

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE FEBRUARY 2007
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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations (SO) Intelligence Systems Development/S400
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COST (Dollars in Millions)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	Cost to Complete	Total Cost
PE1160405BB	62.810	63.357	35.783	37.736	32.968	35.845	35.288	36.182	Cont.	Cont.
S400, SO INTELLIGENCE	62.810	63.357	35.783	37.736	32.968	35.845	35.288	36.182	Cont.	Cont.

A. Mission Description and Budget Item Justification:

This program element provides for the identification, development, and testing of Special Operations Forces (SOF) intelligence equipment to identify and eliminate deficiencies in providing timely intelligence to deployed forces. Sub-projects within this program element address the primary areas of intelligence dissemination, sensor systems, integrated threat warning to SOF mission platforms, and tactical exploitation of national system capabilities. USSOCOM has developed an overall strategy to ensure that Command, Control, Communications, Computers, and Intelligence (C4I) systems continue to provide SOF with the required capabilities into the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture will employ the latest standards and technology by transitioning from separate systems to full integration with the Global Information Grid (GIG). The GIG allows SOF elements to operate with any force combination in multiple environments.

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B. Program Change Summary:

	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>
Previous President's Budget	59.751	29.011	28.115	37.341
Current President's Budget	62.810	63.357	35.783	37.736
Total Adjustments	3.059	34.346	7.668	0.395
Congressional Program Reductions		-0.246		
Congressional Rescissions				
Congressional Increases		36.020		
Reprogrammings	4.406			
Other Program Adjustments			7.668	0.395
SBIR Transfer	-1.347	-1.428		

Funding:

FY06: Net increase of \$3.059 million is due to four Congressional adds internally reprogrammed by OSD to this Program Element (PE) for proper execution (\$4.406 million) and transfer to the Small Business Innovative Research (SBIR) account (-\$1.347 million).

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<p>FY07: Net increase of \$34.346 million is the result of 14 Congressional adds (\$36.020 million), Section 8106 reduction (-\$0.246 million), and SBIR reduction (-\$1.428 million).</p> <p>FY08: Net increase of \$7.668 million is the result of starting the Global Sensor Network (GSN) program—a new start (\$9.800 million), and realigning funds to higher Command priorities (-\$2.132 million).</p> <p>FY09: Net increase of \$0.395 million is due to continuing the GSN program (\$8.899 million), realigning the Distributed Common Ground/Surface System (DCGS) program to PE 0305208BB—the Military Intelligence Program (MIP) PE for DCGS (-\$3.170 million), and realigning funds to higher Command priorities (-\$5.334 million).</p> <p>Schedule: None.</p> <p>Technical: None.</p>		

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Cost (\$ in millions)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
SO Intelligence	62.810	63.357	35.783	37.736	32.968	35.845	35.288	36.182
RDT&E Articles Quantity								

A. Mission Description and Budget Item Justification: This project provides for the identification, development, and testing of Special Operations Forces (SOF) intelligence equipment to identify and eliminate deficiencies in providing timely intelligence to deployed forces. Sub-projects below address the primary areas of intelligence dissemination, sensor systems, integrated threat warning to SOF mission platforms, and tactical exploitation of national system capabilities. USSOCOM has developed an overall strategy to ensure that Command, Control, Communications, Computers, and Intelligence (C4I) systems continue to provide SOF with the required capabilities throughout the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture will employ the latest standards and technology by transitioning from separate systems to full integration with the Global Information Grid (GIG). The GIG will allow SOF elements to operate with any force combination in multiple environments. The intelligence programs funded in this project will meet annual emergent requirements and are grouped by the level of organizational element they support: Operational Element (Team) and Above Operational Element (Garrison). Sub-projects include:

OPERATIONAL ELEMENT (TEAM)

- National Systems Support to SOF (NSSS). The NSSS is a research and development rapid prototyping program. NSSS improves the combat effectiveness of USSOCOM, its components, and the Theater Special Operations Commands (TSOCs) by leveraging service and national agency development efforts on space-based intelligence and communications technologies and systems. This includes Imagery Intelligence, Signals Intelligence (SIGINT), and Measurement and Signature Intelligence processing and tactical display technologies and capabilities; evolving global information dominance technologies; and related meteorological, oceanographic, and space weather developments and architectures. NSSS coordinates and facilitates concepts and technologies for inclusion in Joint Chiefs of Staff Special Projects and selected Advanced Concept Technology Demonstrations (ACTDs) that use space systems to support tactical military operations.
- Joint Threat Warning System (JTWS). JTWS is an evolutionary acquisition (EA) program that provides threat warning, force protection, enhanced situational awareness, and target identification/acquisition information to SOF via signal intercept, direction finding and SIGINT. JTWS will employ continuing technology updates to address the changing threat environment. SOF SIGINT operators are globally deployed and fully embedded within Special Operations teams and aircrews in every operational environment. The JTWS state-of-the-art technology enables these operators to provide critical time sensitive targeting and actionable intelligence to the operational commander during mission execution. Intelligence derived from JTWS operations supports campaign objectives and the National Military

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Strategy. JTWS provides variant systems utilizing common core software that allows operators to task, organize, and scale equipment based on anticipated signal environments and areas of operation. Systems will be modular; lightweight with minimal power requirements; and configurable to support body worn, man-pack, team-transportable, remote unattended, air and maritime operations in support of all SOF missions. Each JTWS, except Team Transportable, variant will be capable of operation by a single trained operator. The four variants are Ground SIGINT Kit, Team Transportable, Air, and Maritime.

- Optimal Placement of Unattended Sensors (OPUS). OPUS provides for the research and integration of a commercial lightweight, modular handheld sensor interface device. This effort will provide the capability to identify the optimal placement of unattended ground sensors in support of SOF mission planning efforts.

ABOVE OPERATIONAL ELEMENT (GARRISON)

- Special Operations Joint Interagency Collaboration Center (SOJICC) is an EA program providing a state-of-the-art capability designed to process, analyze, visualize and collaborate operations and intelligence data supporting SOF core missions, with an emphasis on counter-terrorism, counter-proliferation, information operations, and unconventional warfare. SOJICC applications fuse data from both open source and classified intelligence and operational data for use by SOF mission planners and intelligence personnel as directed by the Commander, USSOCOM. SOJICC will continue to employ technology updates to bridge the gap between operations and intelligence to support deliberate and crisis action planning while addressing the changing threat environment. Operational Preparation of the Environment (OPE) provides a mechanism for research, awareness for pre-deployment, and a bridge to mitigate the information gaps and seams between theaters.
- Counter-Proliferation Analysis and Planning System (CAPS). DOD has a planning mission for Counter-Proliferation (CP) contingency operations. OSD has identified CAPS as the standard CP planning toolset for DOD, and the Assistant to the Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs has consolidated RDT&E funding at USSOCOM for overall program management. U.S. Strategic Command serves as the coordinator for CAPS production requirements and provides O&M funding. Defense Threat Reduction Agency provides science and technology expertise and integration support to enhance CAPS capabilities. CAPS provides tools and assessments to DOD and SOF mission planners to aid in worldwide identification and analysis of suspected Weapons of Mass Destruction and potential targets; assesses the associated effectiveness, costs and risks of various CP options and their collateral effects; and develops alternative plans. CAPS is a primary source of CP mission planning information for Combatant Commanders who are the principal customers. CAPS requires ongoing development, integration and testing of “leading edge technology” for operational planning and processes in order to provide the best possible engineering analysis and to support consequence engineering tools to meet changing threats.

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- Global Sensor Network (GSN). The GSN communications architecture supports the warfighter to find and fix terrorist networks and/or individuals by networking attended and unattended sensors. GSN leverages the Global Video Surveillance Activity (GVSA) for the development and integration of biometric, SOTVS, and HFTTL capabilities. SOCOM, in collaboration with DoD, external agencies and Coalition partners, will develop, deploy, and employ a GSN directly supporting SOF operations against terrorist activities. Leveraging progress already achieved through sensor research and development within SOCOM, other agencies, and commercial industry, the DoD will create a GSN that makes processing, exploitation, and data dissemination available through a horizontally integrated architecture.
- Special Operations Command Research, Analysis & Threat Evaluation System (SOCRATES). SOCRATES is a garrison Sensitive Compartmented Information (SCI) intelligence automation architecture directly supporting the Command's global mission by providing a seamless and interoperable interface with SOF, DOD, national and service intelligence information systems. It provides the capabilities to exercise command and control, planning, collection, collaboration, data processing, video mapping, a wide range of automated intelligence analysis, direction, intelligence dissemination, imagery tools and applications (to include secondary imagery dissemination), as well as news and message traffic. The program ensures intelligence support to mission planning and the intelligence preparation of the battlespace by connecting numerous data repositories while maintaining information assurance. SOCRATES supports HQ USSOCOM, its component commands, TSOCs and forward based SOF units. Additionally, it provides the critical reachback for SOF tactically deployed Local Area Networks/Wide Area Networks. SOCRATES is comprised of state-of-the-art networking devices (firewalls, routers, switches, hubs, and modems), servers, storage devices, workstations, associated peripherals and Government-Off-the-Shelf (GOTS)/Commercial-Off-The-Shelf (COTS) software.
- Unattended Aerial Vehicle (UAV) Near-Real-Time Video Program is an initiative to develop a smart-pull, geospatial situational awareness information system providing SOF the ability to exploit, in near-real-time, specific segments of UAV electro-optic/infrared video.
- Wireless Management and Control Program is an initiative to establish a wireless center of excellence and follow-on tools and techniques that focus on Wireless Communication Intelligence capabilities to map, exploit and actively manipulate wireless signals of interest. Developed technologies against wireless communications must withstand the rigors of field deployment and be sustainable and upgradeable to remain relevant against emerging adversary technologies.
- Application Specific Integrated Circuit Development is an initiative to establish a SOCOM dedicated center for application specific integrated circuits technology design and development.

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- Biowarfare Testing is an initiative to develop a light-weight portable system to detect and identify specific biological agents.
- Foxhound Arabic Software Testing and Evaluation is an initiative to test and evaluate Foxhound Arabic software for SOF applications.
- High Altitude Long Endurance is an initiative to develop a Direction Finding antenna system for employment in high altitude airship, UAV, and JTWS–A platforms/systems.
- High Value Target Tracking Devices is an initiative that accelerates the introduction of miniature high value target tracking and localization capabilities, and provides SOF with the tools and ability to track and report position information of these critical assets.
- Improved Special Operations Reconnaissance Kits is an initiative to develop a prototype and evaluate new software, hardware, and sensors that significantly enhance present capabilities.
- SOF Individual Threat Warning Receiver is an effort to develop and integrate a threat warning system into the body worn manpack for SOF personnel.
- Night Vision Integrated Display System is an effort to develop and integrate wearable display devices with state-of-the-art night vision technology. This is a potential technology insertion for SOTVS/RSTA.
- SOCOM Power Sources Integration Team is an effort to develop innovative power source capability by assessing current and emerging alternative power sources, and developing new battery technology module and new power source modules for JTWS variants.
- Tactical Miniature Software Definable Receiver (SDR) is an effort to develop advanced packaging for GSK II and Team Transportable variants to include research, design requirements and initial prototypes. Additionally, the effort will include advanced camouflaging concepts and miniaturized direction finding module development.
- Biometrics Signatures Research is a joint research project with the University of Louisville and industry to improve the military's ability to covertly locate, identify and track specific individuals. This research examines biometric signatures such as gait and chemical functions.
- Long Endurance Unattended Ground Sensor (UGS) Technology supports research and development of advanced, low power UGS technologies that will provide the warfighter with total, reliable and up-to-the-minute battlefield situational awareness. The program will

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include the development of ad-hoc networks of small, low power Radio Frequency (RF) transceiver nodes that support: (1) high resolution mono- and multi-static RADAR for target detection, classification and tracking; (2) high bandwidth, covert communication of data, voice, and video; and (3) data/information ex-filtration via satellite communications for display using advanced visualization technologies. This is a potential technology insertion for SOTVS/RSTA.

- METOC Airdropped Sensors is an effort to develop small, lightweight and easily deployable sensors that can be dropped from an aircraft or helicopter to transmit data via satellite. This data can be viewed anywhere in the world within minutes after deployment. These sensors measure weather conditions and a variety of other environmental and situational parameters (meteorological and oceanographic data).
- Microelectromechanical Systems (MEMS) & Nanotechnology Defense Lab will develop evaluation prototypes to explore the functional operation of a range of micro-miniaturization technologies with the main focus on developing applications for tagging, tracking and locating (TTL), special communication, sensors, and related GWOT requirements.
- Multi-Spectral Laboratory & Services is a research effort concentrating on next-generation, multi-spectral sensors to support both the warfighter and first responder communities.
- Nanotechnology Integration Team. Applies technology to SOF tagging, tracking, and locating requirements.
- Payload Interface Master Module. Enhances functionality of prototype Payload Interface Master Modules developed under SBIR projects. Enhancements include security mechanisms, miniaturization, and power management improvements.
- SOF Long Endurance Demonstrator (SLED) continues research and development of the SLED in support of special reconnaissance and other potential intelligence uses.
- SOF Tactical Interface (SBIR 01-0006). Continues the development and testing of MANPACK antennas, receivers, direction finding algorithms, and software technologies supporting the JTWS family of systems.
- Tactical Miniature Shortwave Receiver is an effort to develop a miniature shortwave receiver.

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B. Accomplishments/Planned Program

	FY06	FY07	FY08	FY09
NSSS SOF	0.787	0.911	0.952	1.005
RDT&E Articles Quantity				

FY06 Continued to leverage space intelligence, surveillance, and reconnaissance technology developments with SOF utility from the National Community and Military Services. NSSS assessed the operational utility of leveraged and developed technology.
 FY07 Continue to leverage space intelligence, surveillance, and reconnaissance technology developments with SOF utility from the National Community and Military Services. NSSS assessed the operational utility of leveraged and developed technology.
 FY08 Continues to leverage space intelligence, surveillance, and reconnaissance technology developments with SOF utility from the National Community and Military Services. NSSS will assess the operational utility of leveraged and developed technology.
 FY09 Continues to leverage space intelligence, surveillance, and reconnaissance technology developments with SOF utility from the National Community and Military Services. NSSS will assess the operational utility of leveraged and developed technology.

	FY06	FY07	FY08	FY09
JTWS	14.154	8.781	4.106	4.578
RDT&E Articles Quantity				

FY06 This initiative was partially funded by a Congressional add. Completed Air Variant Increment 1 test and evaluation. Commenced development of the Team Transportable (TT) variant, GSK future increment and UAV payload.
 FY07 Continue TT and GSK future increment development. Completed UAV payload development.
 FY08 Continues TT and GSK future increment development and test and evaluation. Starts Air Variant Increment 2 development and testing.
 FY09 Completes TT and GSK future increment development and test and evaluation. Continues development and testing of Air Variant Increment 2.

	FY06	FY07	FY08	FY09
OPUS	0.965	1.608		
RDT&E Articles Quantity				

FY06 This initiative was a Congressional add. Continued development and demonstration of commercial technology used to identify the optimal placement of unattended ground sensors.
 FY07 This initiative was the continuation of a Congressional add. Continue development and demonstration of commercial technology used to identify the optimal placement of unattended ground sensors.

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	FY06	FY07	FY08	FY09
SOJICC	1.433	3.092	2.854	3.070
RDT&E Articles Quantity				
FY06 Continued systems engineering and program management efforts to achieve data compatibility by integrating different COTS hardware and software applications for data mining and retrieval, link and nodal analysis, and data visualization. FY07 Continue systems engineering and program management efforts to achieve data compatibility by integrating different COTS hardware and software applications for data mining and retrieval, link and nodal analysis, and data visualization. FY08 Continues systems engineering and program management efforts to achieve data compatibility by integrating different COTS hardware and software applications for data mining and retrieval, link and nodal analysis, and data visualization. FY09 Continues systems engineering and program management efforts to achieve data compatibility by integrating different COTS hardware and software applications for data mining and retrieval, link and nodal analysis, and data visualization.				
	FY06	FY07	FY08	FY09
CAPS	16.608	17.673	18.071	20.184
RDT&E Articles Quantity				
FY06 Continued development of the CAPS database, intelligence support procedures, Information Technology systems planning, system integration and interface control, software development, and development of analytical tools and system interfaces. FY07 Continue development of the CAPS database, intelligence support procedures, Information Technology systems planning, system integration and interface control, software development, and development of analytical tools and system interfaces. FY08 Continues development of the CAPS database, intelligence support procedures, Information Technology systems planning, system integration and interface control, software development, and development of analytical tools and system interfaces. FY09 Continues development of the CAPS database, intelligence support procedures, Information Technology systems planning, system integration and interface control, software development, and development of analytical tools and system interfaces.				
	FY06	FY07	FY08	FY09
GSN			9.800	8.899
RDT&E Articles Quantity				
FY08 Commences GSN program start, develops GSN biometric systems, evaluates new technologies for SOTVS and HFTTL systems, and supports and integrates service sensors' architecture and configuration to SOF systems. FY09 Continues development of GSN biometric systems, evaluates new technologies for SOTVS and HFTTL systems, and integrates service sensors' architecture and configuration to SOF systems.				

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	FY06	FY07	FY08	FY09
SOCRATES	1.921			
RDT&E Articles Quantity				
FY06 Completed efforts to develop a Multi-Level Security guard that provides the capability to automatically pass imagery and data classified SECRET and below from a TOP SECRET system to a SECRET system without manual intervention.				
	FY06	FY07	FY08	FY09
UAV Near-Real-Time Video Program	0.965			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Continued to develop a smart-pull, geospatial situational awareness information system providing SOF the ability to exploit, in near-real-time, specific segments of UAV electro-optic/infrared video.				
	FY06	FY07	FY08	FY09
Wireless Management and Control Project	1.689			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Completed the development of tools and techniques focusing on Wireless Communication Intelligence.				
	FY06	FY07	FY08	FY09
Application Specific Integrated Circuit Development	4.053	3.215		
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Funded efforts for establishing a dedicated center for application specific integrated circuits technology design and development. FY07 This initiative was a continuation of a Congressional add. Continue efforts to establish a dedicated center for application specific integrated circuits technology design and development.				
	FY06	FY07	FY08	FY09
Biowarfare Testing	.965			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Began development of a light-weight portable system to detect and identify specific biological agents.				

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	FY06	FY07	FY08	FY09
Foxhound Arabic Software Testing and Evaluation	1.307			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Began testing and evaluation of Foxhound Arabic software for SOF applications.				
	FY06	FY07	FY08	FY09
High Altitude Long Endurance Airships	1.016			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Developed a fully-automated synthesis device for producing electronically and optically active nanostructures for high altitude airship electronics and sensors.				
	FY06	FY07	FY08	FY09
High Value Target Tracking Devices	2.032			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Commenced acceleration of introduction of miniature High Value Target Tracking and localization capabilities to provide SOF with the tools and ability to track and report position information of critical assets.				
	FY06	FY07	FY08	FY09
Improved Special Operation Reconnaissance Kits	2.177			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Began development and evaluation of new software, hardware, and sensors to significantly enhance present SOTVS/RSTA capabilities. This is a potential technology insertion for SOTVS/RSTA.				
	FY06	FY07	FY08	FY09
SOF Individual Threat Warning Receiver (ITWR)	7.431			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Began development of a SOF ITWR.				
	FY06	FY07	FY08	FY09
Night Vision Integrated Display System	0.483			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Began development of integrated wearable display devices with state-of-the-art night vision technology. This is a potential technology insertion for SOTVS/RSTA.				

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	FY06	FY07	FY08	FY09
SOCOM Power Sources Integration Team	2.219	1.948		
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Began to evaluate alternative power sources instead of traditional batteries. FY07 This initiative was a continuation of a Congressional add. Continue efforts to evaluate alternative power sources to replace traditional batteries.				
	FY06	FY07	FY08	FY09
Tactical Miniature SDR	2.605			
RDT&E Articles Quantity				
FY06 This initiative was a Congressional add. Began development of a miniature SDR.				
	FY06	FY07	FY08	FY09
Biometrics Signatures Research		1.948		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Began initial research into refining biometric signatures, such as gait and chemical functions, for use in DoD systems.				
	FY06	FY07	FY08	FY09
Long Endurance UGS Technology		1.657		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Begin research and development of advanced, low power unattended ground sensor (UGS) technologies that will provide the warfighter with total, reliable and up-to-the-minute battlefield situational awareness. The program will include the development of ad-hoc networks of small, low power Radio Frequency (RF) transceiver nodes that support: (1) high resolution mono- and multi-static RADAR for target detection, classification and tracking; (2) high bandwidth, covert communication of data, voice, and video; and (3) data/information ex-filtration via satellite communications for display using advanced visualization technologies. This is a potential technology insertion for SOTVS/RSTA.				
	FY06	FY07	FY08	FY09
METOC Airdropped Sensors		1.364		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Begin development of sensors that can be dropped from aircraft or helicopters to collect meteorological and oceanographic data.				

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	FY06	FY07	FY08	FY09
MEMS & Nanotechnology Def Lab		2.240		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Develop prototypes of micro-sensor and optical navigation devices, implement desired features, and transition the TTL devices to field applications.				
	FY06	FY07	FY08	FY09
Multi-Spectral Laboratory & Services		1.461		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Begin research of next-generation, multi-spectral sensors to support both the warfighter and first responder communities.				
	FY06	FY07	FY08	FY09
Nanotechnology Integration Team		1.871		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Apply nanotechnology to SOF tagging, tracking, and locating requirements.				
	FY06	FY07	FY08	FY09
Payload Interface Master Module (PIMM)		.974		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Build enhanced PIMM prototypes to add additional capabilities to command, control, and communicate with the Next Generation Loud Speaker System onboard Unmanned Ground Vehicles.				
	FY06	FY07	FY08	FY09
SOF Long Endurance Demonstrator (SLED)		4.872		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Continue research and developed that had begun as an Advanced Concept Technology Demonstration effort for the SLED platform.				
	FY06	FY07	FY08	FY09
SOF Tactical Interface (SBIR 01-0006)		8.183		
RDT&E Articles Quantity				
FY07 This initiative was a Congressional add. Continued development and testing of manpack antennas, receivers, direction finding algorithms, and software technologies supporting the JTWS family of systems.				

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	FY06	FY07	FY08	FY09
Tactical Miniature S/W Receiver		1.559		
RDT&E Articles Quantity				

FY07 This initiative was a Congressional add. Develop a miniature shortwave receiver.

C. Other Program Funding Summary:

	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>To Complete</u>	<u>Total Cost</u>
PROC, SOF Intelligence Sys	64.227	33.354	70.943	65.596	66.456	58.906	41.065	54.374	Cont.	Cont.
PROC, Unmanned Vehicles	0.000	19.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.400
PROC, Combat Mission Rqmts	6.732	2.562	0.000	0.000	0.000	0.000	0.000	0.000	Cont.	Cont.

D. Acquisition Strategy:

- NSSS is a project to introduce and integrate national systems capabilities into the SOF force structure and operations. NSSS activities include increasing national and commercial systems awareness, demonstrating the tactical utility of national systems and commercial data, testing technologies and evaluating operational concepts in biennial Joint Staff Special Projects, and transitioning promising concepts and technologies to other SOF program offices for execution.
- JTWS is an EA program that provides threat warning, force protection, enhanced situational awareness, and target identification/acquisition information to SOF via signals intercept, direction finding and SIGINT. JTWS will employ continuing technology updates to address the changing threat environment.
- OPUS. Systems Readiness Center will leverage existing OPUS COTS technology to provide a capability to plan, coordinate and identify the optimal placement of unattended sensors.
- SOJICC is an EA program providing a state-of-the-art capability designed to process, analyze, visualize and collaborate operations and intelligence data supporting SOF core missions, with an emphasis on counter-terrorism, counter-proliferation, information operations, and unconventional warfare. SOJICC applications fuse data from both open source and classified intelligence and operational data for use by SOF mission planners and intelligence personnel as directed by the Commander, USSOCOM. SOJICC will continue to employ technology updates to bridge the gap between operations and intelligence to support deliberate and crisis action planning while addressing the changing threat environment.

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- CAPS is an on-going developmental initiative chartered by the Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, which was transferred to USSOCOM from the Defense Threat Reduction Agency to develop, integrate and test “leading edge technology” for operational planning to provide engineering analysis and support consequence engineering tools to meet changing threats.
- GSN will utilize leading edge technology to develop capabilities to collect, exploit, store, and retrieve information from multiple sensor fields. The GSN communications architecture supports the war fighter to find and fix terrorist networks and/or individuals by networking attended and unattended sensors. GSN leverages the Global Video Surveillance Activity (GVSA) for the development and integration of biometric, SOTVS, and HFTTL capabilities. SOCOM, in collaboration with DoD, external agencies and Coalition partners, will develop, deploy, and employ a GSN directly supporting SOF operations against terrorist activities. Leveraging progress already achieved through sensor research and development within SOCOM, other agencies, and commercial industry, the DoD will create a GSN that makes processing, exploitation, and dissemination data available through a horizontally integrated architecture.
- SOCRATES will develop a SOF-peculiar cross-domain solution to support the seamless integration of intelligence data into mission planning and command and control capabilities in both a garrison and tactical environment. USSOCOM will leverage available funds against ongoing efforts by other government agencies to meet SOF-peculiar documented requirements.

Exhibit R-3 RDT&E Project Cost Analysis

DATE: FEBRUARY 2007

APPROPRIATION / BUDGET ACTIVITY				Special Operations Intelligence Systems Development/PE1160405BB							
RDT&E DEFENSE-WIDE / 7				Special Operations Intelligence/S400							
Actual or Budget Value (\$ in millions)											
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	Budget Cost FY07	Award Date FY07	Budget Cost FY08	Award Date FY08	Budget Cost FY09	Award Date FY09	To Complete	Total Program
Product Development											
JTWS Air Increment 1 Dev	MIPR	SPAWAR, Charleston, SC	9.266								9.266
JTWS Air Increment 2 Dev	MIPR	SPAWAR, Charleston, SC				0.500	Nov-07	2.500	Nov-08	Cont.	Cont.
JTWS Team Transportable Dev	MIPR	SPAWAR, Charleston, SC	1.600	2.540	Dec-06	1.900	Nov-07				6.040
JTWS GSK Increment 2 Dev	MIPR	SPAWAR, Charleston, SC	6.100	3.621	Dec-06	1.356	Nov-07	1.708	Nov-08	Cont.	Cont.
JTWS GSK/UAV Plus-up	MIPR	SPAWAR-Charleston, SC & SRC, Charleston, SC	2.957								2.957
JTWS Network Variants Plus-up	MIPR	OGA		2.193	Jan-07						2.193
CAPS Development	MIPR	Lawrence Livermore National Labs (LLNL), Livermore, CA	44.642	16.991	Nov-06	17.296	Nov-07	19.377	Nov-08	Cont.	Cont.
GSN Development	TBD	TBD				4.950	Dec-07	3.700	Dec-08	Cont.	Cont.
NSSS Development	MIPR	Various Government Agencies	0.386	0.472	Dec-06	0.483	Dec-07	0.516	Dec-08	Cont.	Cont.
SOCRATES MSL Development	MIPR	AFRL, Wright-Patterson AFB, OH	1.962								1.962
Wireless Management & Control	FFP	EWA, Herndon, VA	5.368								5.368
Individual Threat Warning Receiver	MIPR	Trident, Germantown, MD	7.590								7.590
Power Source Integration	TBD	TBD	2.267	1.948	Jan-07						4.215
Tactical Miniature SDR Receiver	TBD	TBD	2.661								2.661
UAVNRTVP	MIPR	ITAC, Reston, VA	2.328								2.328
ASICD	MIPR	Networld Exchange, Inc, Carlsbad, CA	7.494	3.215	Jan-07						10.709
High Altitude Long Endurance Airships	MIPR	RDECOM, Aberdeen Proving Ground, MD	1.016								1.016
High Value Target Tracking Devices	MIPR	Dept of Energy, Washington, DC	2.032								2.032
Improved SO Reconnaissance Kits	MIPR	AFRL, Eglin Air Force Base, FL	2.177								2.177
OPUS	FFP	Prologic Incorporated, Fairmount, WV	1.945	1.608	Jan-07						3.553
Night Vision Integrated Display	MIPR	SPAWAR-Charleston, SC & SRC, Charleston, SC	0.493								0.493
Biometrics Signatures Research	MIPR	NAVSEA		1.948	Dec-06						1.948
Long Endurance UGS Technology	TBD	TBD		1.657	Jan-07						1.657
METOC Airdropped Sensors	TBD	TBD		1.364	Jan-07						1.364
MEMS & Nanotechnology Def Lab	TBD	TBD		2.240	Dec-06						2.240
Multi-Spectral Laboratory & Services	MIPR	SPAWAR-Charleston, SC & SRC, Charleston, SC		1.461	Dec-06						1.461
Payload Interface Master Module	TBD	TBD		0.974	Jan-07						0.974
SOF Tactical Interface (SBIR 01-0006)	TBD	TBD		8.183	Jan-07						8.183
Tactical Miniature S/W Receiver	TBD	TBD		1.559	Jan-07						1.559
Nanotechnology Integ. Team	TBD	TBD		1.871	Mar-07						1.871

Exhibit R-3 RDT&E Project Cost Analysis

DATE: FEBRUARY 2007

APPROPRIATION / BUDGET ACTIVITY				Special Operations Intelligence Systems Development/PE1160405BB							
RDT&E DEFENSE-WIDE / 7				Special Operations Intelligence/S400							
Actual or Budget Value (\$ in millions)											
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	Budget Cost FY07	Award Date FY07	Budget Cost FY08	Award Date FY08	Budget Cost FY09	Award Date FY09	To Complete	Total Program
Product Development (Cont.) SOF Long Endurance Demo (SLED)	TBD	TBD		4.872	Mar-07						4.872
Subtotal Product Dev			102.284	58.717		26.485		27.801		Cont.	Cont.
Remarks:											
Support Costs											
JTWS Support	MIPR	Various Government Agencies	2.019	0.097	Jan-07						2.116
CAPS Support	MIPR	Various Government Agencies	1.732	0.682	Nov-06	0.775	Nov-07	0.807	Nov-08	Cont.	Cont.
SOJICC Support	MIPR	Various Government Agencies	0.074								0.074
Subtotal Support Costs			3.825	0.779		0.775		0.807		Cont.	Cont.
Remarks:											
Test & Evaluation											
SOJICC Inter Op Test	MIPR	JITC, Albuquerque, NM	0.159								0.159
JTWS Test (DT/OT/Support)	TBD	TBD		0.330	Jun-07	0.350	Jun-08	0.370	Jun-09	Cont.	Cont.
Subtotal T&E			0.159	0.330		0.350		0.370			0.159
Remarks:											
Management Services											
SOJICC Integration Support	MIPR	MITRE, Tampa, FL	3.846	3.092	Dec-06	1.231	Dec-07	1.338	Dec-08	Cont.	Cont.
SOJICC Integration Support	C-CPAF	EITC, Tampa, FL				1.623	Dec-07	1.732	Dec-06	Cont.	Cont.
NSSS Program Support	C-CPAF	Jacobs-Sverdrup, Tampa, FL	1.997	0.439	Oct-06	0.469	Oct-07	0.489	Oct-08	Cont.	Cont.
JTWS Program Support	C-CPAF	Jacobs-Sverdrup, Tampa, FL	0.829								0.829
GSN Integration	TBD	TBD				4.850	Dec-07	5.199	Dec-08	Cont.	Cont.
Subtotal Management			6.672	3.531		8.173		8.758		Cont.	0.829
Remarks:											
Total Cost			112.940	63.357		35.783		37.736		Cont.	Cont.
Remarks											

Exhibit R-4, RDT&E Program Schedule Profile													Date: FEBRUARY 2007																			
Appropriation/Budget Activity RDT&E/7													Project Number and Name Project S400/SO Intelligence																			
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013			
	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	1	2	3	4
NSSS Participation in Space Technology Development and Demonstrations	▲			▲	▲			△	△			△	△			△	△			△	△			△	△			△	△			△
JTWS Ground - Team Transportable Development		▲		▲	▲			△	△			△	△			△																
JTWS Ground - SIGINT Kit Future Increment Development		▲		▲	▲			△	△			△	△			△																
JTWS Air Variant Development (Increment 1 and Increment 2)	▲			▲					△			△	△			△	△			△												
JTWS Maritime Variant Development	▲	▲																														
JTWS GSK-UAV Development		▲		▲	▲			△																								
OPUS Concept Development	▲			▲	▲			△																								
SOJICC Integration and Test	▲			▲	▲			△	△			△	△			△	△			△	△			△	△			△	△			△
CAPS Integration	▲			▲	▲			△	△			△	△			△	△			△	△			△	△			△	△			△
GSN									△			△	△			△	△			△	△			△	△			△	△			△
SOCRATES Multi-Level Security Guard	▲			▲																												
UAV Near Real Time Video Program				▲	▲			△																								
Wireless Management and Control Project	▲			▲																												
Application Specific Integrated Circuit Development	▲			▲	▲			△																								
Bio-Warfare Testing		▲		▲	▲	▲																										
Foxhound Arabic S/W T&E		▲		▲	▲	▲																										
High Altitude Long Endurance	▲			▲																												

Exhibit R-4, RDT&E Program Schedule Profile													Date: FEBRUARY 2007																			
Appropriation/Budget Activity RDT&E/7													Project Number and Name Project S400/SO Intelligence																			
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013			
	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	1	2	3	4
High Value Target Tracking Devices		▲	—	▲	▲	—	▲																									
Improved SO Reconnaissance Kits		▲	—	▲	▲	—	▲																									
SOF Individual Threat Warning Receiver		▲	—	▲	▲	—	▲																									
Night Vision Integrated Display System		▲	—	▲	▲	—	▲																									
SOCOM Power Sources Integration Team		▲	—	▲	▲	—	▲																									
Tactical Miniature SDR		▲	—	▲	▲	—	▲																									
Biometrics Signature Research					▲	—	—	△																								
Long Endurance UGS Tech.					▲	—	—	△																								
METOC Airdropped Sensors					▲	—	—	△																								
MEMS & Nanotech. Def. Lab.					▲	—	—	△																								
Multi-Spectral Lab. & Svcs.					▲	—	—	△																								
Nanotechnology Integ. Team					▲	—	—	△																								
Payload Interface Master Module					▲	—	—	△																								
SOF Long Endurance Demo (SLED)					▲	—	—	△																								
SOF Tac. Interface (SBIR 01-0006)					▲	—	—	△																								
Tactical Miniature S/W Receiver					▲	—	—	△																								

Exhibit R-4a, RDT&E Program Schedule Detail				Date: FEBRUARY 2007				
<u>Appropriation/Budget Activity</u> RDT&E/7	<u>Program Element Number and Name</u> PE1160405BB/Special Operations Intelligence Systems Development			<u>Project Number and Name</u> Project S400/SO Intelligence				
<u>Schedule Profile</u>	<u>FY2006</u>	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>
NSSS Participation in Space Technology	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
JTWS Ground - Team Transportable Development	2-4Q	1-4Q	1-4Q	1Q				
JTWS Ground - SIGINT Kit Future Increment Development	2-4Q	1-4Q	1-4Q	1-4Q				
JTWS Air Variant Development (Increment 1 and Increment 2)	1-4Q		1-4Q	1-4Q	1-4Q			
JTWS Maritime Variant Development	1-2Q							
JTWS GSK-UAV Development	2-4Q	1-2Q						
Optimal Placement of Unattended Sensors	1-4Q	1-4Q						
SOJICC Integration and Test	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
CAPS Integration	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
Global Sensor Network (GSN)			1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q
SOCRATES Multi-Level	1-4Q							
UAV Near Real-Time Video Program	4Q	1-3Q						
Wireless Management and Control Project	1-4Q							
Application Specific Integrated Circuit Development	1-4Q	1-4Q						
High Altitude Long Endurance Airships	1-4Q							
Bio-Warfare Testing	2-4Q	1Q						
Foxhound Arabic Software Test and Evaluation	2-4Q	1Q						
High Value Target Tracking Devices	2-4Q	1Q						
Improved SO Reconnaissance Kits	2-4Q	1Q						
SOF Individual Threat Warning Receiver	2-4Q	1Q						
Night Vision Integrated Display System	2-4Q	1Q						
SOCOM Power Sources Integration Team	2-4Q	1Q						
Tactical Miniature SDR	2-4Q	1Q						
Biometrics Signatures Research		1-4Q						
Long Endurance UGS Technology		1-4Q						
METOC Airdropped Sensors		1-4Q						
MEMS & Nanotechnology Def. Lab.		1-4Q						
Multi-Spectral Laboratory & Services		1-4Q						
Nanotechnology Integration Team		1-4Q						
Payload Interface Master Module		1-4Q						

