Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Office of Secretary Of Defense

APPROPRIATION/BUDGET ACTIVITY R-1 ITE

0400: Research, Development, Test & Evaluation, Defense-Wide

BA 3: Advanced Technology Development (ATD)

R-1 ITEM NOMENCLATURE

PE 0603826D8Z: Quick Reactions Special Projects (QRSP)

DATE: April 2013

		,										
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	63.029	107.002	78.532	-	78.532	80.583	94.383	103.338	91.225	Continuing	Continuing
P826: Quick Reaction Fund	-	15.044	37.902	26.728	-	26.728	28.189	29.400	32.496	28.396	Continuing	Continuing
P828: Rapid Reaction Fund	-	30.111	55.054	47.956	-	47.956	48.421	60.890	66.628	58.479	Continuing	Continuing
P830: <i>RDT&E Architecture and Integration</i>	-	16.164	10.316	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
P831: Joint Rapid Acquisition Cell Support	-	1.710	1.760	1.819	-	1.819	1.873	1.930	1.987	2.047	Continuing	Continuing
P833: Strategic Multi-Layered Assessment (SMA) Support	-	0.000	1.970	2.029	-	2.029	2.100	2.163	2.227	2.303	Continuing	Continuing

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

The Quick Reactions Special Projects (QRSP) Program supports five separate projects that provide rapid funding to expedite development and transition of new technologies to the warfighter. These projects are: 1) Quick Reaction Fund (QRF); 2) Rapid Reaction Fund (RRF); 3) Research, Development, Test, and Evaluation (RDT&E) Architecture and Integration (RAI) program; 4) Joint Rapid Acquisition Cell (JRAC) support; and 5) Strategic Multi-Layered Assessment (SMA) support. QRSP provides the flexibility to respond to emergent Department of Defense (DoD) issues and address technology surprises and needs within the years of execution outside the two year budget cycle.

The QRF Program objectives are to respond to emergent conventional warfare needs during the execution years that take advantage of breakthroughs in rapidly evolving technologies. The QRF is executed by the Rapid Reaction Technology Office. Examples of the types of projects that are envisioned include: force protection projects to enhance anti-access and area denial capabilities, undersea offensive capabilities and broad electronic warfare capabilities. The QRF focuses on maturing technologies critically needed for the Combatant Commands. QRF projects are typically 12 months in duration and produce prototypes with new capabilities for demonstration and evaluation.

The RRF objectives are to leverage the DoD science and technology (S&T) base and those of the other federal departments, and to provide feedback to the S&T community to guide long term developmental strategies. The RRF is executed by the Rapid Reaction Technology Office (RRTO). RRTO works to anticipate adversaries' exploitation of new technologies and advanced capabilities and develop counters to those capabilities. Additionally, RTTO works to leverage technology developed outside of the DoD in the commercial sector, academia, international arenas, and small, non-traditional businesses to expose them to specific DoD needs areas as identified by Combatant Commanders, Military Service organizations, other Defense agencies and interagency organizations. The typical length of an RTTO

^{##} The FY 2014 OCO Request will be submitted at a later date

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0400: Research, Development, Test & Evaluation, Defense-Wide

PE 0603826D8Z: Quick Reactions Special Projects (QRSP)

DATE: April 2013

BA 3: Advanced Technology Development (ATD)

APPROPRIATION/BUDGET ACTIVITY

program falls within a 6 to 12 month range in order to more effectively aid the warfighter. The RRF consistently exceeds the transition objective of 30 percent for demonstration programs (DoD Strategic Objective 4-3).

The RDT&E Architecture and Integration (RAI) program objectives are to enhance and expand rapid technology architecture and assessment capabilities in general; and, to enhance the Joint Experimentation Range Complex (JERC), Stiletto maritime test platform and the Thunderstorm ISR exercise series. The JERC provides a venue to evaluate a wide range of new technologies in a dessert environment. The requested funding will also support Stiletto, a maritime test vessel that routinely hosts numerous new technologies for evaluation in a maritime environment. Thunderstorm, an ongoing Intelligence, Surveillance, and Reconnaissance (ISR) exercise series, is also supported by this budget line. Thunderstorm brings emerging ISR technologies together in a common architecture for exercise and operational demonstration.

The JRAC Program objectives focus on responding to Joint Urgent Operational Needs (JUONS) that have been submitted by Combatant Commanders and validated by the Joint Staff. In addition, the JRAC's objectives are to manage the delivery of capabilities as requested by the Combatant Command (COCOM) in a time frame acceptable to the COCOM. Efforts, in most instances, are conducted outside of the processes described in the Defense Acquisition System in DoD Directive 5000.1 and utilize contingency and other rapid acquisition authorities.

The SMA cell program objective is to support all Combatant Commands (COCOMs), Joint Force Commanders, and other government agencies by assessing complex operational/technical challenges which require multi-agency and multi-disciplinary approaches. With input from across the United States Government, academia, and the private sector, the SMA cell develops solution options to COCOM generated challenging problems and informs the command's senior leadership. Each SMA cell effort is initiated at the request of COCOM senior leadership. Priorities for SMA Cell programs are set by the Joint Staff Deputy for Operations. Products are typically produced within six months and directly contribute to the decision-making process of the COCOM's senior leaders.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	58.970	107.002	88.155	-	88.155
Current President's Budget	63.029	107.002	78.532	-	78.532
Total Adjustments	4.059	0.000	-9.623	-	-9.623
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	4.077	-			
 SBIR/STTR Transfer 	-	-			
 Baseline Adjustments 	-	-	-9.623	-	-9.623
Other Adjustments	-0.018	-	-	-	-

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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Office of Secre	etary Of Defense	DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions	s Special Projects (QRSP)
Change Summary Explanation FY 2012: Increase of \$4.059 million is due to a reprogramming of adjustments of -\$1.841 million from SBIR/STTR and other reprogramming of adjustments of -\$1.841 million from SBIR/STTR and other reprogramming of the second seco		
FY 2014: Decrease of \$9.623 million is a baseline adjustment refle	ective of DoD priorities and requirements).

Exhibit R-2A, RDT&E Project Just	retary Of D	Defense				DATE: April 2013							
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide						PE 0603826D8Z: Quick Reactions Special F				P826: Quick Reaction Fund			
BA 3: Advanced Technology Devel	lopment (A	TD)			Projects (QRSP)								
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
P826: Quick Reaction Fund	-	15.044	37.902	26.728	-	26.728	28.189	29.400	32.496	28.396	Continuing	Continuing	

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

The Quick Reaction Special Projects (QSRP) Program supports five separate projects that provide rapid funding to expedite development and transition of new technologies to the warfighter. The QSRP Program provides the flexibility to respond to emergent DoD issues and addresses technology surprises and needs that may arise outside the two year budget cycle.

The Quick Reaction Fund (QRF) Program provides the Services, Components, Combatant Commands (COCOMs), and force providers opportunities to capitalize on technologies that are at a relatively high Technology Readiness Level (TRL) and to rapidly field-test promising new operational prototypes that can have immediate impact on military operations. QRF initiatives are limited to those that will deliver a military operational prototype application within twelve months of being funded.

The QRF Program also focuses on projects that have the potential to address conventional, disruptive, catastrophic, and irregular threats. More specifically, initiatives that address the following interest areas: Anti-Access and Area Denial; Base Protection; Electromagnetic Bandwidth and Spectrum Enhancement; Persistent Intelligence, Surveillance, and Reconnaissance (ISR); Newly Emerging National Threats; Directed Energy Capabilities; Low-Cost Precision Engagement Capabilities; Operational Field Demonstrations; Unmanned and Robotics Systems; Over the Horizon-Radar Technologies; and Counter-Electronic Warfare Technologies.

In FY 2013 and FY 2014, the QRF Program will continue to identify and fund new projects that respond to critical operational needs and new technology opportunities. Current and future efforts that show significant effectiveness can be leveraged by additional investments in order to accelerate transition to operational forces.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Matsu	4.229	0.000	0.000
Description: Project Matsu was an open source software project that uses data mining frameworks and related applications for processing very large amounts of hyper-spectral data, and other large Intelligence, Surveillance and Reconnaissance (ISR) data sets. Matsu utilized unique analytics to discover changes and other significant features in cubes of hyper-spectral data. Quick detection of changes in hyper-spectral data improves situational awareness, which can protect the warfighter. A typical architecture for processing hyper-spectral data today uses a file system to store the data, a relational database to store the metadata, and custom code to process the data. The Matsu system is based upon open source software architecture that can efficiently process very large amounts of data.			
FY 2012 Accomplishments:			

^{***} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secre	stary Of Defense	DATE	: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	PROJECT P826: Quick Reaction Fund			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014	
Matsu resulted in the development of an open source system that can data as well as other large ISR data sets efficiently. This enabled remdeployed logistics and manpower footprint. Matsu worked with the Nattechnology to the Services.	ote data processing, which in turn reduces the forward	al			
Title: Home on Global Positioning System (GPS) Jammer Study		1.52	0.000	0.000	
Description: This effort supported the development of GPS Jammer has inventoried weapon systems to identify those most acceptable for most factors used to determine weapon feasibility included integration compoweapon delivery platforms and capability delivered to the warfighter. Finterface integration requirements for the selected platform(s).	dification into a Home on GPS Jammer capable system olexity/cost, weapon cost, weapon employment concept	•			
FY 2012 Accomplishments: The Home on GPS Jammer project identified the most appropriate car inventory suitable for modification to achieve a Home on GPS Jammer required to enable direct attack of GPS jammers and provided an engi	r capability, identified the interface and modifications				
Title: CAESAR		3.44	0.000	0.000	
Description: The CAESAR project developed and demonstrated a necurrent collection of these signals was lacking and CAESAR provided CAESAR is structured to support DoD customers through system charthis project are classified.	a cost-effective, scalable solution. The data provided	ру			
FY 2012 Accomplishments: CAESAR achieved its project objectives on schedule and capabilities oby operational users. Details are classified.	developed during this project were delivered and accep	ted			
Title: Small Boat Radar		2.73	0.000	0.000	
Description: The Small Boat Radar project developed algorithms that resulting capability will fill a COCOM's need. Details are classified.	were incorporated in a commercial radar system. The				
FY 2012 Accomplishments: The project launched in late FY 2012.					
FY 2013 Plans:					

PE 0603826D8Z: Quick Reactions Special Projects (QRSP) Office of Secretary Of Defense

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secreta	ary Of Defense		DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJI	ECT		
0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	P826:	Quick Reacti	on Fund	
B. Accomplishments/Planned Programs (\$ in Millions)		Γ	FY 2012	FY 2013	FY 2014
The prototype system will be fielded for an operational evaluation. The prototype system will be fielded for an operational evaluation.	project will be completed later in FY 2013.				
Title: Positioning, Navigating, and Timing (PNT) Demonstration in Triple	e Canopy		3.112	0.000	0.000
Description: The Positioning, Navigating, and Timing (PNT) Demonstra iGPS in triple canopy and contested environments.	ation in Triple Canopy project executed a demonstrat	ion of			
FY 2012 Accomplishments: The PNT Demo executed field testing and utility evaluations of High Inte Modules in operational-like testing with the Marines. The project will con		ore			
FY 2013 Plans: Tests along with pre-acquisition risk reduction activities planned will ena of Record.	able transition of the iGPS program to an ACAT III Pro	ogram			
FY 2014 Plans: ACAT III Program of Record will begin.					
Title: Over the Horizon Radar (OTHR) Scan			0.000	3.751	0.000
Description: The Over the Horizon Radar (OTHR) Scan project develope the wide area sensing capability of adversary detection, tracking and target Naval forces. A self-contained small deployable prototype was used to verify the contained to the contained small deployable prototype was used to verify the contained to the contained	geting sensors that jeopardize the free movement of				
FY 2013 Plans: OTHR Scan will be tested in a laboratory and limited operational settings and maritime targets. This effort will be completed later this year.	s. Data collection will focus on the protection of sma	ll air			
Title: Anti-Access/Area Denial			0.000	3.750	5.183
Description: In FY 2013 and FY 2014, the focus areas will be in project anticipation of emerging needs to mitigate losses due to the effect of Ele Rapid Reaction Technology Office (RRTO) will ensure the QRF efforts a and spectrum enhancement efforts and will seek to leverage other such	ectronic Warfare (EW) in the air-to-air engagement. Tare not duplicative with other electromagnetic bandwi				
FY 2013 Plans: Anti-Access/Area Denial investment decisions during the budget year wi and other government organization requirements and as new threats em and coordination with organizations throughout DoD, Federally Funded I	nerge or new opportunities are presented. Research				

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secreta	ry Of Defense		DATE: /	April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	PROJECT P826: Quici	PROJECT P826: Quick Reaction Fund			
B. Accomplishments/Planned Programs (\$ in Millions)		FY	2012	FY 2013	FY 2014	
government agencies, industry and academia will help identify areas crit technological enhancement efforts. Anticipate funding seven projects.	ical to developing future anti-access/area denial					
FY 2014 Plans:						
As emerging requirements and threats within the Anti-Access/Area Deni decisions will be resourced to respond to COCOM, Services and other g funding nine projects.						
Title: Electromagnetic Bandwidth and Spectrum Enhancement			0.000	11.798	5.182	
Description: In anticipation of emerging needs, the focus areas for FY 2 prime power, weight and space of radio frequency (RF) components, an In addition, projects will include novel bandwidth compression technique reduction technologies. The Rapid Reaction Technology Office (RRTO) Electromagnetic Bandwidth and Spectrum Enhancement efforts and will	d increase level of integration of related components s with emphasis on on-board data processing and si will ensure the QRF efforts are not duplicative with or	ze				
FY 2013 Plans: Electromagnetic Bandwidth and Spectrum Enhancement investment dec Service and other government organization requirements and as new the Research and coordination with organizations throughout DoD, FFRDCs help identify areas critical to developing future Electromagnetic Bandwid funding of six projects.	reats emerge or new opportunities are presented. s, other government agencies, industry and academic	a will				
FY 2014 Plans: As threats and opportunities within the Electromagnetic and Spectrum E investment decisions will be resourced to respond to COCOM, Services, Anticipate the funding of three projects.						
Title: Undersea Offensive Capabilities			0.000	9.798	5.181	
Description: In anticipation of emerging needs, the focus areas for FY 2 delivery systems to meet critical operation requirements identified by CO will ensure the QRF efforts are not duplicative with other Undersea Offer efforts.	OCOM. The Rapid Reaction Technology Office (RTT	O)				
FY 2013 Plans: Undersea Offensive Capabilities investment decisions during the budget government organization requirements and as new threats emerge or ne						

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secreta	ry Of Defense	DATE:	April 2013			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	Research, Development, Test & Evaluation, Defense-Wide PE 0603826D8Z: Quick Reactions Special P826: Quick Reaction					
B. Accomplishments/Planned Programs (\$ in Millions) coordination with organizations throughout DoD, FFRDCs, other governareas critical to developing future Undersea Offensive Capability efforts.	• •	FY 2012 fy	FY 2013	FY 2014		
FY 2014 Plans: As threats and opportunities within Undersea Offensive Capability focal will be resourced to respond to COCOM, Services, and other government three projects.						
Title: Operational Field Demonstrations		0.000	8.805	5.182		
Description: In anticipation of emerging needs, the focus areas for FY 2 demonstrations of technologies, and fully integrated systems in direct re on demonstration of conventional technologies with transition within a per Technology Office (RTTO) will ensure the QRF efforts are not duplicative will seek to leverage other such efforts.	sponse to critical operational needs. Emphasis will be eriod of no more than one year. The Rapid Reaction	e				
FY 2013 Plans: Operational Field Demonstrations investment decisions during the budge government organization requirements and as new threats emerge or ne coordination with organizations throughout DoD, FFRDCs, other governareas critical to Operational Field Demonstrations efforts. Anticipate the	ew opportunities are presented. Research and ment agencies, industry and academia will help identi	fy				
FY 2014 Plans: As emerging requirements, threats and opportunities within the Operation programmatic and investment decisions will be resourced to respond to Anticipate the funding of three projects.		ns.				
Title: Program Protection of Critical Missions		0.000	0.000	6.000		
Description: The Department of Defense (DoD) has developed a Truste for the development of capabilities, the use of proven mitigation technique processes, and creation of needed technology. Current program protection target individual Major Defense Acquisition Programs of Record (POR). operational mission focus to identify and assure critical DoD missions, we legacy systems and infrastructure.	ues and tools, the ongoing refinement of risk manager ion and supply chain risk management efforts primari However, this approach currently lacks a strategic or	ment y				

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary Of D	DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603826D8Z: Quick Reactions Special	P826: Quid	ck Reaction Fund
BA 3: Advanced Technology Development (ATD)	Projects (QRSP)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Globalization of Information and Communications Technology (ICT) markets creates unprecedented opportunities for			
sophisticated adversaries to defeat not only individual systems, but DoD capabilities through supply chain exploits or other			
malicious tampering. Defense Planning Guidance, Defense Science Board Reports, and recent deliberations on Nuclear Command, Control and Communications have all acknowledged the problem, and identified the requirement to protect critical			
missions from cyber and supply chain vulnerabilities.			
This Quick Reaction Fund effort provides funding for the Department to pilot initial activities to develop methodologies to assess			
critical mission vulnerability to cyber or supply chain exploit, and assess the utility of available tools, processes and models in			
conducting such a cross cutting vulnerability assessment. This project will seek to demonstrate the application or expansion			
of current program protection and supply chain methodologies to a mission-level assessment, focusing on selected exemplar missions. This project will result in an identified mission vulnerability assessment method and available tools, as well as critical			
gaps in tools in order to inform future development and application of this type of assessment as a standard practice.			
FY 2014 Plans:			
This effort will provide support to Program Protection Planning of Critical Missions through analysis of critical missions to			
determine critical system dependencies, analysis of critical systems and their linkages to determine vulnerabilities that lead to			
mission degradation, identification of techniques and toolsets to assess and mitigate vulnerabilities, and identification of gaps			
where techniques and tools are needed.			
Accomplishments/Planned Programs Subtotals	15.044	37.902	26.728

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

In FY 2014, generic performance metrics applicable to the Quick Reaction Fund (QRF) includes attainment of DoD Strategic Objective 3.5.2D. The title of this objective is "Maintain a strong technical foundation within the Department's Science and Technology (S&T) program" and the metric for this objective is to transition 40 percent of completing demonstrations per year. Each project has a period of performance of approximately 12 months. All QRF projects are monitored for schedule deviation, transition outcome, reporting requirements and deliverables such as test reports, studies, components, and equipment. For projects that were completed in FY 2012, the QRF achieved a transition rate of approximately 88 percent.

Exhibit R-2A, RDT&E Project Ju	retary Of D	Defense				DATE: April 2013							
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE				PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide						26D8Z: Quid	k Reaction	s Special	P828: Rapid Reaction Fund				
BA 3: Advanced Technology Deve	elopment (A	ITD)			Projects (QRSP)								
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To	Total Cost	
P828: Rapid Reaction Fund	-	30.111				47.956					•	Continuing	

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

The Quick Reaction Special Projects (QSRP) Program supports five separate projects that provide rapid funding to expedite development and transition of new technologies to the warfighter. The QSRP Program provides the flexibility to respond to emergent DoD issues and addresses technology surprises and needs that may arise outside the two-year budget cycle.

The Rapid Reaction Fund (RRF) is fully executed through the Rapid Reaction Technology Office (RRTO). The RRTO was established to provide rapid response to enhance operations in Iraq, Afghanistan and other theaters; and, to accelerate the transition of high-potential science and technology (S&T) projects into operationally useful products in the execution years. The RRTO leverages the Department of Defense (DoD) S&T base and those of the other Federal Departments; stimulates interagency coordination and cooperation; accelerates the fielding of capabilities and concepts to counter emerging threats; and, provides feedback to the S&T community to guide long term developmental strategies. With projects supporting each Combatant Command and with a global perspective, the RRTO anticipates adversaries' exploitation of technology, including available and advanced commercial capabilities.

In prior years, RRTO has explored methods and approaches of persistent surveillance stimulation for counter-insurgency; developed alternate power sources for sensors and systems; expanded human, social and cultural knowledge; increased small unit situational awareness; advanced the interface between law enforcement and military operations; developed biometrics and forensics capabilities; supported denied area operations; strategic multi-layer assessments; and, established an innovation outreach cell that is facilitating better interactions with small companies with emerging technologies that do not normally do business with the DoD.

In FY 2013 and FY 2014, RRTO will continue to explore new and emerging capabilities to support irregular warfare operations while working to support the Under Secretary of Defense (Acquisition Technology & Logistics) (USD (AT&L)), the Assistant Secretary of Defense (Research and Engineering) (ASD(R&E)) and the Deputy Assistant Secretary of Defense, Rapid Fielding (DASD RF) goals. With project selection occurring during the execution year, the RRTO's potential focus areas for FY 2013 and FY 2014 Rapid Reaction Technology Office projects include: Forward Operating Base (FOB) protection; persistent Intelligence, Surveillance, and Reconnaissance (ISR) architecture; ISR sensors; interface of law enforcement and military operations; biometrics and forensics S&T; autonomous operations; data processing, exploitation and dissemination (PED); cyber security; exploitation of new and emerging cell phone technologies; support to border patrol initiatives; counter proliferation initiatives; capabilities to exploit denied areas; strategic communications and multi-layer assessments; and, non-traditional approaches to leverage innovative businesses.

The typical length of a RRTO project falls within a 6 to 12 month range in order to more effectively respond to the Warfighter.

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary	DATI	: April 2013								
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PROJECT P828: Rapid Rea	action Fund								
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014						
Title: Multiple Projects Less Than One Million Dollars Each		26.4	3 0.000	0.000						
Description: The Rapid Reaction Fund completed and transitioned multing Autonomous Vehicles, Detection of Explosives and Weapons of Mass Desor of Off-the-Shelf Technology, Exploitation of Communications Technologies technology areas. These projects delivered prototypes for evaluation or a 2013 minor resource projects include: Three-dimensional (3D) Thermal Funderwater vehicle development), Exploiting Space-Based Assets, Alumi Radar (MISAR), SATCOM High Data Rate Demonstration, Accedo (Dopp Unmanned Aerial Vehicle (UAV) Testbed, Humanitarian Data Mining, Mo of vehicle tire pressure monitoring systems), Anvil (exploitation of cell phomanagement system), Enhanced Tactical High Frequency Exploitation (E System (SCUDDS), Just Doesn't Look Right (documentation of expertise bombers), Language Exploitation and Analysis from Dynamic Sources, U Visualization of Nuclear Proliferation, Heterogeneous Cooperative Unman phones), RealVision Eye Display (high-definition, three-dimensional displ. Byte (exfiltration of data from unmanned underwater vehicle), CyPhy (tett Dynamic Photoacoustic Spectroscopy, HARE (detection of trace explosive inflation system to enable operational vehicles to run with multiple puncture cost micro-UAV), Tertiary Proliferation Signatures, Anti-Swimmer (a distripant Android (biometric iris identification on android smartphones), High Temp Subsystem, Technology Solutions for Manufacturing Advanced Products, capable of being flown on a medium-sized UAV), Technology Assessmer Sensor Airborne Intelligence, Reconnaissance, and Surveillance, and Humanical Description and Surveillance, and Humanical Descriptions of the Surveillance of the Surveilla	ation FY ed lire lire livery e re ow- gen									
FY 2012 Accomplishments: The following projects were completed and transitioned to operational use Space-Based Assets, Aluminum Combustion, MISAR, ACCEDO, Arms V Data Mining, Mobility Applications, Railgun Study, TIDES, XCapture, ETH Exploitation and Analysis from Dynamic Sources, Undersea Technologies Proliferation, Heterogeneous Cooperative Unmanned Vehicles, CellRad, FMV-On-Target, Dynamic Photoacoustic Spectroscopy, HARE, Tire Ball, Swimmer, Iris on Android, High Temperature Carbon Nanotube Compositions.	erification and Control UAV Testbed, Humanitarian HEX, SCUDDS, Just Doesn't Look Right, Language is Course, Assessment and Visualization of Nuclear RealVision Eye Display, SHARC Byte, IBEAM, CyF Instant Eye, Tertiary Proliferation Signatures, Anti-	Phy,								

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secreta	ary Of Defense		DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	PROJE P828: <i>F</i>	CT Rapid Reacti	on Fund	
B. Accomplishments/Planned Programs (\$ in Millions) Manufacturing Advanced Products, TriBand SlimSAR, Multi-Sensor Airb Human-Propelled Mini-Submarine.	FY 2012	FY 2013	FY 2014		
Title: Tech Assessments			1.395	0.250	1.75
Description: The Joint Experimental Range Complex (JERC) is a remothat is designed to rapidly evaluate prototype technologies. These limite development of Intelligence, Surveillance, and Reconnaissance (ISR) to Since its establishment in late FY 2003, the Rapid Reaction Technology 275 systems at the JERC. This funding is utilized to provide assessment capabilities to the site.	ed proof-of-concept evaluations allow for integration a raining and Concept of Operation (CONOPS) develop y Office (RRTO) has sponsored evaluation of more th	and oment. an			
FY 2012 Accomplishments: Executed six two-weeks evaluation periods for interested industry and gin a realistic desert environment. Use of the results of these evaluations future enhanced capabilities and informed operational users of capabilities.	s has informed the development/procurement proces				
FY 2013 Plans: Conduct two two-weeks evaluation periods for interested industry and g in a realistic desert environment. Use the results of these evaluations to enhanced capabilities and to inform operational users of capabilities in order to the conduction of the					
FY 2014 Plans: Conduct six two-weeks evaluation periods for interested industry and go in a realistic desert environment. Use the results of these evaluations to enhanced capabilities and to inform operational users of capabilities in order.					
Title: South Asia (SA) Geo-Political Stability			2.303	2.000	2.10
Description: In FY 2012, SMA conducted an assessment on South Asi assessment of regional stability in SA, and included identifying both directinternal instability that allow safe haven for violent extremist organization directly assisted in decision making, as well as, crisis planning, involving					
FY 2012 Accomplishments: The SA Stability effort's sub-elements produced a Regional Risk Assess National Intelligence/National Intelligence Council strategic gaming effor a conflict escalation/de-escalation assessment. The effort also provided	rts with George Mason University Strategic Modeling	into			

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary C	Of Defense		DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	PROJEC P828: Ra	T apid React	ion Fund	
B. Accomplishments/Planned Programs (\$ in Millions)		F	Y 2012	FY 2013	FY 2014
Army Training and Doctrine Command and Private Industry, modeling effort report of the confluence of Violent Extremist Organizations (VEO) and crimic Energy National labs' vulnerability and risk assessments. Finally the effort constability. The reports have helped inform the U.S. Central Command, U.S decision making processes.	nal networks all of which fed into the Department converged on developing approaches to countering	of ng			
U.S. CENTCOM has requested a follow-on effort to the South Asia Assessm assessment of regional stability in SA and will identify both direct drivers of instability. Internal instability which allows for VEO safe havens that may spit The stability and instability factors in the assessment include: (1) Ethnic divand other sources of internal social, economic and governing instability that domestic and external factors driving regional actors – both state and non-simedia and shared narratives — that transfer instability within and across state (COCOM) planners in assessing strategic long-term and short-term regional sub-regional stability through various short-term excursions, a threat scenar examine long-term decline and will propose a multi-generational Security St payoff to the warfighter will be a detailed, classified multi-method assessme (e.g., academic, Subject Matter Expert, etc.) input not generally found in U.S.	interstate conflict as well as sources of internal ill-over into, and exacerbate interstate tensions. isions, recent anti-regime opposition movements may lead to state failures of various kinds; (2) Thate, (3) The contagion dynamics – including sociate borders. This effort will assist Combatant Comil stability. It will also assist the planners in assessio, and a conflagration scenario. This effort will a trategy Concept designed to avoid conflagration. Int of regional conditions combined with unclassifications.	ne al mand sing ilso The			
FY 2014 Plans: Continue to actively work with the COCOMs and the Joint Staff to identify chareas of DoD expertise. These problems will be in direct support of the COC terrorism; counter weapons of mass destruction (state and non-state); countand, individual state or national level deterrence studies.	COMs and may include areas such as: counter				
Title: Biometrics and Forensics Science and Technology Focus Area (FY 20	013 and FY2014 New Start Focal Area Plans)		0.000	5.000	5.000
Description: Focal area for FY 2013 and FY 2014 Biometrics and Forensic technology gaps that limit our ability to quickly and accurately identify anony assets either overseas or in the Homeland. Additionally, the biometrics and partners to attribute enemy activity to a specific individual; and, will operatio systems and technologies. Biometrics and Forensics projects will develop experience and forensic capabilities required by commanders and warfighter	mous individuals who threaten our physical and forensics projects will collaborate with interagent nally evaluate and test biometrics and forensics emerging technologies that support evolving identification.	virtual cy			
FY 2013 Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secreta	ry Of Defense	DATE:	April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special P828				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014	
The biometric portfolio will support gaps identified by commanders in the exploration of the use of emerging biometric modalities and collection of forensic portfolio will support gaps identified by commanders in the area accuracy of analysis of data, increasing the types of forensics data colledone in a field environment vice a laboratory environment. Projects will other U.S. Government Departments and Agencies to maximize collaborations.	biometric data from non-cooperative subjects. The s of reducing time to collect forensic data, improving cted and increasing the amount of analysis that can be selected after coordination throughout DoD and a	be			
FY 2014 Plans: The biometric portfolio will support gaps identified by commanders in the exploration of the use of emerging biometric modalities and collection of forensic portfolio will support gaps identified by commanders in the areas accuracy of analysis of data, increasing the types of forensics data collection in a field environment vice a laboratory environment. Projects will other U.S. Government Departments and Agencies to maximize collaborations.	biometric data from non-cooperative subjects. The s of reducing time to collect forensic data, improving cted and increasing the amount of analysis that can be selected after coordination throughout DoD and a	be			
Title: Commercial Product Vulnerabilities and Applications (FY 2013 and	0.000	6.439	5.30		
Description: Focal area for FY 2013 and FY 2014 Commercial Product the use of commercial-off-the-shelf products to address immediate operatechnological advances made by commercial industry which may have in vulnerabilities of readily available technology used by adversaries.	ational needs. This focus area identifies and exploits	3			
FY 2013 Plans: RRF investment decisions are made during the execution years in responsible organizations' requirements and as new threats emerge or new opporture organizations throughout DoD and other government agencies will help identify commercial product vulnerabilities and applications. Anticipate is	nities are presented. Research and coordination with identify areas critical to developing future capabilities				
FY 2014 Plans: RRF investment decisions are made during the execution years in responsible organizations' requirements and as new threats emerge or new opportuning organizations throughout DoD and other government agencies will help identify commercial product vulnerabilities and applications. Anticipate significant in the product of	nities are presented. Research and coordination with identify areas critical to developing future capabilities				
Title: Red Teaming in Support of Rapid Fielding (FY 2013 and FY 2014		0.000	6.669	5.51	

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary	Of Defense		DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	PROJECT P828: Rapid Reaction Fund			
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2012	FY 2013	FY 2014
Description: Focal area for FY 2013 and FY 2014 Red Teaming projects capabilities to be defeated by parties not intimately familiar with the technology of Federally Funded Research and Development Centers, academia, and systems can be gamed against in a distributed table top environment again will inform enhancement decisions and Concept of Operations developme	ology. RRTO will leverage the innovative capabiliting industry to develop a construct that current or futurinst traditional and non-traditional players. Delivera	re			
FY 2013 Plans: RRF investment decisions are made during the execution years in responsorganizations' requirements and as new threats emerge or new opportunit organizations throughout DoD and other government agencies will help ide by red teams. Deliverables will include recommendations on system oper countermeasures taken by the threat, and potential counter-countermeasured the system. Anticipate supporting five to six projects.	ties are presented. Research and coordination with entify key technologies and systems to be assesse rational employment, potential vulnerabilities, likely	d			
FY 2014 Plans: RRF investment decisions are made during the execution years in responsorganizations' requirements and as new threats emerge or new opportunit organizations throughout DoD and other government agencies will help ideby red teams. Deliverables will include recommendations on system oper countermeasures taken by the threat, and potential counter-countermeasures the system. Anticipate supporting four to five projects.	ties are presented. Research and coordination with entify key technologies and systems to be assesse rational employment, potential vulnerabilities, likely	d			
Title: Open Source Data Analysis and Applications (FY 2013 and FY 2014	4 New Start Focal Area Plans)		0.000	6.012	4.851
Description: Focal area for FY 2013 and FY 2014 Open Source Data And of capabilities, software, and tools to analyze open source information. Thinclude inputs from a broad spectrum of sources.	oment				
FY 2013 Plans: RRF investment decisions are made during the execution years in responsorganizations' requirements and as new threats emerge or new opportunit open source data analysis tools and applications. Anticipate supporting for and tools to exploit open source information and to reduce manpower requirements. FY 2014 Plans:	ties are presented. RRF will support development our to five projects. Deliverables will include capab				

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary C	Of Defense	DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PROJECT P828: Rapid Reac	tion Fund		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
RRF investment decisions are made during the execution years in response organizations' requirements and as new threats emerge or new opportunitie open source data analysis tools and applications. Anticipate supporting threat and tools to exploit open source information and to reduce manpower requirements.	s are presented. RRF will support development ee to four projects. Deliverables will include capa			
Title: Countering Violent Extremism and Planning Support (FY 2013 and FY	2014 New Start Focal Area Plans)	0.000	5.828	4.766
Description: Focal area for FY 2013 and FY 2014 Countering Violent Extre of violent groups, collection of best-practices from a variety of federal organic communication techniques in tribal environments, science and technical capsocial analysis to support counter-insurgency efforts and development of more operational challenges. These studies will inform decision makers and facility extremism.	izations, deterrence, social network analysis, effect pabilities in support of strategic communications, culti-disciplinary multi-agency approaches to comp	ective		
FY 2013 Plans: RRF investment decisions are made during the execution years in response organizations' requirements and as new threats emerge or new opportunitie organizations throughout DoD and other government agencies will help ider counter the spread of violent extremism. Anticipate supporting seven to eig pilot programs to counter violent extremism in theater, analysis of social net violent extremism, and tools to support communications in theaters of operations.	s are presented. Research and coordination with htify areas critical to developing future capabilities ht projects. Deliverables will include strategies a works and of the use of social media to proliferat	s to nd		
FY 2014 Plans: RRF investment decisions are made during the execution years in response organizations' requirements and as new threats emerge or new opportunitie organizations throughout DoD and other government agencies will help ider counter the spread of violent extremism. Anticipate supporting six to seven programs to counter violent extremism in theater, analysis of social network extremism, and tools to support communications in theaters of operation.	s are presented. Research and coordination with htify areas critical to developing future capabilities projects. Deliverables will include strategies and	s to pilot		
Title: Innovation Outreach Focus Area (FY 2013 and FY 2014 New Start Fo	ocal Area Plans)	0.000	1.500	2.782
Description: Innovation Outreach will support the Department of Defense E Buying Power objectives by leveraging technology and emerging products commercial sector. Solutions will be sought to meet needs identified by Con other Defense agencies and interagency organizations. The Innovation Outrobjectives of promoting effective competition and fielding affordable capabilities.	leveloped by small, innovative businesses in the nbatant Commanders, Military Service organizati reach Focus Area will support the Department's	ons,		

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretar	ry Of Defense	DAT	E: April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	PROPRIATION/BUDGET ACTIVITY 0: Research, Development, Test & Evaluation, Defense-Wide R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special P828			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 201	2 FY 2013	FY 2014
from commercial R&D investments. The Innovation Outreach Focus Area Communications, Data and Data Analysis, Alternative Energy, Imagery, during the execution year.		ed		
FY 2013 Plans: RRF investment decisions are made during the execution years in respo organizations' requirements and as new threats emerge or new opportunengagements with DoD users to areas discussed above.		ee		
FY 2014 Plans: RRF investment decisions are made during the execution years in respo organizations' requirements and as new threats emerge or new opportunengagements with DoD users to areas discussed above.		е		
Title: Autonomous Systems and Behaviors (FY 2013 and FY 2014 New	0.0	00 6.090	3.877	
Description: Focal area for FY 2013 and FY 2014 Autonomous Systems systems to facilitate increased performance of unmanned systems, enha cooperatively interact, development of sensors for integration aboard unrunmanned sensors and "red teaming" to counter emerging unmanned the examine the establishment of common software platforms to reduce development of examined vehicles and support rapid customization of autonomous systems.	nnced capabilities for multiple autonomous systems to manned platforms, improvements to data ex-filtration reats from potential adversaries. These projects will elopment cost, increase collaboration among dispan	o ı from also		
FY 2013 Plans: RRF investment decisions are made during the execution years in respo organizations' requirements and as new threats emerge or new opportununmanned autonomous aerial, surface and subsurface systems. Anticip	nities are presented. RRF will support development	of		
FY 2014 Plans: RRF investment decisions are made during the execution years in respo other government organizations' requirements and as new threats emerg development of unmanned autonomous aerial, surface and subsurface s	ge or new opportunities are presented. RRF will sup			
<i>Title:</i> Interface of Military Operations with Law Enforcement and Border Plans)	Patrol (FY 2013 and FY 2014 New Start Focal Area	0.0	00 4.912	3.806
Description: Focal area for FY 2013 and FY 2014 Interface of Military O start projects include collaboration and exercises with law enforcement of				

PE 0603826D8Z: Quick Reactions Special Projects (QRSP) Office of Secretary Of Defense

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretar		DATE:	April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	Development, Test & Evaluation, Defense-Wide PE 0603826D8Z: Quick Reactions Special P828				
B. Accomplishments/Planned Programs (\$ in Millions)		F	Y 2012	FY 2013	FY 2014
military and law enforcement operations, exploitation of law enforcement development of improved border protection capabilities that can be used of biometrics and forensics tools.		ilities			
FY 2013 Plans: RRF investment decisions are made during the execution years in responsion organizations' requirements and as new threats emerge or new opportunion organizations throughout DoD and other government agencies will help in of interest to multiple federal organizations. Anticipate supporting six to sensors and knowledge management systems, as well as a demonstration of the process o	lities are presented. Research and coordination with dentify areas critical to developing future capabilities seven projects. Deliverables will include prototype	3			
FY 2014 Plans: RRF investment decisions are made during the execution years in responsion organizations requirements and as new threats emerge or new opportunion organizations throughout DoD and other government agencies will help in interest to multiple federal organizations. Anticipate supporting five to six	nities are presented. Research and coordination with dentify areas critical to developing future capabilities or projects.				
Title: Intelligence, Surveillance, and Reconnaissance (ISR) (FY 2013 and		0.000	5.542	4.601	
Description: Focal area for FY 2013 and FY 2014 ISR new start projects to facilitate analysis of large data sets, methods to harvest meaningful intestablishment of more effective processing, exploitation, and disseminati systems. Projects in this area generally involve high risk and have high progranizations. Projects will also explore technologies to improve ISR in of increasing the effectiveness of ISR architectures to maximize the capa human analyst manpower required to produce actionable intelligence.	ner ds				
FY 2013 Plans: RRF investment decisions are made during the execution years in responding organizations' requirements and as new threats emerge or new opportunions organizations throughout DoD and other government agencies will help in Anticipate supporting four to five projects. Deliverables will include proto well as analytical capabilities developed to reduce the manpower burden	nities are presented. Research and coordination with dentify areas critical to developing future ISR capability type systems and software for a variety of platforms	ilities.			
FY 2014 Plans:					

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary	DAT	E: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	PROJECT P828: Rapid Re	action Fund	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2012	FY 2013	FY 2014
RRF investment decisions are made during the execution years in responding organizations' requirements and as new threats emerge or new opportunity organizations throughout DoD and other government agencies will help in Anticipate supporting three to four projects. Deliverables will include protokell as analytical capabilities developed to reduce the manpower burden	ities are presented. Research and coordination wit dentify areas critical to developing future ISR capab otype systems and software for a variety of platform	ilities.		
Title: Urban Characterization Focus Areas (FY 2013 and FY 2014 New S	0.0	00 4.812	3.606	
Description: Focal area for FY 2013 and FY 2014 Urban Characterization urban areas for modeling, simulation and planning purposes. These efforms surveillance and reconnaissance (ISR), electronic warfare, kinetic/non-kinoperations in a wide range of urban areas.	ce,			
FY 2013 Plans: RRF investment decisions are made during the execution years in respor organizations' requirements and as new threats emerge or new opportuniopen source data analysis tools and applications. Anticipate supporting f and simulations systems to support planning efforts.				
FY 2014 Plans: RRF investment decisions are made during the execution years in responding organizations' requirements and as new threats emerge or new opportunity open source data analysis tools and applications. Anticipate supporting the analysis and simulations systems to support planning efforts.	ities are presented. RRF will support development			

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

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30.111

55.054

47.956

Accomplishments/Planned Programs Subtotals

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary Of D	DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603826D8Z: Quick Reactions Special	P828: <i>Rap</i>	id Reaction Fund
BA 3: Advanced Technology Development (ATD)	Projects (QRSP)		

E. Performance Metrics

In FY 2014, generic performance metrics applicable to the Rapid Reaction Fund (RRF) includes attainment of DoD Strategic Objective 3.5.2D. The title of this objective is "Maintain a strong technical foundation within the Department's Science and Technology (S&T) program" and the metric for this objective is to transition 40 percent of completing project demonstrations per year. In addition, project performance metrics are specific to each effort and include measures identified in the specific project plans. Project completions and success are monitored against schedules and deliverables stated in the proposals and statements of work. The metrics include items such as target milestone dates, production measures, fielding dates, and demonstration goals and dates. For projects completed in FY 2012, the RRF achieved a transition rate of greater than 81 percent.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary Of						Defense				DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)								PROJECT P830: RD7	T DT&E Architecture and Integration			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
P830: RDT&E Architecture and Integration	-	16.164	10.316	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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A. Mission Description and Budget Item Justification

The RDT&E Architecture and Integration (RAI) program objectives are to enhance and expand rapid technology architecture and assessment capabilities in general; and, to enhance the Joint Experimentation Range Complex (JERC), Stiletto maritime test platform and the Thunderstorm ISR exercise series. The JERC provides a venue to evaluate a wide range of new technologies in a dessert environment. The requested funding will also support Stiletto, a maritime test vessel that routinely hosts numerous new technologies for evaluation in a maritime environment. Thunderstorm, an ongoing Intelligence, Surveillance, and Reconnaissance (ISR) exercise series, is also supported by this budget line. Thunderstorm brings emerging ISR technologies together in a common architecture for exercise and operational demonstration.

With the drawdown of operations in Afghanistan in FY2014, the requirements for many of the assessments supported by this budget line have been greatly reduced. The remaining assessment requirements will be addressed by other Program Elements.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014	
Title: Joint Experimentation Range Complex (JERC) Architecture and Infrastructure Improvement Program	5.731	2.200	0.000	
Description: This program expanded JERC capabilities by increasing radio frequency range when conducting hardware in the loop (HWIL) testing and networking of multiple test sites. This enhancement complemented the Assistant Secretary of Defense (Research and Engineering) (ASD R&E) and Joint Improvised Explosive Device Defeat Organization (JIEDDO) Science & Technology (S&T) investment and acquisition strategy.				
FY 2012 Accomplishments: Projects completed and transitioned included: increase in Radio Frequency Range for Hardware in the Loop (HWIL) testing; Long Term Evolution (LTE) Fourth Generation (4G) cell phone Network Hardware Integration; LTE 4G Network for Remote Sites; Extended Geodetic Reference Stations; and, Remote Base/Repeater Turn-Key System. These enhancements complement the Assistant Secretary of Defense (Research and Engineering) (ASD R&E) and Joint Improvised Explosive Device Defeat Organization (JIEDDO) Science & Technology (S&T) investment and acquisition strategy.				
FY 2013 Plans: Evaluate trends of the emerging threat to blue forces and continue improvements to the testing infrastructure to support evaluation of emerging technologies to counter the evolving threat. Potential future focus areas could include Fifth Generation (5G) cellular				

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^{##} The FY 2014 OCO Request will be submitted at a later date

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary	Of Defense		DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	PROJECT P830: RD		nitecture and I	Integration
B. Accomplishments/Planned Programs (\$ in Millions)		FY	2012	FY 2013	FY 2014
networks, novel enhanced explosives, comprehensive force protection cap Reconnaissance (ISR) sensors and improvements to data handling. These and JIEDDO S&T investment and acquisition strategy. Anticipate the fund	e investments will continue to support the ASD(R8				
Title: Cloudbreak			10.433	0.000	0.000
Description: The CLOUDBREAK project focused on Command and Control CLOUDBREAK drove a common "plug and fight" architecture that provides Defense Information Enterprise Architecture (DIEA) and the Defense Intellicution CLOUDBREAK demonstrated capabilities which can be provided as comp Success was achieved when capabilities based on common standards we other tools to be employed by multiple COCOMs. The CLOUDBREAK pro Operations/Intelligence, Situational Awareness and Regional Domain Awarenessified.	s services and consumes data based on the igence Information Enterprise (DI2E) frameworks. osable services on the Global Information Grid (Gre incorporated into multiple programs of record an ogram demonstrated mature capabilities in Cyber,	IG).			
FY 2012 Accomplishments: Cloudbreak capabilities were incorporated into the DIEA and DI2E framew details are classified.	ork and are supporting multiple COCOM's. Furthe	er			
Title: Stiletto			0.000	3.162	0.000
Description: Stiletto is a maritime demonstration platform designed to assacross the range of military operations to higher Technology Readiness Lecarbon fiber craft that was purposefully designed to rapidly acquire, integrated utility of emerging technologies and concepts of operation for special and expartnership with the Naval Surface Warfare Center's Combatant Craft Divis Warfare Innovation Cell, streamlines the experimentation process and help risk reduction of emerging technologies and capabilities. Stiletto's simple at to provide low cost access for industry, government, and academic organization maritime environment. The demonstration process also encourages system the maritime environment to rapidly adapt technologies around warfighter to Virginia.	evels. The 88-foot long boat is an experimental, all ate, and employ new capabilities to explore the milexpeditionary forces. The Stiletto program, managesion and the Naval Air Warfare Center Aircraft Divides facilitate the rapid demonstration, exploration, a application process for experimentation is intended attachmentation to install and prove their systems in a realism developers to engage directly with the warfighter.	I itary ged in ision's nd d stic er in			
FY 2013 Plans: Stiletto will conduct three Capability Demonstrations in FY 2013, including coordination with organizations that include Naval Expeditionary Combat C					

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary C	Of Defense		DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	PROJECT P830: RD		nitecture and I	Integration
B. Accomplishments/Planned Programs (\$ in Millions)		F'	Y 2012	FY 2013	FY 2014
Army Watercraft Systems, and the United Kingdom Ministry of Defense. St throughout the year to expand the number of opportunities for non-traditional Stiletto as a low cost, accessible demonstration venue for maturing their system to demonstrations that directly assist an acquisition program, with specific for	al businesses that have not worked with DoD to ustems in a maritime environment. Priority will be	tilize			
Title: Thunderstorm			0.000	3.162	0.000
Description: Thunderstorm is an enduring multi-Intelligence technology del (OSD), interagency partners, Combatant Commanders, Services, academia The demonstration provides an opportunity to evaluate and assess the capa Intelligence, Surveillance, and Reconnaissance technologies, and related in dissemination (PED) capabilities in mission-related, geographically, and open employment. Thunderstorm demonstration objectives, performance measurand data evaluation serve to inform future DoD Intelligence, Surveillance, and remote PED capabilities.	a, government laboratories, and commercial vend abilities of new, emerging and transformational aformation collection, processing, exploitation, and erationally relevant environments prior to full-scal res, lessons learned, post-demonstration assess	ors. d e			
FY 2013 Plans: Thunderstorm Spirals 13-1 and 13-2 planning began in early FY 2013. Both in the Rio Grand Valley Sector. Spiral 13-1's primary focus will be to further threats and inform tactics, techniques, and procedures to detect and discrim to-land transition activity. Execution of the spring 2013 spiral will leverage property Joint Interagency Task Force-South (JIATF-S), Joint Task Force-Northern C (USCG), National Geospatial-Intelligence Agency (NGA), National Reconnation (SOUTHCOM) and U.S. Northern Command (NORTHCOM). Emphasis will and display. Spiral 13-2 will be executed in summer 2013. This spiral build maritime-to-land transition activity and the ability for suspicious actors to quipopulation.	r characterize and counter asymmetrical maritime ninate suspicious open water, littoral and maritime partnerships with Customs Border Protection (CB Command (JTF-N B), the United States Coast Guaissance Office (NRO), U.S. Southern Command be placed on near real-time information disseminate upon Spiral 13-1 and places emphasis on the	e- P), ard			
Title: Tech Assessments			0.000	1.792	0.000
Description: The Joint Experimental Range Complex (JERC) is a remote to that is designed to rapidly evaluate prototype technologies. These limited p and development of Intelligence, Surveillance, and Reconnaissance (ISR) to development. Since its establishment in late FY 2003, the Rapid Reaction of more than 275 systems at the JERC. This funding is utilized to provide a upgrades to capabilities to the site.	proof-of-concept evaluations allow for integration raining and Concept of Operations (CONOPS) Technology Office (RRTO) has sponsored evalua	tion			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary Of D		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603826D8Z: Quick Reactions Special	P830: <i>RD1</i>	「&E Architecture and Integration
BA 3: Advanced Technology Development (ATD)	Projects (QRSP)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
FY 2013 Plans: Execute six two-weeks evaluation periods for interested industry and government representatives to test emerging capabilities in a realistic desert environment.			
Accomplishments/Planned Programs Subtotals	16.164	10.316	0.000

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

NA

E. Performance Metrics

In FY 2013, generic performance metrics applicable to the RDT&E Architecture and Integration initiative includes attainment of DoD Strategic Objective 3.5.2D. The title of this objective is "Maintain a strong technical foundation within the Department's Science and Technology (S&T) program" and the metric for this objective is to transition 30 percent of completing project demonstrations per year. Project performance metrics are specific to each effort and include schedules and deliverables stated in the proposals and statements of work, production measures, fielding dates, and demonstration goals and dates.

	Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary Of Defense							DATE: April 2013					
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)									PROJECT P831: Joint Rapid Acquisition Cell Support				
	COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
	P831: Joint Rapid Acquisition Cell Support	-	1.710	1.760	1.819	-	1.819	1.873	1.930	1.987	2.047	Continuing	Continuing

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

This funding includes support for the Joint Rapid Acquisition Cell (JRAC) to enable management and tracking of Combatant Commander (COCOM) identified and Joint Staff validated immediate warfighter needs. FY 2012 was the first year for a dedicated funding line for this effort. The funding in this project is under the cognizance of the JRAC and is responsible to:

- (1) Coordinate review of validated Joint Urgent Operational Needs (JUON) and assign responsibility to appropriate DoD Components for timely funding and resolution.
- (2) Serve as the review and approval authority for the DoD Components' strategy to fund and mitigate the identified JUON capability gap.
- (3) Continually assess actions taken by the DoD Components to resolve JUONs and recommend to the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) any changes determined appropriate to improve their responsiveness to JUONs.
- (4) Provide periodic reports to the Secretary of Defense on new and outstanding JUONs.
- (5) In coordination with Under Secretary of Defense Comptroller (USD(C)), manage the Rapid Acquisition Fund (RAF) to allocate resources to priority unfunded JUONs.
- (6) In coordination with the Office of the Chairman of the Joint Chiefs of Staff and the USD(C), make programmatic, budget, and acquisition recommendations for JUONs and identify capability gaps to the Secretary of Defense.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Joint Rapid Acquisition Cell (JRAC) Management Support	1.710	1.760	1.819
Description: This funding is utilized to support the staff manning of the JRAC to enable management and tracking of COCOM identified and Joint Staff validated immediate warfighter needs. This baseline was initiated in FY 2012 to preclude ad hoc and unstable historical programmatic and financial support to the JRAC staff.			
FY 2012 Accomplishments: Supported the JRAC to enable management and tracking of COCOM initiated and Joint Staff validated immediate warfighter needs.			
FY 2013 Plans:			

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit K-2A, KD I de l'Toject dustille ation. I D 2014 Office di Secretar		DAIL.	April 2010			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603826D8Z: Quick Reactions Special Projects (QRSP)	1.1100=0	PROJECT P831: Joint Rapid Acquisition Cell S			
B. Accomplishments/Planned Programs (\$ in Millions) Support for the JRAC to enable management and tracking of COCOM in needs.	itiated and Joint Staff validated immediate warfighte	_	Y 2012	FY 2013	FY 2014	
FY 2014 Plans: Support for the JRAC to enable management and tracking of COCOM in needs.	itiated and Joint Staff validated immediate warfighte	er				

Accomplishments/Planned Programs Subtotals

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

NA – Capabilities acquired to fulfill JUONs are provided by other DoD components.

Exhibit R-24 RDT&F Project Justification: PR 2014 Office of Secretary Of Defense

E. Performance Metrics

JRAC performance metrics are specific to each JUON and include measures identified in the management approach for each JUON. In addition, JUON completions and successes are monitored against schedules and deliverables stated in the JUON management approach. The metrics to which JRAC support correlates is to the number of full time personnel identified in the JRAC support contract with associated pay rates and shall not exceed the specified amounts or hourly rates and/or firm fixed price.

DATE: April 2013

1.710

1.760

1.819

	Exhibit R-2A, RDT&E Project Ju	stification:	PB 2014 C	Office of Sec	retary Of D	efense					DATE : Apr	il 2013	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)						PE 0603826D8Z: Quick Reactions Special				PROJECT P833: Strategic Multi-Layered Assessment (SMA) Support			
	COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
- 1	P833: Strategic Multi-Layered Assessment (SMA) Support	-	0.000	1.970	2.029	-	2.029	2.100	2.163	2.227	2.303	Continuing	Continuing

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

Note

The Strategic Multi-Layered Assessment (SMA) project was added in FY 2013 as a result of a net zero functional transfer of resources and mission from United States Strategic Command (USSTRATCOM).

A. Mission Description and Budget Item Justification

B Accomplishments/Planned Programs (\$ in Millions)

The Strategic Multi-Layered Assessment Cell supports all Combatant Commands (COCOMs), Joint Force Commanders and other government agencies by assessing complex operational/technical challenges which require multi-agency and multi-disciplinary approaches. With input from across the United States Government, academia and the private sector, the SMA cell develops solution options to COCOM generated challenging problems and informs the command's senior leadership. Each SMA effort is initiated at the request of senior COCOM leadership. Priorities for SMA problems are set by the Joint Staff Deputy for Operations. Products are typically produced within six months and directly contribute to the decision making process of COCOM's senior leaders.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Strategic Multi-Layered Assessment (SMA)	0.000	1.970	2.029
Description: The SMA cell develops solution options, not generally found in U.S. Government work, to COCOMs generally challenging problems and informs the command's senior leadership. Each SMA effort is initiated at the request of seni leadership. Priorities for SMA problems are set by the Joint Staff Deputy for Operations. Products are typically product six months and directly contribute to the decision making process of COCOM's senior leaders.	ior COCOM		
FY 2013 Plans: At the request of U.S. Pacific Command the SMA cell will undertake a Megacities project. This project consists of three components. The first component is a research study into methods of conducting socio-cultural analysis including remetechniques for collecting indicator variables of resilience and vulnerability within interrelated megacity and rural systems second component will be a case analysis of the drivers of and buffers to political, social, economic and environmental in the Dhaka, Bangladesh population center. The third component of the study will be an assessment and testing of not to present and visualize megacity stability data. This will benefit COCOM planners with forecasting socio-cultural trend state, regional, or community level stability. Also this effort will answer the need for quantitative stability assessment and	ote sensing s. The instability ovel ways Is affecting		

EV 2012 EV 2012

EV 2014

^{***} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Office of Secretary Of D		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603826D8Z: Quick Reactions Special	P833: Stra	tegic Multi-Layered Assessment
BA 3: Advanced Technology Development (ATD)	Projects (QRSP)	(SMA) Sup	port

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
to address key national security considerations including the potential for or resurgence of violent extremism; humanitarian crisis; reinforcement of outlier state behavior and consideration of partner and ally relations.			
FY 2014 Plans: The SMA cell will continue to actively work with the COCOMs and the Joint Staff to identify challenging problems that are not within the traditional areas of DoD expertise. These problems will be in direct support of the Combatant Commanders and may include areas such as: counter terrorism; counter weapons of mass destruction (state and non-state); counter global or regional social and cultural assessments; and, individual state or national level deterrence studies.			
Accomplishments/Planned Programs Subtotals	0.000	1.970	2.029

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

SMA performance metrics are specific to each effort and include measures identified in the specific project plans. In addition, project completions and successes are monitored against schedules and deliverables stated in the execution documents. Each project results are reviewed by a senior review group that is comprised with representatives from the Office of the Secretary of Defense, the Joint Staff, the COCOMs and outside subject matter experts. The ultimate measure of success is adaption and transition of SMA products by the COCOM and supporting entities.