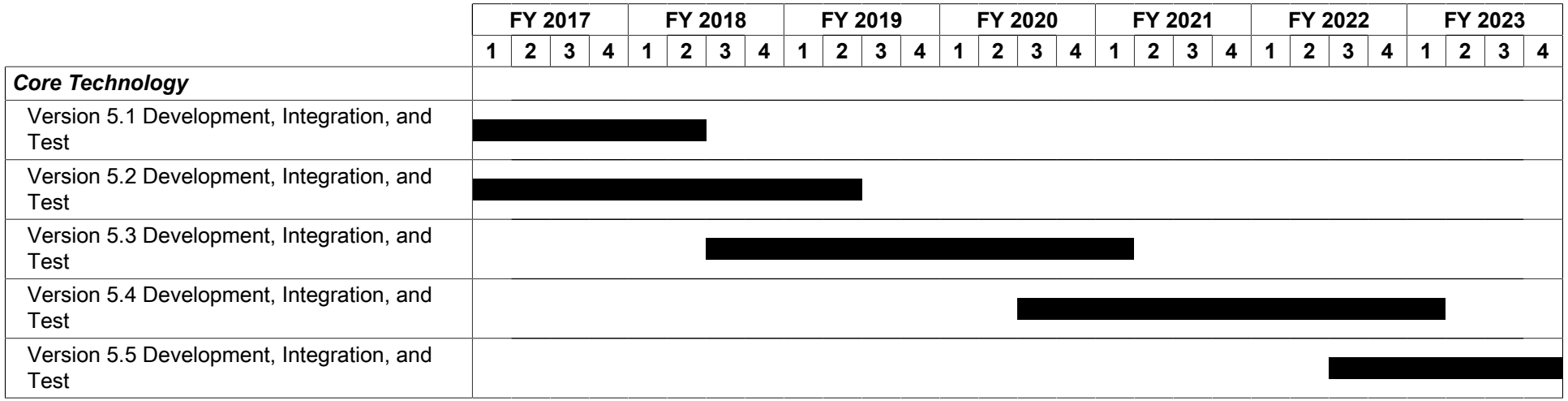

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 / *NCCT Core Technology*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Core Technology				
Version 5.1 Development, Integration, and Test	1	2017	2	2018
Version 5.2 Development, Integration, and Test	1	2017	2	2019
Version 5.3 Development, Integration, and Test	3	2018	1	2021
Version 5.4 Development, Integration, and Test	3	2020	1	2023
Version 5.5 Development, Integration, and Test	3	2022	4	2023

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 0305221F / *Network-Centric Collaborative Targeting*	Project (Number/Name) 675275 / *SUTER*	

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
675275: *SUTER*	-	2.495	2.547	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2019, PE 0305221F, Network-Centric Collaborative Targeting, Project 675275, SUTER efforts were transferred to PE 0305208F, Distributed Common Ground/ Surface Systems, Project 674826, Common Imagery Ground/Surface Systems, in order to facilitate the development and integration of SUTER as a mission application on Open Architecture (OA) DCGS.

A. Mission Description and Budget Item Justification

SUTER is a project responsible for developing sub-nodal analysis tools to horizontally and/or vertically integrate network collaborative Intelligence, Surveillance, and Reconnaissance (ISR) sensor systems within and across intelligence disciplines. Operational uses of sub-nodal analysis tools would include, but are not limited to, determining which nodes of the adversary's C4I network are engaged or protected to achieve desired effects, and modeling execution plans to determine the need to disrupt or monitor the required network aim-points in order to redirect activities based on changing battlefield conditions.

SUTER develops technologies for synchronizing the capabilities of ISR and non-kinetic capabilities in a coordinated fashion with traditional kinetic weapons to prosecute targets connected together or dependent upon some form of network. SUTER's planning, execution and assessment capability is implemented in a virtual architecture available to all Air Operations Centers (AOCs), taking advantage of the military value added from the synergies of Joint composite ISR, non-kinetic, and/or kinetic strike packages operating against networked target sets. This virtualized Service Oriented Architecture (SOA) utilizes software applications which employ machine-to-machine interfaces and Internet Protocol (IP) communications to impact these target sets by "attacking" or influencing/shaping links, nodes or end points in the network to include: Radio Frequency (RF) and terrestrial links, switches, routers, hubs, servers, IP addresses, cell phones, antennas, radars, microwave relays, Satellite Communications (SATCOM) receivers, transceivers, etc. The three main pieces of the SUTER Concept of Operations (CONOPS) include: first, the use of SUTER's sub-nodal analysis software to determine which nodes of the adversary's C4I network to engage or protect to achieve desired effects; second, the use of SUTER's distributed operations architecture to tie together relevant planning cells (e.g. AOCs, Joint Information Operations Warfare Command (JIOWC), etc.) so they can collaborate in developing and modeling the execution plan(s) needed to disrupt or monitor the required network aim-points; and third, via SUTER's combined network Graphical User Interface (GUI), all involved "players" monitor the plan's execution, provide Near-Real Time (NRT) updates to the status of on-going activities, provide continuous assessment/updates of the execution of the plan, and, within authorities (Rules of Engagement or ROEs), re-direct activities based on changing battlefield conditions.

SUTER is the technology that assists Combatant Commanders (COCOMs) and Components to exercise synchronized dynamic Command and Control (C2) of ISR, kinetic and non-kinetic Joint operations against conventional and terrorist threat networks. SUTER provides decision makers and operators supporting airborne, ship-borne, cyber and land-based Command and Control, Intelligence, Surveillance and Reconnaissance (C2ISR) platforms and at supporting locations continuous Predictive Battlespace Awareness (PBA) of the information superiority fight. It also incorporates the Machine-to-Machine (M2M) capabilities that rapidly synchronize the employment of kinetic weapons, non-kinetic weapons and ISR assets to target challenging threat systems responsively. SUTER depicts a dynamic, multi-security level picture of current and predicted threat network status, capitalizing on data inputs from sources such as Modernized Intelligence Database (MIDB), Net-Centric

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 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675275 / *SUTER*

Collaborative Targeting (NCCT), Joint Targeting Database (JTDB), Computer Network Operations Database (CNODB), National Air and Space Intelligence Center (NASIC) Links and Nodes, and Integrated Broadcast Service (IBS). SUTER provides a GUI that can be tailored to support the integration of ISR, kinetic, and non-kinetic composite target packages supporting Combatant Commands and Component specified information superiority effects and objectives across the full spectrum of conflict from tactical operations to an Anti-Access Area Denial (A2AD) strategy. FY 2018 funding is dedicated to optimizing the SUTER mission application within an enterprise environment and develop machine-to-machine (M2M) data interfaces via several Department of Defense and Intelligence Community data sources while enhancing and updating data models to existing data sources.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: SUTER Software Development	2.495	2.547	0.000	0.000	0.000
Description: Planned efforts include development and release of SUTER software upgrade. ***FY 2018 Plans:*** • Continuing development of manual analysis and manual course of action capability to support target identification and to predict effects of actions executed to achieve decision maker objectives • Beginning research and development of new machine-to-machine data interfaces for interfacing with several national and defense Intelligence Community data sources, while updating data models of existing interfaced data sources • Beginning research and development of interoperability with Air Operations Center and Air Force Distributed Common Ground System weapon systems • Evaluating the ability to leverage Pivotal Cloud Foundry for eventual development of commercial cloud services capability ***FY 2019 Base Plans:*** N/A ***FY 2019 OCO Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** In FY 2019 SUTER funding ($2.587M) was transferred to PE 0305208F, Distributed Common Ground/Surface Systems, Project 674826, Common Imagery Ground/Surface Systems.					
Accomplishments/Planned Programs Subtotals	2.495	2.547	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

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 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675275 / *SUTER*

C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

Prior to FY 2017, SUTER capabilities were developed, maintained and sustained with baseline/incremental upgrades plus any Quick Reaction Capability (QRC) developments acquired through the 645 AESG. In FY 2017, due to software limitations and a lack of technical maturity of SUTER's capabilities, the Air Force decided not to proceed with the 645 AESG technical plan on SUTER and transitioned SUTER program execution responsibilities to the Air Force Research Laboratory (AFRL). AFRL is increasing the technical maturity of the SUTER software and capabilities to a level suitable for operational capability and for transition to PE 0305208F, Distributed Common Ground/Surface Systems, Project 674826, Common Imagery Ground/Surface Systems. This transition will be made in order to facilitate the development and integration of SUTER as a mission application on Open Architecture (OA) DCGS.

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 2019 Air Force			Date: February 2018
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305221F / *Network-Centric Collaborative Targeting*	Project (Number/Name) 675275 / *SUTER*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SUTER Technology Development and Maturation	SS/CPFF	Northrup Grumman : Bellevue, NY	-	1.855		1.882		-		-		-	Continuing	Continuing	-
		Subtotal	-	1.855		1.882		-		-		-	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SUTER Technical Support	C/CPFF	BAE Systems : Rome, NY	-	0.600	Sep 2017	0.625	Sep 2018	-		-		-	Continuing	Continuing	-
		Subtotal	-	0.600		0.625		-		-		-	Continuing	Continuing	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Activity (PMA)	MIPR	AFRL : Rome, NY	-	0.040	Sep 2017	0.040	Sep 2018	-		-		-	Continuing	Continuing	-
		Subtotal	-	0.040		0.040		-		-		-	Continuing	Continuing	N/A

	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	2.495		2.547		-		-		-	Continuing	Continuing	N/A

Remarks

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 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675275 / *SUTER*

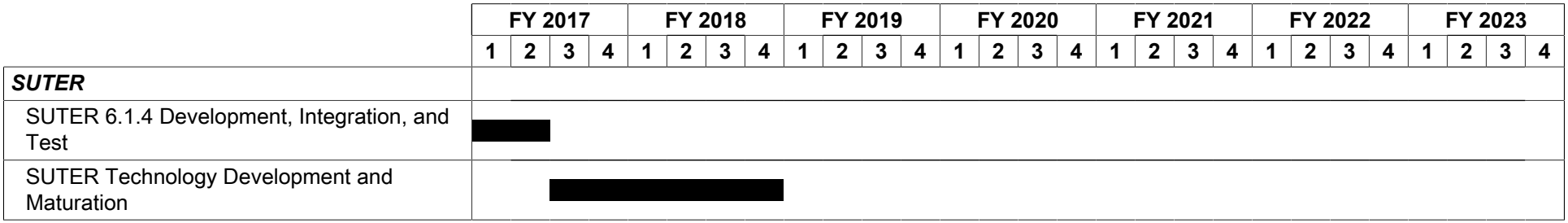

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Air Force		Date: February 2018
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675275 / *SUTER*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SUTER				
SUTER 6.1.4 Development, Integration, and Test	1	2017	2	2017
SUTER Technology Development and Maturation	3	2017	4	2018