Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force											Date: February 2015	

Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 7: *Operational Systems Development*						R-1 Program Element (Number/Name) PE 0305221F I *Network-Centric Collaborative Targeting*						

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	7.413	11.096	21.587	-	21.587	21.235	16.361	14.512	14.903	Continuing	Continuing
675197: *NCCT Core Technology*	-	7.413	11.096	19.271	-	19.271	18.715	13.796	11.901	12.246	Continuing	Continuing
675275: *SUTER*	-	-	-	2.316	-	2.316	2.520	2.565	2.611	2.657	Continuing	Continuing

Note

In FY 2016, PE 0305221, Network-Centric Collaborative Targeting, Project 675197 efforts for SUTER were transferred to PE 0305221, Network-Centric Collaborative Targeting, Project 675275, SUTER.

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). Current NCCT-enabled systems include, but are not limited to, the RC-135V/W/S/U RIVET JOINT, COBRA BALL, COMBAT SENT, EC-130H COMPASS CALL, Distributive Common Ground System (DCGS) SIGINT components, Falconer Aerospace Operations Centers (AOC), Forward Processing/Exploitation/Dissemination (FPED), Gorgon Stare (GS), OIO, and multiple airborne coalition partner platforms. Prospective Coalition, Joint or Service systems are required to fund their respective integration, unique core technology improvements/upgrades to support system integration.

The SUTER Program System (SPS) 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

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2016 Air Force		**Date:** February 2015
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305221F *I Network-Centric Collaborative Targeting*	

network. SPS's planning, execution and assessment capability is implemented in a virtual architecture available to all 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: RF and terrestrial links, switches, routers, hubs, servers, IP addresses, cell phones, antennas, radars, microwave relays, SATCOM receivers, transceivers, etc. The three main pieces of the SPS CONOPS include: first, the use of SPS'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 SPS's distributed operations architecture to tie together relevant planning cells (e.g. AOCs, 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 SPS'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. SPS is the technology that assists 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. SPS provides decision makers and operators supporting airborne, ship-borne, cyber and land-based C2ISR platforms and at supporting locations continuous Predictive Battle-space Awareness (PBA) of the information superiority fight. It also incorporates the machine-to-machine capabilities that rapidly synchronize the employment of kinetic weapons, non-kinetic weapons and ISR assets to target challenging threat systems responsively. SPS 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), NASIC Links and Nodes, and Integrated Broadcast Service (IBS). SPS 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 2016 funding is dedicated to upgrading the virtualized SOA for the operational SPS system delivered in FY15, consisting of improvements in core technology security/Information Assurance, and addition of additional systems and data types.

The NCCT program is categorized as 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 2016 Air Force				Date: February 2015	
Appropriation/Budget Activity 3600: *Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development*			**R-1 Program Element (Number/Name)** PE 0305221F *I Network-Centric Collaborative Targeting*		
B. Program Change Summary ($ in Millions)	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**
Previous President's Budget	7.413	11.096	10.930	-	10.930
Current President's Budget	7.413	11.096	21.587	-	21.587
Total Adjustments	-	-	10.657	-	10.657
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-	-	10.657	-	10.657

Change Summary Explanation

FY 2016 increase was validated by Air Combat Command and programmed to add additional capability for the transition to an Anti-Access Area Denial (A2AD) strategy to the core NCCT system and to upgrade the operational SPS system delivered in FY 2015.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force										**Date:** February 2015	

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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
675197: *NCCT Core Technology*	-	7.413	11.096	19.271	-	19.271	18.715	13.796	11.901	12.246	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2016, PE 0305221, Network-Centric Collaborative Targteting, Project 675197 efforts for SUTER were transferred to PE 0305221, Network-Centric Collaborative Targteting, Project 675275, SUTER.

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 would include, but are not be 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 would include, but are not be 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). Current NCCT-enabled systems include, but are not limited to, the RC-135V/W/S/U RIVET JOINT, COBRA BALL, COMBAT SENT, EC-130H COMPASS CALL, Distributive Common Ground System (DCGS) SIGINT components, Falconer Aerospace Operations Centers (AOC), Forward Processing/Exploitation/Dissemination (FPED), Gorgon Stare (GS),OIO, and multiple airborne coalition partner platforms. Prospective Coalition, Joint or Service systems are required to fund their respective integration, unique core technology improvements/upgrades to support system integration. The significant increase is RDT&E funding in the FY 2016 budget was due to Air Combat Command's validated requirement to allow not only NCCT to sustain the capability to operate in a tactical environment but in addition provide development in the Core Technology to provide enhanced capabilities for an Anti-Access Area Denial (A2AD) strategy in the future.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric* *Collaborative Targeting*	**Project (Number/Name)** 675197 / *NCCT Core Technology*

The NCCT program is categorized as 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 2014	FY 2015	FY 2016
Title: Core Technology	7.413	11.096	19.271
Description: Accomplishments and planned efforts include development and update of NCCT Core Technology; technical support to users, and management activities *FY 2014 Accomplishments:* Supported integration of GMTI-SIGINT correlation capability with operational systems, completion and intial fielding of the NCCT global services architecture, improvements in core technology security/Information Assurance, development of an NCCT network simulation capability targeted to support operator training/Distributed Mission Training/Distributed Mission Operations, and preliminary evaluation of additional systems and data types. *FY 2015 Plans:* Will mature the integration of GMTI-SIGINT correlation capability with operational systems, completion and intial fielding of the NCCT global services architecture, required improvements in core technology security/Information Assurance in support of CNSS-1253. NCCT will continue evaluating collaboration of additional systems and data types. *FY 2016 Plans:* NCCT will begin initial integration of Link 16 Ingest, Air Moving Target Indicator (AMTI) correlation capbility, and develop Distributed Mission Operations and Training (DMO/DMT) Capability. NCCT will also continue evaluating collaboration of additional systems and data types, such as OPIR Fusion and demonstration of National-to-Tactical Fusion for the technology enhancements required for NCCT to operate in an Anti-Access Area Denial (A2AD) environment.			
Accomplishments/Planned Programs Subtotals	7.413	11.096	19.271

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• OPAF: BA03: Line Item # 832070: *Intelligence Comm Equipment*	2.900	2.974	2.344	-	2.344	3.384	3.333	3.138	3.194	Continuing	Continuing

Remarks

D. Acquisition Strategy

The 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 (BIG SAFARI System Program Office) in accordance with the BIG SAFARI Program Management

Exhibit R-2A, **RDT&E Project Justification:** PB 2016 Air Force		**Date:** February 2015
Appropriation/Budget Activity 3600 *I* 7	**R-1 Program Element (Number/Name)** PE 0305221F *I Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 *I NCCT Core Technology*

Directive (PMD) and the BIG SAFARI Class Justification and Authorization (J&A) documents for acquisition of supplies and services. The procured supplies and services are supported by the BIG SAFARI Life Cycle Management Plan (LCMP) across the full spectrum of system life cycle management -- developmental engineering to system retirement ("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.

645th AESG, Wright Patterson AFB OH, manages the Cost Plus Fixed Fee (CPFF) contracts used to develop the NCCT Core Technology. 645th AESG will develop NCCT Core Technology software on common hardware for systems and platforms designated to field this ISR capability. Individual program management offices may contract directly with their prime contractors or through the 645th AESG for integration of these ISR 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 2016 Air Force		Date: February 2015
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 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Core Technology	SS/CPFF	L-3ComCept : Rockwall, TX	-	3.788	Dec 2013	7.711	Jan 2015	18.549	Jan 2016	-		18.549	Continuing	Continuing	TBD
SPS Software	SS/CPFF	Analyst Warehouse : Baltimore, MD	-	2.235	May 2014	2.565	May 2015	-		-		-	-	4.800	-
Subtotal			-	6.023		10.276		18.549		-		18.549	-	-	-

Remarks

FY 2014 ($2.235M) and FY 2015 ($2.565M) obligations for the SPS software was funded with NCCT Core Technology BPAC (675197). In FY 2016, the SPS BPAC (675275) will obligate the funding for SPS software development.

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Security Certification/ Technical Engineering	SS/CPFF	Riverside Research Institute : Dayton, OH	-	0.290	Dec 2013	0.320	Jan 2015	0.274	Jan 2016	-		0.274	Continuing	Continuing	TBD
Subtotal			-	0.290		0.320		0.274		-		0.274	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PMA	C/FFP	Riverside Research Institute : Dayton, OH	-	1.100	Dec 2013	0.500	Feb 2015	0.448	Feb 2016	-		0.448	Continuing	Continuing	TBD

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force												**Date:** February 2015		

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305221F / Network-Centric Collaborative Targeting	Project (Number/Name) 675197 / NCCT Core Technology

Management Services ($ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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**
Subtotal			-	1.100		0.500		0.448		-		0.448	-	-	-

			Prior Years	**FY 2014**		**FY 2015**		**FY 2016 Base**		**FY 2016 OCO**		**FY 2016 Total**	**Cost To Complete**	**Total Cost**	**Target Value of Contract**
Project Cost Totals			-	7.413		11.096		19.271		-		19.271	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 *I* 7	**R-1 Program Element (Number/Name)** PE 0305221F *I Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 *I NCCT Core Technology*

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Core Tech Version 5.0.2 Development, Integration, Test and Fielding	███	███	███	███																								
Core Tech Version 5.0.3 Development, Integration, Test and Fielding							███	███	███	███	███																	
Core Tech Version 5.0.4 Development, Integration, Test and Fielding									███	███	███	███	███	███	███	███	███	███	███	███	███							

Exhibit R-4A, **RDT&E Schedule Details:** PB 2016 Air Force		**Date:** February 2015
Appropriation/Budget Activity 3600 *I* 7	**R-1 Program Element (Number/Name)** PE 0305221F *I Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 *I NCCT Core Technology*

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Core Tech Version 5.0.2 Development, Integration, Test and Fielding	1	2014	4	2015
Core Tech Version 5.0.3 Development, Integration, Test and Fielding	4	2015	1	2018
Core Tech Version 5.0.4 Development, Integration, Test and Fielding	2	2016	4	2019

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force											Date: February 2015	
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 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
675275: *SUTER*	-	-	-	2.316	-	2.316	2.520	2.565	2.611	2.657	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2016, PE 0305221, Network-Centric Collaborative Targteting, Project 675197, Core Technology efforts providing funding assistance for SUTER Program System development starting in FY 2015 were transferred to PE 0305221, Network-Centric Collaborative Targteting, Project 675275, SUTER Program System to establish a dedicated funding line.

A. Mission Description and Budget Item Justification

The SUTER Program System (SPS)is a project within the Air force program of record 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, determing which nodes of the adversary's Command, Control, Communications, Computers, Intelligence (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.

The SUTER Program System (SPS) 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. SPS's planning, execution and assessment capability is implemented in a virtual architecture available to all 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: RF and terrestrial links, switches, routers, hubs, servers, IP addresses, cell phones, antennas, radars, microwave relays, SATCOM receivers, transceivers, etc. The three main pieces of the SPS CONOPS include: first, the use of SPS'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 SPS's distributed operations architecture to tie together relevant planning cells (e.g. AOCs, 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 SPS'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. SPS is the technology that assists 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. SPS provides decision makers and operators supporting airborne, ship-borne, cyber and land-based C2ISR platforms and at supporting locations continuous Predictive Battle-space Awareness (PBA) of the information superiority fight. It also incorporates the machine-to-machine capabilities that rapidly synchronize the employment of kinetic weapons, non-kinetic weapons and ISR assets to target challenging threat systems responsively. SPS 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), NASIC Links and Nodes, and Integrated Broadcast Service (IBS). SPS

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305221F / Network-Centric Collaborative Targeting	Project (Number/Name) 675275 / 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 across the full spectrum of conflict from tactical operations to an Anti-Access Area Denial (A2AD) strategy.

FY 2016 funding is dedicated to upgrading the virtualized SOA for the operational SPS system delivered in FY 2015, improvements in core technology security/ Information Assurance, and addition of additional systems and data types.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: SUTER Program System (SPS) Software Development	-	-	2.316
Description: Planned efforts include development and fielding of SPS software development. **FY 2014 Accomplishments:** Started SPS software development which focused on machine-to-machine (M2M)interface capability and Service Orientated Architecture (SOA) upgrades. These upgrades reduced time to pull information from other database sources, improve security management, and allow more flexibility for operational decision makers. Funding to initiate these efforts was provided by Core Technology project within the NCCT PE. Obligation was less than $2.0M. **FY 2015 Plans:** Continue the SPS software development which focuses on M2M interface capability and SOA upgrades. These upgrades will reduce time to pull information from other database sources, improve security management, and allow more flexibility for operational decision makers. Funding to continue these efforts was provided by Core Technology project within the NCCT PE. Obligation was less than $2.0M. **FY 2016 Plans:** Will continue to support the latest SPS software development which focuses on M2M interface capability and SOA upgrades. These upgrades will reduce time to pull information from other database sources, improve security management, and allow more flexibility for operational decision makers across the spectrum of conflict.			
Accomplishments/Planned Programs Subtotals	-	-	2.316

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• OPAF: BA03: 832070: *Intelligence Communications Equipment*	2.900	2.974	2.418	-	2.418	3.358	3.305	3.111	3.166	Continuing	Continuing

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric* *Collaborative Targeting*	**Project (Number/Name)** 675275 / *SUTER*

D. Acquisition Strategy

The SPS capabilities are developed, maintained and sustained with baseline/incremental upgrades plus any Quick Reaction Capability (QRC) developments acquired through the 645th Aeronautical System Group (BIG SAFARI System Program Office) in accordance with the BIG SAFARI Program Management Directive (PMD) and the BIG SAFARI Class Justification and Authorization (J&A) documents for acquisition of supplies and services. The procured supplies and services are supported by the BIG SAFARI Life Cycle Management Plan (LCMP) across the full spectrum of system life cycle management -- developmental engineering to system retirement ("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 (COCOM) requirements. 645th AESG, Wright Patterson AFB OH, manages the Cost Plus Fixed Fee (CPFF) contracts used to develop SPS. 645th AESG will develop SPS software on common hardware for systems and platforms designated to field this ISR capability. Individual program management offices may contract directly with their prime contractors or through the 645th AESG for integration of these ISR 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 2016 Air Force			Date: February 2015

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 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SPS Software	SS/CPFF	Analyst Warehouse, LLC : Baltimore, MD	-	-		-		2.081	May 2015	-		2.081	Continuing	Continuing	6.345
Subtotal			-	-		-		2.081		-		2.081	-	-	6.345

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Test	SS/CPFF	Analyst Warehouse, LLC : Baltimore, MD	-	-		-		0.235	May 2015	-		0.235	Continuing	Continuing	0.791
Subtotal			-	-		-		0.235		-		0.235	-	-	0.791

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Subtotal			-	-		-		-		-		-	-	-	-

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	-	2.316	-	2.316	-	-	7.136

Remarks

Exhibit R-4, **RDT&E Schedule Profile:** PB 2016 Air Force		**Date:** February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675275 / *SUTER*

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
SPS Increment 1				███	███	███	███	███																				
SPS Increment 2					███	███	███	███	███	███	███	███	███	███	███	███												

Exhibit R-4A, **RDT&E Schedule Details:** PB 2016 Air Force		**Date:** February 2015
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / Network-Centric Collaborative Targeting	**Project (Number/Name)** 675275 / SUTER

Schedule Details

Events	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
SPS Increment 1	1	2014	4	2015
SPS Increment 2	4	2015	1	2018