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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604250D8Z I <i>Advanced Innovative Technologies</i>
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COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	296.683	459.966	846.470	1,175.832	-	1,175.832	958.802	620.173	89.365	103.000	Continuing	Continuing
P250: <i>Advanced Innovative Technologies</i>	296.683	459.966	846.470	1,175.832	-	1,175.832	958.802	620.173	89.365	103.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Strategic Capabilities Office (SCO) identifies, analyzes, demonstrates, and transitions game-changing applications of existing and near-term technology (and other U.S. Government capabilities) to shape and counter emerging threats. Currently focused on the Asia-Pacific Rebalance, SCO combines capability innovation with concepts of operation and information management to develop novel concepts often crossing Service, Defense-Intelligence, and multi-classification divides. This helps to solve critical national security challenges in partnership with the Services, Defense Agencies, Combatant Commands (COCOMS), Joint Chiefs of Staff, Intelligence Community, and the Office of the Secretary of Defense (OSD). SCO analyzes, demonstrates, and red-teams these concepts on an accelerated time frame to enable subsequent programmatic decisions on alternative capabilities that have greater mission impact and lower cost.

The Advanced Innovative Technologies Program Element (PE) contains projects that include in-depth analysis to determine technical and operational performance and risk, component and subsystem-level prototyping and testing to reduce risk, and operational demonstrations to prove concept viability prior to subsequent programmatic decisions. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	468.881	844.870	544.547	-	544.547
Current President's Budget	459.966	846.470	1,175.832	-	1,175.832
Total Adjustments	-8.915	1.600	631.285	-	631.285
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-8.915	-			
• OTHER adjustments	-	-	624.285	-	624.285
• Request for Additional Appropriations	-	1.600	7.000	-	7.000

Change Summary Explanation

OTHER adjustments provided for FY 2017 and FY 2018.

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The amended budget request for an additional of \$1.600 million is required in FY 2017 and an additional \$7.000 million in FY 2018 to address emergency warfighting readiness requirements.

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Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>				Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
P250: <i>Advanced Innovative Technologies</i>	296.683	459.966	846.470	1,175.832	-	1,175.832	958.802	620.173	89.365	103.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Strategic Capabilities Office (SCO) identifies, analyzes, demonstrates, and transitions game-changing applications of existing and near-term technology (and other U.S. Government capabilities) to shape and counter emerging threats. Currently focused on the Asia-Pacific Rebalance, SCO combines capability innovation with concepts of operation and information management to develop novel concepts often crossing Service, Defense-Intelligence, and multi-classification divides. SCO helps to solve critical national security challenges in partnership with the Services, Defense Agencies, Combatant Commands (COCOMS), Joint Chiefs of Staff, Intelligence Community, and the Office of the Secretary of Defense (OSD). SCO analyzes, demonstrates, and red-teams these concepts on an accelerated time frame to enable subsequent programmatic decisions on alternative capabilities that have greater mission impact and lower cost.

The Advanced Innovative Technologies Program Element (PE) contains projects that include in-depth analysis to determine technical and operational performance and risk, component and subsystem-level prototyping and testing to reduce risk, and operational demonstrations to prove concept viability prior to subsequent programmatic decisions. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2016	FY 2017	FY 2018
Title: Advanced Navigation	11.659	3.350	-
Description: Leverage existing technologies to analyze, build and demonstrate a prototype advanced navigation technique for contested environments and integrate into a mature weapons system.			
FY 2016 Accomplishments:			
<ul style="list-style-type: none"> • Defined software development requirements and preliminary software design. • Evaluated software – hardware compatibility in a captive-carry flight test. • Modeled navigation performance when integrated into a weapon system. • Defined system requirements and preliminary system design. • Began test planning for demonstrations in FY 2017. • Tested sensor hardware in captive-carry test and post-processed with navigation algorithms. 			
FY 2017 Plans:			
<ul style="list-style-type: none"> • Determine baseline design of software development tools, flight software, and flight hardware. • Conduct captive-carry flight test of baseline hardware and software. • Conduct planning for integration into additional weapons. 			

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> • Conduct functional qualification testing of hardware and software for flight test. • Test sensor hardware and navigation software in captive-carry test. • Drop guided test vehicles to demonstrate weapon accuracy using sensor hardware and navigation software. 				
<p>Title: Alternative Strike</p> <p>Description: The Alternative Strike program demonstrates feasibility and utility of launching existing/modified weapons from existing launch platforms. This project will retire risks associated with cross platform integration to enable transition of new weapon/system combinations to Service partners. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level. The Alternative Strike project transitions fully in FY 2017 from the Advanced Innovative Analysis and Concepts Program Element (PE) 0603289D8Z to the Advanced Innovative Technologies (PE) 0604250D8Z.</p> <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> • Complete system design analysis and trade studies. • Conduct environmental testing. • Complete initial ground testing. • Conduct sub-system requirement review. • Develop wind tunnel models. • Perform wind tunnel tests. • Continue test planning. <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Conduct initial design review. • Develop initial weapon designs. • Develop weapon system simulation. • Continue ground testing. 		-	198.030	175.760
<p>Title: Assured Tactical C2 (ATC2)</p> <p>Description: Leverage existing technologies to analyze and demonstrate an alternative tactical command and control solution for contested environments. Project will apply existing Department of Defense (DoD) investments in novel ways to increase tactical command and control reliability in contested environments. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level. This project transitions to the Services in FY 2017.</p> <p>FY 2016 Accomplishments:</p> <ul style="list-style-type: none"> • Completed enhanced security and vulnerability assessments. 		15.100	-	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> • Demonstrated an integrated, secure, and assured operational environment that provides reliable communications and robust security for the tactical warfighter. • Demonstrated capabilities at Trident Warrior 16. 				
<p>Title: AVATAR</p> <p>Description: SCO will convert manned aircraft and target drones to avatars in order to develop enhanced combat capabilities. Due to the nature of this project, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Conduct detailed design and systems engineering activities in support of system architecture, hardware design and platform integration requirements. • Establish a ground-based simulator for further system development and testing. • Complete design review and execute vendor down-select. • Finalize sensor package requirements and select systems for integration. 		-	-	25.000
<p>Title: Breaker</p> <p>Description: The Breaker demonstration integrates existing systems to provide Combatant Commanders with long range, surface- and air-delivered area effects. This project will demonstrate the feasibility and utility of launching this modified weapon from existing fires launchers. This project will retire risks associated with munition integration into and dispense from existing systems including modifications to increase munition lethality. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Determine munition integration design. • Conduct planning for integration into existing fires launchers. • Conduct ground-based tests to confirm design and functionality. • Continue mission analysis evaluating capability across multiple mission areas. 		-	-	47.782
<p>Title: Command and Control of the Information Environment (C2IE)</p> <p>Description: The Command and Control of the Information Environment (C2IE) project provides Combatant Commands, Services, Agencies, and Department of Defense leadership the ability to detect, monitor, understand, and act in the information environment. The C2IE project leverages commercial and other existing software tools to enable dynamic understanding of the information environment. C2IE will improve the warfighters ability to sense, understand, and visualize the information environment, and collaboratively plan and execute responses. Due to the nature of this project, specific applications and detailed plans are available at a higher classification level. The Command and Control of the Information Environment project transitions fully in</p>		-	31.880	36.570

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
<p>FY 2017 from the Advanced Innovative Analysis and Concepts Program Element (PE) 0603289D8Z to the Advanced Innovative Technologies (PE) 0604250D8Z.</p> <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> • Demonstrate near real-time analysis of unclassified data sources on a single platform. • Complete initial assessment of performance of four analytic components. • Complete initial installation/demonstration of C2IE components on two Secure Internet Protocol Router (SIPR) networks. • Perform developmental, operational, and interface testing of C2IE software. • Initiate development of Tactics Techniques & Procedures (TTP) for use of developed analytics. • Continue incremental software development of information Common Operational Picture (iCOP) and Situational Awareness (SA) components of C2IE. • Conduct multiple validation demonstrations and workshops for various Combatant Commanders (CCMDs). • Establish a C2IE requirements working group and validation process. <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Continue assessment of performance for four additional analytic components. • Continue incremental software development, system integration, and testing cycle of the C2IE software. • Continue installation/demonstration of C2IE components and system on SIPR networks for each Combatant Command. • Continue developmental, operational, and interface testing of C2IE software. • Continue conducting multiple validation demonstrations and workshops for Combatant Commanders (CCMDs). • Develop a C2IE Capability Package (CP) and incorporate into the approved requirements Capability Definition Package (CDP). 			
<p>Title: Contender</p> <p>Description: SCO will develop and demonstrate an operational prototype that will extend the range of torpedoes for use in expanded mission sets. This project is currently funded within the Advanced Innovative Analysis and Concepts Program Element 0603289D8Z and will transition to the Advanced Innovative Technologies Program Element 0604250D8Z in FY 2017.</p> <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> • Refine Stakeholders Objectives Document. • Design and test communications subsystems and integrate into full design. • Test and scale propulsion plant to meet desired speed and range goals while keeping integrated form factor. • Plan demonstrations to prove concept operational viability. • Design, integrate and test required sensors with Guidance Navigation and Control (GNC) package. <p>FY 2018 Plans:</p>	-	35.550	69.600

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> • Design and test host platform dynamics. • Conduct in-water risk reduction tests. • Conduct payload launch testing. • Perform subsystem integration planning. 				
<p>Title: Enhanced Munitions</p> <p>Description: Leverage existing technologies to analyze and prototype enhancements to current munitions. As existing munitions age, leveraging advanced technology may enhance or buy-back performance. This project will retire risks associated with transition of enhanced munitions. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2016 Accomplishments:</p> <ul style="list-style-type: none"> • Conducted prototype component testing. • Completed first In-Process Review (IPR) of munition enhancements concept and design. <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> • Build and test munition enhancement article. • Conduct second IPR of munition enhancements. • Finalize Critical Experiment test plan. • Plan and conduct first ground test of enhanced munition test article. <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Build and test form factor enhancement article. • Conduct third In-Progress Review of munition enhancements. • Integrate enhancements into munitions test article. • Plan and conduct second ground test of integrated enhanced munition test article. 		22.300	41.960	29.970
<p>Title: Ghost Fleet</p> <p>Description: SCO will develop and demonstrate fleet integrated, operational prototype unmanned maritime vehicles to fill existing mission requirements for Combatant Commanders. The prototypes will include the platforms, autonomy, Command, Control and Communications (C3) and payload integration. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Build and evaluate unmanned capabilities to support future operational demonstrations. • Begin payload integration activities. 		-	-	206.000

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> Finalize autonomy architecture to support mission, platform, and payload level autonomy development. Conduct operational assessments for prototype systems. 				
<p>Title: Hornet's Nest</p> <p>Description: SCO will develop a multi-mission Unmanned Aerial Vehicle (UAV) capable of launch from manned/unmanned rotary and fixed wing aircraft and ground systems. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> Conduct initial program and testing review. Conduct wargames to define operational scenarios. Conduct subsystem development and testing. Perform initial analysis for platform integration. Demonstrate integration of various payloads and capabilities. 		-	-	24.000
<p>Title: Hypervelocity Gun Weapon System (HGWS)</p> <p>Description: Cost-effective, large magazine point defense will be demonstrated by closing the fire control loop between existing sensors and prototype projectiles launched from existing families of powder guns. Due to the nature of this project, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2016 Accomplishments:</p> <ul style="list-style-type: none"> Conducted live-fire projectile launches from numerous powder guns. Conducted a control actuation system test from high velocity guns. Tested projectile capabilities in hardware-in-the-loop and gun live-fire demonstrations. Built government-designed projectiles for FY 2016 and FY 2017 testing. <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> Test lethality of projectile. Use hardware-in-the-loop to test closed-loop system performance. Conduct closed-loop live-fire testing at high velocity launch against synthetic targets. Begin procurement of targets to be used in FY 2018 tests. Conduct prototype fire control sensor Critical Design Review (CDR). Conduct test site development activities. Continue procurement of test targets for live-fire testing. <p>FY 2018 Plans:</p>		259.724	246.070	67.050

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> • Complete Advanced Projectile design concepts. • Complete target procurement and support flight tests. • Continue closed-loop performance demonstrations by conducting increasingly difficult fly-by engagements of live targets. • Deliver Prototype Fire Control Radar and demonstrate enhanced range and precision. • Complete Prototype Surveillance Radar modifications and support demonstrations. • Integrate subsystems and conduct target intercepts. 				
<p>Title: LiTE Saber</p> <p>Description: SCO will develop and demonstrate a commercial-enabled tactical command, control and communication capability to create secure tactical communications for Ground Forces in Anti-Access / Area Denial (A2/AD) environments.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Establish metrics and measurements. • Establish candidate operating environments (vignettes/concepts of operation). • Conduct analysis to define system characteristics and effectiveness. 		-	-	65.000
<p>Title: MAVEN</p> <p>Description: Leverage advanced commercial technologies to provide advantage to the warfighter in contested environments. Due to the nature of some of these projects, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Develop initial data sets. • Demonstrate analytics interfaces with databases. • Demonstrate initial analytic performance. 		-	-	16.000
<p>Title: Miniature Air Launched Decoy – X (MALD-X)</p> <p>Description: SCO will leverage existing low-cost payloads by demonstrating autonomous swarming behavior of a large number of Unmanned Aerial Vehicles (UAVs) as well as focused upgrades of the low cost Miniature Air-Launched Decoy (MALD) platform (MALD-X). This project seeks to demonstrate the operational effectiveness and tactical advantage provided by large numbers of collaborative, expendable platforms. Due to the nature of some of these projects, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2016 Accomplishments:</p> <ul style="list-style-type: none"> • Conducted ground and air-dropped micro-UAV swarm demonstrations. • Completed MALD-X critical design review. 		27.369	26.230	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> Conducted initial prototype subsystem testing. Anchored modeling and simulations, and updated operational effectiveness assessment. <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> Conduct large air-dropped micro-UAV swarm demonstration. Conduct platform/vehicle level ground testing. Conduct vehicle level captive-carry flight testing. Build, integrate and checkout flight test vehicles. Complete flight test demonstrations. Update modeling and simulations based on completed testing and update operational effectiveness assessment. Complete prototype development and testing in partnership with Service program offices to speed transition to a program of record. 				
<p>Title: Motley Crew</p> <p>Description: SCO will leverage near term technologies being developed to enable interoperability between weapons. Motley Crew will enable collaboration among existing weapons to enhance capabilities Anti-Access / Area Denial (A2/AD) environment. Due to the nature of this project, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> Conduct detailed design and systems engineering activities in support of system architecture, hardware design and platform integration requirements. Complete and validate lab, ground and flight test capability development activities. Conduct component- and subsystem-level platform integration development and testing. Perform platform testing in operationally relevant scenarios, on ground and inflight, to demonstrate basic collaborative capabilities 		-	-	32.000
<p>Title: Perdix Gen 7</p> <p>Description: Develop next generation micro-UAV (unmanned air vehicle) with improved endurance and processing power to allow for a multi-mission capabilities with a focus on Intelligence, Surveillance, and Reconnaissance (ISR) capabilities. The multi-mission platform will be designed for use with multiple host platforms.</p> <p>FY 2017 Plans:</p> <p>Perform mission and systems analysis necessary to inform micro-UAV design limits (e.g. speed, endurance, stability). Develop processing architecture and image processing technology required to collect and offload imagery data from UAV to host platform.</p>		-	1.600	7.000

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
Perform a battery and power train analysis to inform build of low-cost, high performance micro-UAV. FY 2018 Plans: Finalized baseline design and begin build of both the micro-UAV and canister dispenser. Test and integrate power source.				
Title: Sea Dragon Description: A cost-effective disruptive offensive capability will be demonstrated by integrating an existing weapon system with an existing Navy platform. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level. FY 2016 Accomplishments: <ul style="list-style-type: none"> • Completed design of in-water test apparatus. • Completed design of the ejection body and associated hardware. • Identified and analyzed alternative targeting methods to enable down-select and follow on demonstrations. • Procured long lead range test articles. • Completed Land-Based Testing (LBT). FY 2017 Plans: <ul style="list-style-type: none"> • Initiate construction of launch support site. • Conduct planning for underwater testing. • Refine parameters for subsystem weapon integration and interoperability to support end-to-end demonstration. FY 2018 Plans: <ul style="list-style-type: none"> • Complete construction of launch support test site. • Commence underwater static testing. • Continue planning for in-water testing. • Continue kill chain analysis within platform communications and fire control system architectures. 		85.421	70.760	163.000
Title: Sea Mob Description: SCO is developing a group of Unmanned Surface Vehicles (USVs) capable of cooperative swarming behaviors. This project will demonstrate the ability to generate common situational awareness among USVs and conduct coordinated dynamic planning required for sustaining cooperative behaviors. This project is funded within the Advanced Innovative Technologies Program Element 0604250D8Z in FY 2016 and FY 2017. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.		20.186	18.120	10.160

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<p><i>FY 2016 Accomplishments:</i></p> <ul style="list-style-type: none"> • Converted an Rigid Hull Inflatable Boat (RHIB) to operate as an autonomous USV and successfully conducted autonomous USV operations, including long-distance unmanned transit. • Demonstrated the ability to autonomously navigate. • Converted additional ship to an autonomous USV and demonstrated a logistics resupply mission from ship to shore. <p><i>FY 2017 Plans:</i></p> <ul style="list-style-type: none"> • Acquire, install, integrate, and test subsystems on additional USVs. • Demonstrate a tactical mission using multiple USVs that includes long range transit. • Develop and test cooperative behaviors between USVs to conduct complex missions. <p><i>FY 2018 Plans:</i></p> <ul style="list-style-type: none"> • Integrate payloads with USV autonomy software. • Develop human-in-the-loop targeting using existing Sea Mob USV onboard sensors and communications links. • Further develop Sea Mob USV autonomy subsystems to enhance platform operation and survivability in hostile environments. • Test USVs for specified missions using payload module. • Conduct in-water exercises against relevant targets for specified missions. • Finalize Sea Mob Technical Data Packages for transition. 				
<p><i>Title:</i> Sea Stalker</p> <p><i>Description:</i> SCO will leverage existing low-cost, persistent maritime platforms to offer Combatant Commanders deterrence options during a crisis. The Sea Stalker project seeks to retire the risk of platform and payload integration to provide an immediate, flexible capability. This project is currently funded within the Advanced Innovative Analysis and Concepts Program Element 0603289D8Z and will transition to the Advanced Innovative Technologies Program Element 0604250D8Z in FY 2017. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.</p> <p><i>FY 2017 Plans:</i></p> <ul style="list-style-type: none"> • Manufacture and test integrated platform/payload systems. • Develop command and control algorithms and power management plan necessary for operation. • Perform platform testing in operationally relevant scenarios. • Develop and test payload design and quantify effectiveness against mission goals. <p><i>FY 2018 Plans:</i></p> <ul style="list-style-type: none"> • Perform payload field testing for operational effectiveness. • Perform in-water integrated payload/platform testing. 		-	17.390	27.240

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> • Demonstrate platform reliability and persistence. • Conduct in-water platform testing with optimized algorithms. 				
<p>Title: StormSystem</p> <p>Description: StormSystem will leverage existing capabilities to develop a suite of tools that disrupts the adversary cyber network exploitation (CNE). This effort will provide low-cost, at-scale obfuscation capabilities to government and industrial base research and development networks.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Conduct initial system demonstration. • Analyze system performance. 		-	-	7.000
<p>Title: Strike-X</p> <p>Description: The Strike-X project leverages existing long range strike capabilities and develops alternative Concepts of Employment (CONEMP) and Tactics, Techniques, and Procedures (TTP) to deliver near-term innovative long range strike capabilities to Combatant Commanders. Due to the nature of this project, specific applications and detailed plans are available at a higher classification level. The Strike-X project transitions fully in FY 2017 from the Advanced Innovative Analysis and Concepts Program Element (PE) 0603289D8Z to the Advanced Innovative Technologies (PE) 0604250D8Z.</p> <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> • Conduct detailed design and systems engineering activities in support of system architecture, hardware design and platform integration requirements. • Develop Interface Control Documents (ICD) to manage integration of systems within Strike-X and integration on host platforms. • Procure test article hardware to support component-level testing and integration. • Continue fabrication of test articles to facilitate platform integration evaluations. • Conduct component- and subsystem-level platform integration development and testing. • Conduct test site development activities. • Conduct platform design verification live fire testing to collect performance data to validate design and identify risks. <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> • Complete detailed design and systems engineering activities in support of system architecture, hardware design and platform integration requirements. • Procure and receive test article hardware to support component-level and system-level testing and integration. • Complete fabrication of system-level demonstrator and initial prototype test articles to facilitate platform integration evaluations. • Complete test site development activities. 		-	121.720	114.800

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> Conduct system-level live fire integration and validation engineering tests with demonstrator assets. 				
<p>Title: TEM II</p> <p>Description: Leverage existing technologies to analyze and demonstrate a prototype solution to disrupt enemy targeting of critical U.S. assets. The first phase of this project will be demonstrated at sea and transition to the Navy in FY 2017. The second phase will leverage recent advances in commercial technology to provide additional capability. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2016 Accomplishments:</p> <ul style="list-style-type: none"> Manufactured and tested major subsystems. Conducted deployed testing of subsystems. Collected representative ground truth data. Conducted initial integration testing of the major subsystems. <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> Demonstrate prototype in a laboratory environment. Conduct analysis of subsystem alternatives. Begin planning for an at-sea demonstration. Complete interface control document. 		18.207	-	18.000
<p>Title: Third Eye</p> <p>Description: Third Eye is a data architecture that leverages existing and emerging sensors to provide real-time tracking and targeting for multi-Service weapon systems. This project is currently funded within the Advanced Innovative Analysis and Concepts Program Element 0603289D8Z and will transition to the Advanced Innovative Technologies Program Element 0604250D8Z in FY 2017.</p> <p>FY 2017 Plans:</p> <ul style="list-style-type: none"> Conduct four spirals of targeting demonstrations. Complete low latency fusion algorithms development. Finalize analysis of data for improved data fusion. Develop updates to Mission Planning for Weapons/Tactical Employment guides. Provide test results and analysis to Combatant Commands. <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> Deploy limited operational capability. 		-	33.810	25.400

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary Of Defense		Date: May 2017		
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
<ul style="list-style-type: none"> Continue to update capability based on operator feedback. 				
<p>Title: Vanguard</p> <p>Description: SCO will provide a capability to detect and track troop and motorized unit movements across the battle field. Due to the classified nature of this project, specific applications and detailed plans are available at a higher classification level.</p> <p>FY 2018 Plans:</p> <ul style="list-style-type: none"> Initiate sensor configuration design and analysis. Develop comprehensive program management plan and integrated master schedule. Examine scalability and component performance characterizations. Examine sensor and targeting prototype capabilities. Validate suitability of proposed design. 		-	-	8.500
Accomplishments/Planned Programs Subtotals		459.966	846.470	1,175.832
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				
OTHER adjustments provided for FY 2017 and FY 2018. The amended budget request for an additional of \$1.600 million is required in FY 2017 and an additional \$7.000 million in FY 2018 to address emergency warfighting readiness requirements.				
D. Acquisition Strategy				
N/A				
E. Performance Metrics				
Performance metrics are specific to each of the SCO efforts funded under the Advanced Innovative Technologies Program Element. All of which include measures identified in the management approach, Statement of Work (SOW) and Period of Performance (POP). In addition, completions and successes are monitored against schedules and deliverables stated in the initiative's management approach. Due to the nature of these projects, specific applications and detailed plans are available at a higher classification level.				

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Alternative Strike	Various	VARIOUS - TBD : VARIOUS - TBD	-	-		-		25.260	Nov 2017	-		25.260	Continuing	Continuing	-
Breaker	C/TBD	VARIOUS - TBD : VARIOUS - TBD	-	-		-		15.000	Oct 2017	-		15.000	Continuing	Continuing	-
Command and Control of the Information Environment (C2IE)	C/Various	VARIOUS - TBD : VARIOUS - TBD	-	-		-		8.570	Oct 2017	-		8.570	Continuing	Continuing	-
Contender	Various	Naval Undersea Warfare Center - Newport, Naval Surface Warfare Center - Indian Head Division, Naval Sea Systems Command - PMS404 : Newport, RI / Indian Head, MD / Navy Yard, DC	-	-		-		9.600	Oct 2017	-		9.600	Continuing	Continuing	-
Hypervelocity Gun Weapon System (HGWS)	IA	Sandia : NM	5.394	4.687	Oct 2015	4.496		-		-		-	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	SOSSEC : NJ	68.128	16.330	Oct 2015	7.284		1.000	Dec 2017	-		1.000	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	DOTC : NJ	41.609	42.812	Oct 2015	26.180		15.000	Nov 2017	-		15.000	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	PEO IWS 7.0 : VA	16.849	26.163	Oct 2015	87.392		-		-		-	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	MDA / GTRI : AL, GA	24.676	8.000		50.856		20.000	Oct 2017	-		20.000	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	MDA / Parsons : AL, VA	17.576	52.509		1.575		2.550	Oct 2017	-		2.550	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	US ARMY : Various	14.421	17.250	Oct 2015	42.093		-		-		-	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	Defense Microelectronics	32.103	1.430	Oct 2015	24.838		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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Product Development (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
		Activity (DMEA) : Various													
Hypervelocity Gun Weapon System (HGWS)	MIPR	Air Force Life Management Center (AFLCMC) - Hanscom AFB, Massachusetts Institute of Technology / Lincoln Laboratory (MIT / LL) : MA	0.502	53.475	Oct 2015	1.356		1.500	Oct 2017	-		1.500	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	NAVSEA , Johns Hopkins Advanced Research Laboratory : DC, MD	-	9.364		-		-		-		-	-	-	-
Perdix Gen 7	C/TBD	Various - TBD : Various - TBD	-	-		1.600		7.000		-		7.000	Continuing	Continuing	-
Sea Dragon	C/TBD	VARIOUS TBD : VARIOUS TBD	-	-		-		40.000	Oct 2017	-		40.000	Continuing	Continuing	-
Sea Stalker	Various	VARIOUS - TBD : VARIOUS - TBD	-	-		-		7.000	Oct 2017	-		7.000	Continuing	Continuing	-
Strike-Ex	Various	U. S. Army Aviation and Missile Research Development and Engineering Center (AMRDEC) & Naval Surface Warfare Center, Carderock Division (NSWCCD) : AL & MD	-	-		-		14.000	Nov 2017	-		14.000	Continuing	Continuing	-
TEM II	C/TBD	VARIOUS - TBD : VARIOUS - TBD	-	-		-		15.500	Oct 2017	-		15.500	Continuing	Continuing	-
Subtotal			221.258	232.020		247.670		181.980		-		181.980	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Advanced Navigation	MIPR	MIT/LL : MA	1.600	-		-		-		-		-	-	-	-
Advanced Navigation Software Development	MIPR	MIT/LL : MA	1.400	-		-		-		-		-	-	-	-
Advanced Navigation	MIPR	AFLMC : FL	12.909	16.359	Oct 2015	3.350		-		-		-	-	-	-
Air Launched Area Effects	Various	VARIOUS - TBD : VARIOUS - TBD	-	-		-		17.782	Nov 2017	-		17.782	Continuing	Continuing	-
Alternative Strike	MIPR	John Hopkins University / Advanced Physics Lab) (JHU/APL) : MD	-	-		198.030		50.000	Nov 2017	-		50.000	-	-	-
Alternative Strike	Various	VARIOUS - TBD : VARIOUS - TBD	-	-		-		100.000	Oct 2017	-		100.000	Continuing	Continuing	-
Alternative Strike	Option/ FFP	Ball Aerospace and Technologies Corporation : Boulder, CO	-	-		-		0.500	Oct 2017	-		0.500	Continuing	Continuing	-
Assured Tactical C2	MIPR	ONR, NRL, AFRL, ARL : DMV	29.280	14.473	Oct 2015	-		-		-		-	-	-	-
AVATAR	Option/ FFP	Infocitex : Dayton, OH	-	-		-		13.000	Nov 2017	-		13.000	Continuing	Continuing	-
AVATAR	Option/ FFP	Georgia Tech Research Institute : Smyrna, GA	-	-		-		12.000	Nov 2017	-		12.000	Continuing	Continuing	-
Breaker	MIPR	U.S. Army Aviation and Missile Research : Redstone Arsenal, AL	-	-		-		15.000	Nov 2017	-		15.000	Continuing	Continuing	-
Command and Control of the Information Environment	MIPR	Army Research Laboratory : MD	-	-		31.880		-		-		-	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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
Command and Control of the Information Environment (C2IE)	Various	VARIOUS - TBD : VARIOUS - TBD	-	-		-		28.000	Oct 2017	-		28.000	Continuing	Continuing	-
Contender	Various	Naval Undersea Warfare Center - Newport, Naval Surface Warfare Center - Indian Head Division, Naval Sea Systems Command - PMS404 : Newport, RI / Indian Head, MD / Navy Yard, DC	-	-		-		60.000	Oct 2017	-		60.000	Continuing	Continuing	-
Enhanced Munitions	MIPR	MSIC, MDA : AL, VA	10.449	23.474	Oct 2015	41.960		29.970	Oct 2017	-		29.970	-	-	-
Ghost Fleet	MIPR	SPAWAR System Center Pacific : San Diego, CA	-	-		-		0.300	Nov 2017	-		0.300	Continuing	Continuing	-
Ghost Fleet	MIPR	Naval Surface Warfare Center : Bethesda, MD	-	-		-		2.000	Nov 2017	-		2.000	Continuing	Continuing	-
Ghost Fleet	C/Various	TBD : VARIOUS TBD	-	-		-		203.700	Nov 2017	-		203.700	Continuing	Continuing	-
Hornets Nest	MIPR	Aviation and Missile Research, Development, and Engineering Center : Redstone Arsenal, AL	-	-		-		24.000	Jan 2019	-		24.000	Continuing	Continuing	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	SOSSEC : NJ	-	20.699		-		15.000	Oct 2017	-		15.000	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	Naval Surface Warfare Center Port Hueneme Division (NSWC PHD), WSMR : CA	-	13.053		-		10.000	Oct 2017	-		10.000	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Hypervelocity Gun Weapon System (HGWS)	MIPR	NSWCDD : Dahlgren, VA	-	4.315		-		2.000	Nov 2017	-		2.000	-	-	-
Hypervelocity Gun Weapon System (HGWS)	MIPR	Various : TBD	-	-		35.550		-		-		-	-	-	-
Intelligence, Surveillance, and Reconnaissance (ISR) Denial	MIPR	JHU/APL : MD	19.787	19.470	Oct 2015	-		-		-		-	-	-	-
LiTE Saber	C/TBD	VARIOUS TBD : VARIOUS TBD	-	-		-		64.000	Oct 2017	-		64.000	Continuing	Continuing	-
LiTE Saber	Option/ FFP	Johns Hopkins/ Applied Physics Lab (JHU/APL) : Laurel, MD	-	-		-		1.000	Oct 2017	-		1.000	Continuing	Continuing	-
MAVEN	C/TBD	VARIOUS - TBD : VARIOUS - TBD	-	-		-		16.000	Nov 2017	-		16.000	Continuing	Continuing	-
Motley Crew	Option/ FFP	Johns Hopkins/ Applied Physics Lab (JHU/APL) : Laurel, MD	-	-		-		2.000	Nov 2017	-		2.000	Continuing	Continuing	-
Motley Crew	C/TBD	VARIOUS TBD : VARIOUS TBD	-	-		-		30.000	Oct 2017	-		30.000	Continuing	Continuing	-
Sea Dragon	MIPR	IWS, NAVSEA, NUWC, SPAWAR, NAVAIR & JHU/ APL : Various	-	81.000	Oct 2015	70.760		-		-		-	-	-	-
Sea Dragon	MIPR	Naval Sea Systems Command (073) : Washington Navy Yard DC	-	-		-		20.000	Oct 2017	-		20.000	Continuing	Continuing	-
Sea Dragon	Option/ FFP	John Hopkins University/ Applied Research Laboratory (JHU/APL) : Laurel, MD	-	-		-		2.000	Oct 2017	-		2.000	Continuing	Continuing	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Sea Dragon	Option/FFP	SEACORP : Middleton, RI	-	-		-		1.000	Oct 2017	-		1.000	Continuing	Continuing	-
Sea Dragon	C/TBD	VARIOUS TBD : VARIOUS TBD	-	-		-		100.000		-		100.000	Continuing	Continuing	-
Sea Mob	MIPR	NSWC/CCD, NSWC/PCD, JHU/APL, PSU/ARL, JPL : Various	-	19.985	Oct 2015	18.120		10.160	Nov 2017	-		10.160	-	-	-
Sea Stalker	MIPR	Various : TBD	-	-		17.390		20.240	Oct 2017	-		20.240	-	-	-
Storm System	Option/FFP	Pacific Northwest National Laboratory : Richland, WA	-	-		-		7.000	Oct 2017	-		7.000	Continuing	Continuing	-
Strike-Ex	MIPR	U. S. Army Aviation and Missile Research Development and Engineering Center (AMRDEC) & Naval Surface Warfare Center, Carderock Division (NSWCCD) : AL & MD	-	-		121.720		100.800	Oct 2017	-		100.800	-	-	-
TEM II	MIPR	Naval Research Laboratory : Washington, DC	-	-		-		0.500	Oct 2017	-		0.500	Continuing	Continuing	-
TEM II	MIPR	Military Sea lift Command - USNS : NORFOLK, VA	-	-		-		2.000	Oct 2017	-		2.000	Continuing	Continuing	-
Third Eye	MIPR	Naval Systems Management Activity (NSMA), Naval Research Laboratory - NRL : DC, MA, VA	-	-		33.810		25.400	Nov 2017	-		25.400	-	-	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Office of the Secretary Of Defense	Date: May 2017
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Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / Advanced Innovative Technologies	Project (Number/Name) P250 / Advanced Innovative Technologies
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Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Unmanned Aerial Vehicle Payloads	MIPR	MIT/LL, SSC Pacific, NAWCWD : Various	-	15.118	Oct 2015	26.230		-		-		-	-	-	-
Vanguard	Various	VARIOUS - TBD : VARIOUS - TBD	-	-		-		8.500	Nov 2017	-		8.500	Continuing	Continuing	-
Subtotal			75.425	227.946		598.800		993.852		-		993.852	-	-	-
Project Cost Totals			296.683	459.966		846.470		1,175.832		-		1,175.832	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Office of the Secretary Of Defense		Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>

	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
<i>BREAKER Product Development</i>																												
Product Development																												
<i>C2IE Platform Integration</i>																												
Platform Integration																												
<i>C2IE Transition Management</i>																												
Transition Management																												
<i>Contender Product Development</i>																												
Product Development																												
<i>HGWS - Product Development</i>																												
Product Development																												
<i>Perdix Gen 7 - Product Development</i>																												
Product Development																												
<i>Sea Dragon - Product Development</i>																												
Product Development																												
<i>Strike X - Product Development</i>																												
Product Development																												
<i>TEM II - Product Development</i>																												
Product Development																												
<i>Advanced Navigation Test & Evaluation</i>																												
Test & Evaluation																												
<i>Air Launched Area Effects - T & E</i>																												
Test & Evaluation																												
<i>Alternative Strike - T & E</i>																												
Test & Evaluation																												

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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
AVATAR - T & E																												
Test & Evaluation																												
BREAKER - T & E																												
Test & Evaluation																												
C2IE - T & E																												
Test & Evaluation																												
Contender - T & E																												
Test & Evaluation																												
Enhanced Munitions - T & E																												
Test & Evaluation																												
Ghost Fleet - T & E																												
Test & Evaluation																												
Hornet's Nest - T & E																												
Test & Evaluation																												
HGWS - T & E																												
Test & Evaluation																												
LITE Saber - T & E																												
Test & Evaluation																												
MAVEN - T & E																												
Test & Evaluation																												
Motley Crew - T & E																												
Test & Evaluation																												
Sea Dragon - T & E																												
Test & Evaluation																												
Sea Mob - T & E																												

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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	FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022			
	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

Test & Evaluation																												
Sea Stalker - T & E																												
Test & Evaluation																												
Storm System - T & E																												
Test & Evaluation																												
Strike X - T & E																												
Test & Evaluation																												
TEM II - T & E																												
Test & Evaluation																												
Third Eye - T & E																												
Test & Evaluation																												
Vanguard - T & E																												
Test & Evaluation																												

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Office of the Secretary Of Defense		Date: May 2017
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>BREAKER Product Development</i>				
Product Development	1	2018	4	2020
<i>C2IE Platform Integration</i>				
Platform Integration	2	2017	4	2018
<i>C2IE Transition Management</i>				
Transition Management	4	2018	4	2019
<i>Contender Product Development</i>				
Product Development	1	2017	4	2020
<i>HGWS - Product Development</i>				
Product Development	1	2017	4	2018
<i>Perdix Gen 7 - Product Development</i>				
Product Development	4	2017	4	2020
<i>Sea Dragon - Product Development</i>				
Product Development	1	2017	4	2017
<i>Strike X - Product Development</i>				
Product Development	1	2017	4	2019
<i>TEM II - Product Development</i>				
Product Development	1	2017	4	2020
<i>Advanced Navigation Test & Evaluation</i>				
Test & Evaluation	1	2017	4	2017
<i>Air Launched Area Effects - T & E</i>				
Test & Evaluation	1	2018	4	2020

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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Alternative Strike - T & E				
Test & Evaluation	1	2017	4	2020
AVATAR - T & E				
Test & Evaluation	1	2018	4	2022
BREAKER - T & E				
Test & Evaluation	4	2017	3	2019
C2IE - T & E				
Test & Evaluation	4	2017	4	2018
Contender - T & E				
Test & Evaluation	1	2017	4	2020
Enhanced Munitions - T & E				
Test & Evaluation	1	2017	3	2018
Ghost Fleet - T & E				
Test & Evaluation	1	2018	4	2020
Hornet's Nest - T & E				
Test & Evaluation	1	2018	2	2020
HGWS - T & E				
Test & Evaluation	1	2017	3	2019
LiTE Saber - T & E				
Test & Evaluation	1	2017	3	2020
MAVEN - T & E				
Test & Evaluation	1	2018	3	2020
Motley Crew - T & E				
Test & Evaluation	1	2018	3	2020
Sea Dragon - T & E				

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Office of the Secretary Of Defense **Date:** May 2017

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604250D8Z / <i>Advanced Innovative Technologies</i>	Project (Number/Name) P250 / <i>Advanced Innovative Technologies</i>
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Test & Evaluation	1	2017	4	2017
Sea Mob - T & E				
Test & Evaluation	1	2017	4	2018
Sea Stalker - T & E				
Test & Evaluation	1	2017	3	2019
Storm System - T & E				
Test & Evaluation	2	2017	3	2020
Strike X - T & E				
Test & Evaluation	2	2017	3	2019
TEM II - T & E				
Test & Evaluation	2	2017	3	2020
Third Eye - T & E				
Test & Evaluation	2	2017	3	2019
Vanguard - T & E				
Test & Evaluation	1	2018	3	2020