Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force											Date: March 2014	
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 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
Total Program Element	-	6.752	7.413	11.096	-	11.096	10.930	14.834	17.468	13.935	Continuing	Continuing
675197: *NCCT Core Technology*	-	6.752	7.413	11.096	-	11.096	10.930	14.834	17.468	13.935	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

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 (Operations Interfaces, Network Controller, Fusion Engines, Data Guard, Interface to Command & Control, and Interface to Overhead Intelligence Operations), the migration of the NCCT technologies to emerging network centric technologies (Service Oriented Architectures (SOA) and web services), and satisfying DoD standards and Information Assurance requirements.

NCCT Core Technology develops the hardware and software to horizontally integrate Joint and Coalition dissimilar 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 RIVET JOINT, EC-130H, COMPASS CALL, Distributed Common Ground System (DCGS) SIGINT components, Falconer Aerospace Operations Centers (AOC), MC-12W Liberty Project Aircraft (LPA), Forward Processing/Exploitation/Dissemination (FPED), Gorgon Stare, Vehicle and Dismount Exploitation Radar (VADER), and Overhead Intelligence Operations (OIO). Prospective Coalition, Joint or Service systems are required to fund their respective integration, unique core technology improvements/upgrades to support system integration.

Information Operations Battle Management (IOBM) and the SUTER Program System (SPS) develop 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 distributed operations architecture 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. Impacting these target sets can be achieved 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 Common Operating Picture (COP), 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 NCCT and Integrated Broadcast Service (IBS). SPS provides a COP 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.

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. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	7.367	7.413	11.235	-	11.235
Current President's Budget	6.752	7.413	11.096	-	11.096
Total Adjustments	-0.615	-	-0.139	-	-0.139
• Congressional General Reductions	-0.009	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	-0.606	-	-0.139	-	-0.139

Change Summary Explanation

FY13 $606k reflects congressional sequestration reduction.

FY14 $139k change due to higher AF priorities.

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
Title: Core Technology	6.752	5.178	8.831
Description: Accomplishments and planned efforts include development and update of NCCT Core Technology; technical support to users, and management activities ***FY 2013 Accomplishments:*** Continued development efforts of NCCT Core Tech Version 5.0 increments, live-fly demonstration of GMTI-SIGINT correlator and application of NCCT Core Tech in Air-Sea Battle scenarios in the Trident Warrior 13 venue ***FY 2014 Plans:*** Continue 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. Support NATO's Unified Vision 14 demonstration if funded ***FY 2015 Plans:*** Will begin maturing the 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 in support of CNSS-1253. NCCT begin initial integration of AMTI correlation capbility with operational systems. NCCT will also continue evaluating collaboration of additional systems and data types. Support NATO's Unified Vision 16 demonstration if funded.			
Title: SUTER Program System (SPS) Software Development	-	2.235	2.265
Description: Planned efforts include development and fielding of SPS software development ***FY 2013 Accomplishments:*** Effort transfered from Information Warfare Planning Capability (IWPC) program ***FY 2014 Plans:*** Begin latest Suter software version development which focuses on machine to machine interface capability and Service Orientated Architecture upgrades. These upgrades will reduce time to pull information from other database sources, improved security management and allows more flexibility. ***FY 2015 Plans:***			

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
Continue latest Suter software version development which focuses on machine to machine interface capability and Service Orientated Architecture upgrades. These upgrades will reduce time to pull information from other database sources, improved security management and allows more flexibility.			
Accomplishments/Planned Programs Subtotals	6.752	7.413	11.096

D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• OPAF: BA03: Line Item # 832070: *Intelligence Comm Equipment*	-	2.900	2.974	-	2.974	2.984	3.089	3.083	3.138	Continuing	Continuing

Remarks

E. Acquisition Strategy

The NCCT Core Technology and Suter (IOBM) 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/SPO) 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 requirements.

645th AESG, Wright Patterson AFB OH, manages the Cost Plus Fixed Fee (CPFF) contracts used to develop Suter and the NCCT Core Technology. 645th AESG will develop NCCT Core Technology and Suter 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.

F. 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-4, RDT&E Schedule Profile: PB 2015 Air Force		Date: March 2014
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 / *NCCT Core Technology*

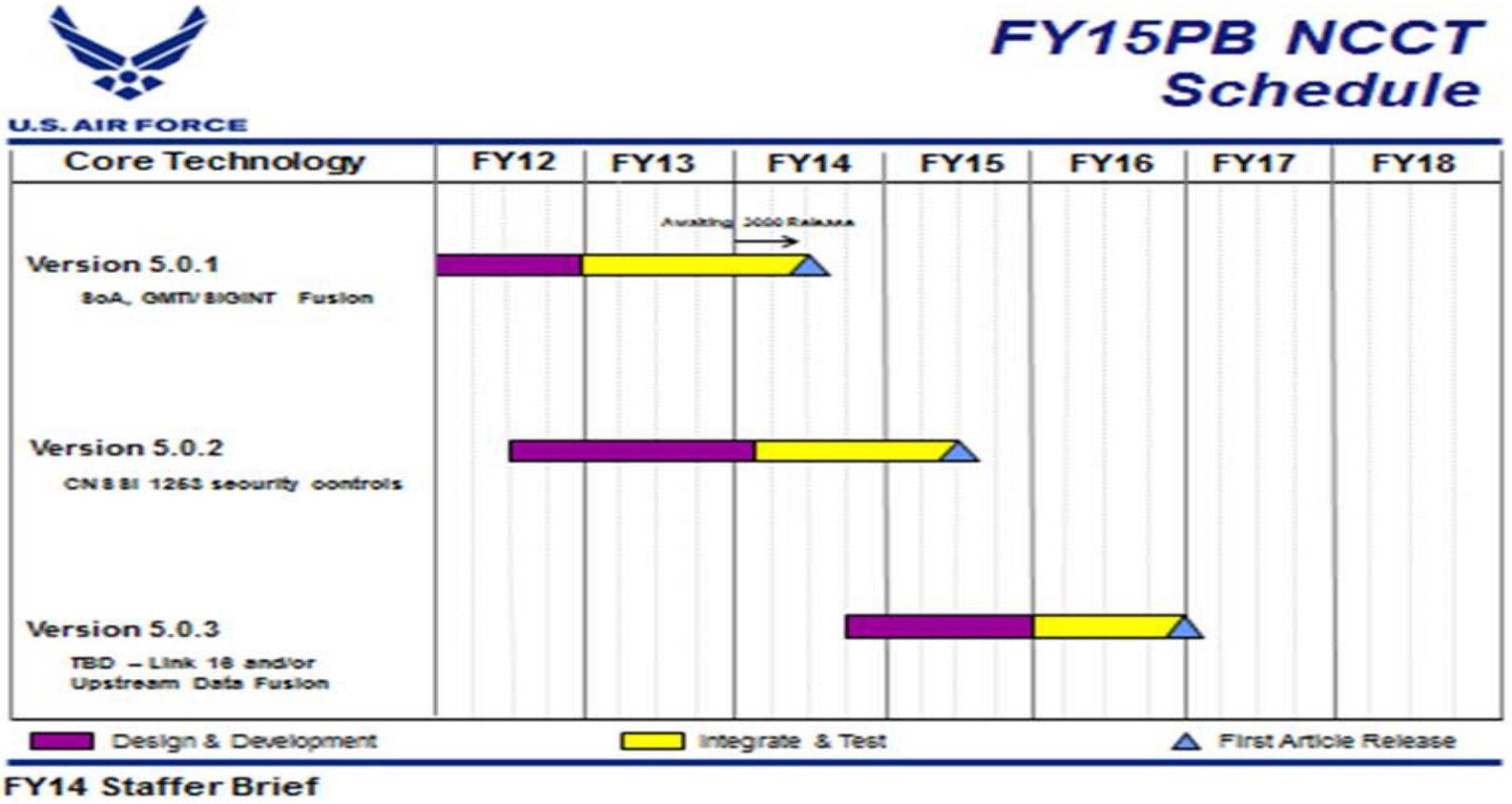
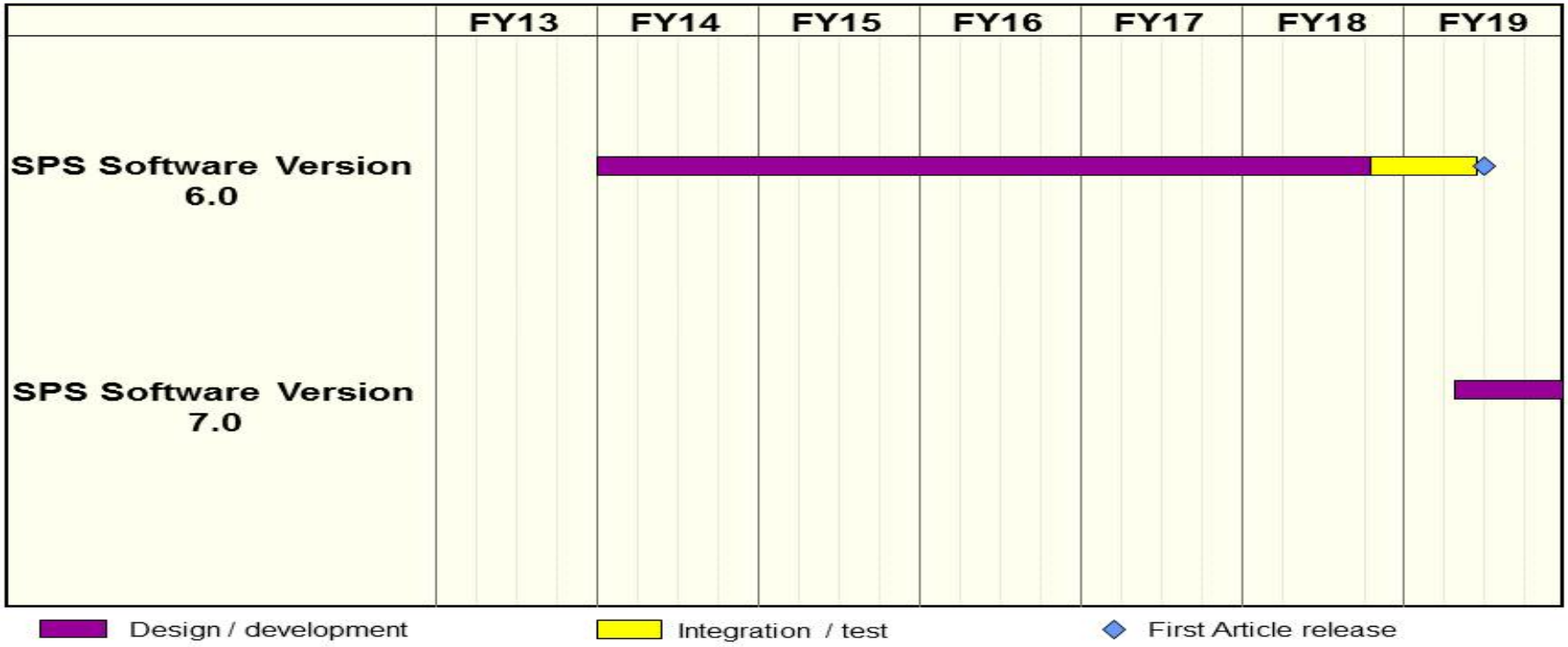


Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force		Date: March 2014
Appropriation/Budget Activity 3600 / 7	**R-1 Program Element (Number/Name)** PE 0305221F / *Network-Centric Collaborative Targeting*	**Project (Number/Name)** 675197 / *NCCT Core Technology*

U.S. AIR FORCE

Suter Program Schedule



FY15 Staffer Brief

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