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| Exhibit R-2, RDT&E Budget Item Justification | DATE February 2008 |
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| BUDGET ACTIVITY 07 Operational System Development | PE NUMBER AND TITLE 0305221F Network Centric Collaborative Targeting |
|--|---|

| Cost (\$ in Millions) | FY 2007 Actual | FY 2008 Estimate | FY 2009 Estimate | FY 2010 Estimate | FY 2011 Estimate | FY 2012 Estimate | FY 2013 Estimate | Cost to Complete | Total |
|---------------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------|
| Total Program Element (PE) Cost | 18.466 | 8.586 | 8.807 | 8.716 | 8.976 | 9.150 | 9.337 | Continuing | TBD |
| 5197 Core Technology | 18.466 | 8.586 | 8.807 | 8.716 | 8.976 | 9.150 | 9.337 | Continuing | TBD |

In FY 2006, Project 675197, Network Centric Collaborative Targeting (NCCT), efforts were transferred from PE 0305206F, Airborne Reconnaissance Systems, Project 675038, NCCT, in order to transition NCCT capabilities from an Advanced Concept Technology Demonstration (ACTD) to an operational system fielding as a program of record.

In FY 2007, BPAC 675274, Information Operations Battle Management (IOBM) was added to the PE for all information operations related efforts to include Project SUTER Software suite development efforts. Previous years and current development efforts have been funding from programs outside this PE.

(U) A. Mission Description and Budget Item Justification

Network Centric Collaborative Targeting (NCCT) is the Air Force program of record for net-centric collaborative intelligence, surveillance and reconnaissance (ISR) operations. NCCT is a networked application that uses machine-to-machine interfaces and Internet Protocol (IP) connectivity to horizontally integrate Battle Management (BM)/Command and Control (C2)/ISR assets and systems to provide timely detection, identification, and geo-location of time-sensitive and high priority targets to combatant commanders and their forces. NCCT develops and deploys the capability to share multi-source, multi-INT sensor-level data, coordinate sensor activity, and provide rapidly correlated results between dissimilar BM/C2/ISR assets, systems and decision-making nodes. NCCT develops and refreshes software and hardware required for net-centric operations. NCCT supports participant program offices with development and fielding of BM/C2/ISR asset, system and decision-making node interfaces.

NCCT Core Technology develops the machine-to-machine hardware and software to horizontally integrate dissimilar BM/C2/ISR assets and systems to include, but is not limited to, RC-135 RIVET JOINT, RC-130 SENIOR SCOUT, E-8 Joint Surveillance and Target Attack Radar System (JSTARS), U-2/Deployable Common Ground System (DCGS), Falconer Air and Space Operations Center (AOC), and national systems. NCCT Core Technology includes, but is not limited to, network management software, operations interface, network messages and formats, correlation software and data rules of interaction, NCCT unique security hardware and software items, and platform specific Platform Interface Modules (PIMs). Core technology supports the Systems Integration Lab (SIL) used to test NCCT development, modification and PIMs. Core technology also supports Air Force and Joint experiments, demonstrations, and exercises as necessary.

Project SUTER Software (PSS) suite applies Air Force ISR, national agency, space, and Joint capabilities to bridge the gap between tomorrow's advanced networked threats and our ability to train and integrate our forces to fly and fight against these threats. Threat sensor and communication systems are being modified and fielded in compressed timelines as commercial advances are adopted in short (18 month or less) cycles. PSS attempts to lead turn threat networks by developing, fielding and rapidly transitioning concepts of operations (CONOPs); tactics, techniques and procedures (TTPs); Network Target Playbooks; and capabilities that address ISR and kinetic/non-kinetic networked options at all classification levels. Exercises provide an opportunity to train personnel in combined, distributed operations focused on the "Find, Fix, and Finish" process for high-value targets. Formal assessment and operator critiques, derived during constructive play and live fly/live fire events, will be used to make rapid fielding decisions. PSS will continue development to integrate latest generation, classified kinetic and non-kinetic weapons, advanced ISR and Joint/Coalition capabilities.

Exhibit R-2, RDT&E Budget Item Justification

DATE

February 2008

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0305221F Network Centric Collaborative Targeting

This program is categorized as Budget Activity 7 because it provides for development of technologies in support of operational system development. BPAC 675274 was established in FY 2007 for information operations and battle management purposes (IOBM) and to date has progressed to this point via funding from programs outside this PE.

(U) **B. Program Change Summary (\$ in Millions)**

| | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> |
|--------------------------------------|----------------|----------------|----------------|
| (U) Previous President's Budget | 8.467 | 8.641 | 8.881 |
| (U) Current PBR/President's Budget | 18.466 | 8.586 | 8.807 |
| (U) Total Adjustments | 9.999 | | |
| (U) Congressional Program Reductions | | | |
| Congressional Rescissions | | -0.084 | |
| Congressional Increases | | | |
| Reprogrammings | 10.237 | | |
| SBIR/STTR Transfer | -0.238 | | |

(U) **Significant Program Changes:**

\$5.3M reprogrammed to maintain NCCT Core Technology schedule. \$4.9M reprogrammed (flex-in for RCO initiative) for SAF Special Interest support to USSTRATCOM's XESSA initiative.

Exhibit R-2a, RDT&E Project Justification

DATE

February 2008

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|---|-------------------|---------------------|---------------------|--|---------------------|---------------------|---|---------------------|-------|
| BUDGET ACTIVITY 07 Operational System Development | | | | PE NUMBER AND TITLE 0305221F Network Centric Collaborative Targeting | | | PROJECT NUMBER AND TITLE 5197 Core Technology | | |
| Cost (\$ in Millions) | FY 2007 Actual | FY 2008 Estimate | FY 2009 Estimate | FY 2010 Estimate | FY 2011 Estimate | FY 2012 Estimate | FY 2013 Estimate | Cost to Complete | Total |
| 5197 Core Technology | 18.466 | 8.586 | 8.807 | 8.716 | 8.976 | 9.150 | 9.337 | Continuing | TBD |
| Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

(U) A. Mission Description and Budget Item Justification

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Project SUTER Software (PSS) suite applies Air Force ISR, national agency, space, and Joint capabilities to bridge the gap between tomorrow's advanced networked threats and our ability to train and integrate our forces to fly and fight against these threats. Threat sensor and communication systems are being modified and fielded in compressed timelines as commercial advances are adopted in short (18 month or less) cycles. PSS attempts to lead turn threat networks by developing, fielding and rapidly transitioning concepts of operations (CONOPs); tactics, techniques and procedures (TTPs); Network Target Playbooks; and capabilities that address ISR and kinetic/non-kinetic networked options at all classification levels. Exercises provide an opportunity to train personnel in combined, distributed operations focused on the "Find, Fix, and Finish" process for high-value targets. Formal assessment and operator critiques, derived during constructive play and live fly/live fire events, will be used to make rapid fielding decisions. PSS will continue development to integrate latest generation, classified kinetic and non-kinetic weapons, advanced ISR and Joint/Coalition capabilities.

This program is categorized as Budget Activity 7 because it provides for development of technologies in support of operational system development. BPAC 675274 was established in FY 2007 for information operations and battle management purposes (IOBM) and to date has progressed to this point via funding from programs outside this PE.

Exhibit R-2a, RDT&E Project Justification

DATE

February 2008

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| BUDGET ACTIVITY 07 Operational System Development | PE NUMBER AND TITLE 0305221F Network Centric Collaborative Targeting | PROJECT NUMBER AND TITLE 5197 Core Technology |
|---|--|---|

| (U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> |
|--|----------------|----------------|----------------|
| (U) NCCT Core Technology Development and Refresh | 10.793 | 6.561 | 5.907 |
| (U) SAF/RCO Special Interest Support for USSTRATCOM's XESSA Initiative | 4.937 | 0.000 | 0.000 |
| (U) Technical Support | 0.591 | 0.986 | 1.300 |
| (U) Test and Evaluation | 0.550 | 0.000 | 0.000 |
| (U) Management | 1.595 | 1.039 | 1.600 |
| (U) Total Cost | 18.466 | 8.586 | 8.807 |

| (U) <u>C. Other Program Funding Summary (\$ in Millions)</u> | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> | <u>FY 2010</u> | <u>FY 2011</u> | <u>FY 2012</u> | <u>FY 2013</u> | <u>Cost to</u> | <u>Total Cost</u> |
|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| | <u>Actual</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Estimate</u> | <u>Complete</u> | |
| (U) PE 0305206F BPAC 675038 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |

(U) **D. Acquisition Strategy**
 645 Aeronautical Systems Group (645 AESG), at Wright Patterson AFB OH, manages the Cost Plus Fixed Fee contract used to develop NCCT core technology. 645 AESG will provide NCCT software and common hardware to platforms for fielding. Individual platform offices (RIVET JOINT, AF DCGS, AOC, national systems) manage and may contract directly for Platform Interface Module (PIM) development and integration on their platforms.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis

DATE

February 2008

| BUDGET ACTIVITY | | | | PE NUMBER AND TITLE | | | | | PROJECT NUMBER AND TITLE | | | |
|---|-----------------------------------|---|------------------------------------|---|---------------------------|---------------------|---------------------------|---------------------|-----------------------------|-------------------------|-------------------|---------------------------------|
| 07 Operational System Development | | | | 0305221F Network Centric Collaborative Targeting | | | | | 5197 Core Technology | | | |
| (U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions) | <u>Contract Method & Type</u> | <u>Performing Activity & Location</u> | <u>Total Prior to FY 2007 Cost</u> | <u>FY 2007 Cost</u> | <u>FY 2007 Award Date</u> | <u>FY 2008 Cost</u> | <u>FY 2008 Award Date</u> | <u>FY 2009 Cost</u> | <u>FY 2009 Award Date</u> | <u>Cost to Complete</u> | <u>Total Cost</u> | <u>Target Value of Contract</u> |
| (U) <u>Product Development</u> Core Technology | CPFF | L3 ComCept / Rockwall, TX | | 10.793 | Nov-06 | 6.561 | Nov-07 | 5.907 | Nov-08 | Continuing | TBD | TBD |
| Subtotal Product Development | | | 0.000 | 10.793 | | 6.561 | | 5.907 | | Continuing | TBD | TBD |
| Remarks: | | | | | | | | | | | | |
| (U) <u>Technical Support</u> Security Certification | Various | Various | | 0.591 | Jan-07 | 0.986 | Nov-07 | 1.300 | Nov-08 | Continuing | TBD | TBD |
| Subtotal Technical Support | | | 0.000 | 0.591 | | 0.986 | | 1.300 | | Continuing | TBD | TBD |
| Remarks: | | | | | | | | | | | | |
| (U) <u>Test and Evaluation</u> Operational Test | MIPR | 605 TES | | 0.550 | Nov-06 | 0.000 | Nov-07 | 0.000 | Nov-08 | Continuing | TBD | TBD |
| Subtotal Test and Evaluation | | | 0.000 | 0.550 | | 0.000 | | 0.000 | | Continuing | TBD | TBD |
| Remarks: | | | | | | | | | | | | |
| (U) <u>Management</u> Program Office | Various | 645 AESG / Wright-Patters on AFB, OH | | 1.595 | Nov-06 | 1.039 | Nov-07 | 1.600 | Nov-08 | Continuing | TBD | TBD |
| Other Government | MIPR | SAF/RCO & USSTRATCO M | | 4.937 | Nov-06 | 0.000 | Nov-07 | 0.000 | Nov-08 | Continuing | TBD | TBD |
| Subtotal Management | | | 0.000 | 6.532 | | 1.039 | | 1.600 | | Continuing | TBD | TBD |
| Remarks: | | | | | | | | | | | | |
| (U) Total Cost | | | 0.000 | 18.466 | | 8.586 | | 8.807 | | Continuing | TBD | TBD |

Exhibit R-4, RDT&E Schedule Profile

DATE

February 2008

BUDGET ACTIVITY
07 Operational System Development

PE NUMBER AND TITLE
0305221F Network Centric
Collaborative Targeting

PROJECT NUMBER AND TITLE
5197 Core Technology

NCCT Development

Page 1 of 1

1/9/07

| Task | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | |
|--|--|------|------|------|------|------|------|------|--|
| Core Technology Development and Refinement | [Solid blue bar spanning FY07 to FY12] | | | | | | | | |
| Systems Integration Lab | [Solid blue bar spanning FY07 to FY09] | | | | | | | | |
| Platform Interface Module (PIM) deliveries | ◆ | ◆ | | | | | | | |
| Network Controller and Operations Interface Upgrade Software Release | | | ◆ | | | | | | |
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UNCLASSIFIED

Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2008

BUDGET ACTIVITY

07 Operational System Development

PE NUMBER AND TITLE

0305221F Network Centric Collaborative Targeting

PROJECT NUMBER AND TITLE

5197 Core Technology

(U) **Schedule Profile**

| | <u>FY 2007</u> | <u>FY 2008</u> | <u>FY 2009</u> |
|--|----------------|----------------|----------------|
| (U) Continued Core Technology Development and Refinement | 1-4Q | 1-4Q | 1-4Q |
| (U) Systems Integration Lab operation | 1-4Q | 1-4Q | 1-4Q |
| (U) Platform Interface Module (PIM) deliveries | 3Q | 2Q | |
| (U) Network Controller and Operations Interface Upgrade Software Release | | | 2Q |