

Exhibit R-2, RDT&E Budget Item Justification						Date: February 2008	
Appropriation/Budget Activity RDT&E, Dw BA 06			R-1 Item Nomenclature: Support to Information Operations Capability, PE 0303166D8Z				
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	0	34.590	30.039	30.825	31.583	30.433	31.052
IO Capability Activities, P159	0	3.558	4.613	4.678	4.746	4.819	4.770
IO Range, P159	0	10.600	10.900	11.200	11.600	11.840	12.575
IO Planning Capability – Joint, P159	0	14.360	14.526	14.947	15.237	13.774	13.707
Enhanced Simulation for Information Operations Capabilities (Congressional add)	0	6.072	0	0	0	0	0
A. Mission Description and Budget Item Justification:							
<p>These programs are each part of the Defense Department’s coordinated effort to integrate Information Operation (IO) test and evaluation capability to assess IO technologies and tactics in a representative operational environment against realistic targets. The IO Roadmap identified the need for a suite of automated data analysis and decision support software tools to facilitate joint-IO planning enabling users to accomplish Intelligence Preparation of the Battle space (IPB), develop IO strategy and candidate IO campaign targets, plan IO missions, and monitor and assess execution. The objectives of the programs are to create a flexible, seamless and persistent environment enabling combatant commanders to achieve the same level of confidence and expertise in employing IO weapons that they have in kinetic weapons; to lead the development of a joint IO analysis, planning, and targeting capability for Service and COCOM IO operational execution; and to transform intelligence support to IO and joint IO training, education, and exercises.</p> <ol style="list-style-type: none"> 1. Information Operations Capability Activities - Supports the development of IO capabilities, particularly critical emerging IO needs that support IO planners and operators. 2. Information Operations Range (IOR) - IOR will establish a secure, flexible, and seamless environment for the Services and Joint warfighters to test, train, develop tactics, and exercise simulated computer network attack using selected offensive electronic warfare capabilities. This environment enables the COCOM’s warfighters to visualize non-kinetic weapons effects, understand the intricate and interactive effects generated by kinetic and non-kinetic weapons and achieve the same level of confidence and expertise in employing IO weapons that they have with kinetic weapons. <p>Virtual Integrated Support for the Information Operations eNvironment (VisION) (formerly called Information Operations Planning Capability - Joint (IOPC-J)) is the future joint IO planning and analysis system, which will integrate and synchronize IO analysis, planning, execution and assessment. VisION will support operations at multiple security levels, including coalition operations, across all Services and</p>							

Exhibit R-2, RDT&E Budget Item Justification		Date: February 2008
Appropriation/Budget Activity RDT&E, Dw BA 06	R-1 Item Nomenclature: Support to Information Operations Capability, PE 0303166D8Z	
<p>3. communities. Additionally, it will reduce duplication of effort, minimize training, speed up processes, and ensure unity of efforts throughout the DoD.</p> <p>4. Enhanced Simulation for Information Operations Capabilities will provide a software architecture that can bring network management to the Deputy Secretary of Defense Chartered Information Operations Range and VisION initiatives. The IO Range and VisION programs require the transfer of large amounts of data to accomplish their mission and must mitigate or overcome latency and bandwidth limitation inherent in all networks. These network limitations are especially prevalent in field operations where connectivity to networks is erratic. The DoD leadership recognizes the need to improve efficiency in utilizing non kinetic weapons. Currently, however, the ability to create and operate the realistic operational environment required to support effective integration of these systems is limited because data transfer requirements exceed real world bandwidth limitations. The software architecture will support IO Range and VisION objectives to provide analysis, planning, rehearsal, and execution environments for US and coalition forces by enabling large-scale data transfer and providing a central integration point with new standards. This will save considerable time and money by eliminating rewrites of existing simulations and filtering of critical data thus providing a mission critical solution that is needed by DoD now.</p> <p>Funding from other program elements were consolidated in FY08 under this new non-MIP program element. Funds allocated for IO Range development were transferred from PE 0603757D8Z to support USJFCOM, the Lead Agent for the IO Range. The Deputy Secretary of Defense Memorandum on the IO Range signed 18 November 2005 firmly establishes the requirement for creating a cooperative information operations range among Service Ranges, Agencies, Non-DoD laboratories, and academia under the leadership of Joint Forces Command. In a memo signed 15 November 2006, the Deputy Secretary of Defense designated Commander USJFCOM the DoD Lead Component for the development, integration and sustainment of the Information Operations Planning Capability-Joint (IOPC-J) (now named "VisION") as the department's primary IO mission planning and analysis capability. Transfer IOPC-J (VisION) funds from PE 0208021F corresponds with the functional transfer of responsibility for capability development to USJFCOM. Enhanced Simulation for Information Operations Capabilities is a Congressional add in FY08.</p>		

Exhibit R-2, RDT&E Budget Item Justification		Date: February 2008		
Appropriation/Budget Activity RDT&E, Dw BA 06		R-1 Item Nomenclature: Support to Information Operations Capability, PE 0303166D8Z		
B. Program Change Summary:				
	<u>FY 2007</u>		<u>FY 2008</u>	<u>FY 2009</u>
Previous President's Budget	0		28.652	30.093
Current Budget Estimates Submission	0		34.590	30.039
Total Adjustments	0		5.938	-0.054
Congressional reductions	0		-0.302	0
Congressional increases	0		6.240	0
Other adjustments	0		0	-0.054
Change Summary Explanation:				
FY 2007: N/A				
FY 2008: Congressional add, Department decrease				
FY 2009: FY 2009 reflects program adjustments due to inflation				
C. Other Program Funding Summary: N/A				
D. Acquisition Strategy: These efforts will use an evolutionary acquisition strategy using contracts awarded after full and open competition.				
E. Performance Metrics: Performance metrics are measured through internal management controls and external assessments. Performance metrics include, but are not limited to time, money, realism, and fidelity as defined below:				
<ul style="list-style-type: none"> • Time – Will the effort enable the warfighter to speed up processes faster than current capabilities allow? • Money – Will the effort enable the warfighter to reduce duplication of effort and to prepare and execute events at a more effective and efficient cost than current capabilities allow? • Realism – Will the effort enable the warfighter to create an environment that is closer to the real world environment than current capabilities allow? • Fidelity – Will the effort ensure unity of efforts throughout the IO Community? 				

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification						Date: February 2008	
Appropriation/Budget Activity RDT&E, Dw BA 06			Project Name and Number IO Capability Activities, P159				
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
IO Capability Activities, P159	0	3.692	4.613	4.678	4.746	4.819	4.770
RDT&E Articles Quantity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A. Mission Description and Budget Item Justification:							
This capability contains classified programs. Facilitates the development of IO capabilities that support COCOMs and Services executing IO during current and future conflicts. Supports the development of IO capabilities, particularly critical emerging IO needs that support IO planners and operators.							
B. Accomplishments/Planned Program							
	FY 2007	FY 2008	FY 2009				
Accomplishment/Effort/Subtotal Cost	0	3.692	4.613				
RDT&E Articles Quantity	N/A	N/A	N/A				
<p>FY 2007 Accomplishments: N/A</p> <p>FY 2008 Plans: The project contains classified efforts. Developed IO capabilities that support COCOMs and Services executing IO during current and future conflicts. Developed of IO capabilities, particularly critical emerging IO needs that support IO planners and operators.</p> <p>FY 2009 Plans: The project contains classified efforts. Funds the development of IO capabilities that support COCOMs and Services executing IO during current and future conflicts. Supports the development of IO capabilities, particularly critical emerging IO needs that support IO planners and operators.</p>							
C. Other Program Funding Summary: N/A							
D. Acquisition Strategy: N/A							
E. Major Performers: N/A							

UNCLASSIFIED

R-1 Shopping List Item No.151

Page 4 of 10

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification						Date: February 2008	
Appropriation/Budget Activity RDT&E, Dw BA 06			Project Name and Number IO Capability Activities, P159				
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
IO Range, P159	0	10.600	10.900	11.200	11.600	11.840	12.575
RDT&E Articles Quantity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A. Mission Description and Budget Item Justification:							
<p>The National Military Strategy of the United States stresses the importance of integrating Information Operations (IO) capabilities for the success of Joint Operations and Decision Superiority. “Assuring information systems in the face of attack and conducting effective Information Operations” was one of the six critical operational goals in DoD’s transformation efforts (2001 Quadrennial Defense Review). The 2003 Department of Defense Information Operations (IO) Roadmap, dated 30 Oct 2003, established a requirement for an integrated range supporting “exercises, testing, and development of IO capabilities.” Further direction by OSD identified the need for an “integrated IO test and evaluation capability to assess IO technologies and tactics in a representative operational environment against realistic targets.” The FY04-09 Defense Planning Guidance (DPG) stated the need to expand IO training and education for the developing cadre of IO professionals and provide an environment for analysis, testing, training, combat assessments, and measures of effectiveness for more reliable IO capabilities. Deputy SECDEF Memorandum on the IO Range signed 18 Nov 2005 established the requirement for creating a cooperative information operations range among military services under the leadership of USJFCOM.</p> <p>The Information Operations Range (IO) establishes a secure, flexible, and seamless environment for the Services and Joint warfighters to test, train, develop tactics, and exercise simulated computer network attack using selected offensive electronic warfare capabilities. The basis of the functional structure of the IO Range is the integration of existing ranges, laboratories, information warfare centers, and other Government facilities that currently support IO test, training, exercise, and experimentation events. Capabilities at the selected sites will be securely connected and integrated into the IO Range. A key feature of this concept is the persistent, secure connection that links the sites together, allowing the exchange of data and the visualization of effects as we employ capabilities. Creation of a “virtual range” based on persistent connections significantly reduces the amount of lead-time required to set up each new warfighter event. The long-term goal for the IO Range is to be a full spectrum IO Range comprising: operational security, computer network operations, electronic warfare, psychological operations, and military deception. This environment enables the COCOM’s warfighters to visualize non-kinetic weapons effects, understand the intricate and interactive effects generated by kinetic and non-kinetic weapons and achieve the same level of confidence and expertise in employing IO weapons as they have with kinetic weapons.</p>							

UNCLASSIFIED

R-1 Shopping List Item No.151

Page 5 of 10

Exhibit R-2a, RDT&E Project Justification		Date: February 2008	
Appropriation/Budget Activity RDT&E, Dw BA 06		Project Name and Number IO Capability Activities, P159	
Note: Funds allocated for IO Range development were transferred from PE 0603757D8Z in FY08 to support USJFCOM, the Lead Agent for the IO Range.			
B. Accomplishments/Planned Program			
	FY 2007	FY 2008	FY 2009
Accomplishment/Effort/Subtotal Cost	0	10.600	10.900
RDT&E Articles Quantity	N/A	N/A	N/A
FY 2007 Accomplishments: N/A			
FY 2008 Plans:			
<ul style="list-style-type: none"> • Matured strategic partnerships with stakeholders to maintain and expand IO Range functionality • Integrated additional IO capabilities into the IO Range • Enhanced the IO Range security posture to support Service sensitive programs • Leveraged technology breakthroughs to enhance IO Range capabilities to provide a realistic IO battlespace • Established formal self-assessment (continuous improvement) programs • Effectively planned, programmed, budgeted and managed investments in the IO Range program 			
FY 2009 Plans:			
<ul style="list-style-type: none"> • Develop, test and evaluate IO Range concepts during events based on a list of prioritized requirements and available funding. • Development toward full spectrum IO will continue to evolve with the addition of a more robust set of Electronic Attack targets. • Continue the spiral implementation of IO capabilities at the Range sites. This continuing effort supports progress toward reaching full capability in which twenty persistent IO Range sites will be connected and integrated for IO Range use. 			

Exhibit R-2a, RDT&E Project Justification		Date: February 2008
Appropriation/Budget Activity RDT&E, Dw BA 06	Project Name and Number IO Capability Activities, P159	
<p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: N/A</p> <p>E. Major Performers: Northrop Grumman Corporation, Booz-Allen Hamilton</p>		

Exhibit R-2a, RDT&E Project Justification						Date: February 2008	
Appropriation/Budget Activity RDT&E, Dw BA 06			Project Name and Number Planning Capability – Joint, P159				
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
IO Planning Capability – Joint, P159	0	14.360	14.526	14.947	15.237	13.774	13.707
RDT&E Articles Quantity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A. Mission Description and Budget Item Justification:							
<p>National Military Strategy stresses the importance of integrating Information Operations (IO) capabilities for the success of Joint Operations and Decision Superiority. “Assuring information systems in the face of attack and conducting effective Information Operations” was one of the six critical operational goals in DoD’s transformation efforts (2001 Quadrennial Defense Review). In a memo signed 15 Nov 2006, the Deputy Secretary of Defense designated Commander USJFCOM the DoD Lead Component for the development, integration and sustainment of the Information Operations Planning Capability-Joint (IOPC-J) as the department's primary IO mission planning and analysis capability.</p> <p>Virtual Integrated Support for the Information Operations eNvironment (VisION) (formerly called Information Operations-Joint (IOPC-J)) is the future Joint IO Planning and analysis system, which will integrate, and synchronize IO analysis, planning, execution and assessment. VisION will support operations at multiple security levels, including coalition operations, across all Services and communities. Additionally, it will reduce duplication of effort, minimize training, speed up processes, and ensure unity of efforts throughout the DoD.</p> <p>Note: Transfer of Information Operations Planning Capability - Joint (IOPC-J) funds from PE 0208021F corresponds with the functional transfer of responsibility for capability development to USJFCOM.</p>							
B. Accomplishments/Planned Program							
	FY 2007	FY 2008	FY 2009				
Accomplishment/Effort/Subtotal Cost	0	14.360	14.526				
RDT&E Articles Quantity	N/A	N/A	N/A				
FY 2007 Accomplishments: N/A							

Exhibit R-2a, RDT&E Project Justification		Date: February 2008
Appropriation/Budget Activity RDT&E, Dw BA 06	Project Name and Number IO Planning Capability – Joint, P159	
<p>FY 2008 Plans:</p> <ul style="list-style-type: none"> • Merge JIAPC and IOPC-J into one program (called VisION). • Initiate development of closed Research and Development network on the IO Range to further refine VisION utility. • Develop VisION baseline capability with initial IO analysis and assessment capabilities. • Initiate support to operations at multiple security levels. <p>FY 2009 Plans:</p> <ul style="list-style-type: none"> • Integrate and synchronize planning, analysis, execution and assessment capabilities into VisION in support of COCOMs/Services/Agencies requirements. • Reduce duplication of effort, minimize and facilitate planning, analysis, execution and assessment, increase process efficiencies and ensure repeatability. • Apply existing net enabled architectures to enhance IO planning, analysis, execution and assessment. • Support operations conducted at multiple security levels including coalition operations. • Integrate integrative analysis methodology with IO planning, analysis, execution and assessment across IO Community. <p>C. Other Program Funding Summary: N/A</p> <p>D. Acquisition Strategy: The VisION risk reduction technology demonstration will be extended in duration and expanded in scope to meet the requirements of the baseline capability risk reduction technology demonstration. This short-term approach will be in addition to the formal acquisition process to develop VisION initial capability and full capability. This will include a short “bridging contract” to provide IWPC 4.2/ JIAPC sustainment until VisION baseline capability is ready.</p> <p>Concurrently, the IO JMO will initiate the formal acquisition process to mature and harden the baseline capability for deployment Initial Capability in FY09 leading to full capability.</p> <p>E. Major Performers: N/A</p>		

Exhibit R-2a, RDT&E Project Justification						Date: February 2008	
Appropriation/Budget Activity RDT&E, Dw BA 06			Project Name and Number Enhanced Simulation for Information Operations Capabilities				
Cost (\$ in millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Enhanced Simulation for IO Capabilities	0	6.072	0	0	0	0	0
RDT&E Articles Quantity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A. Mission Description and Budget Item Justification:							
<p>Enhanced Simulation for Information Operations Capabilities is a Congressional add in FY08 providing a software architecture that can bring network management to the Deputy Secretary of Defense Chartered Information Operations Range and VisION initiatives. The IO Range and VisION programs require the transfer of large amounts of data to accomplish their mission and must mitigate or overcome latency and bandwidth limitation inherent in all networks. These network limitations are especially prevalent in field operations where connectivity to networks is erratic. The DoD leadership recognizes the need to improve efficiency in utilizing non kinetic weapons. Currently, however, the ability to create and operate the realistic operational environment required to support effective integration of these systems is limited because data transfer requirements exceed real world bandwidth limitations. The software architecture will support IO Range and VisION objectives to provide analysis, planning, rehearsal, and execution environments for US and coalition forces by enabling large-scale data transfer and providing a central integration point with new standards. This will save considerable time and money by eliminating rewrites of existing simulations and filtering of critical data thus providing a mission critical solution that is needed by DoD now.</p>							
B. Accomplishments/Planned Program							
	FY 2007	FY 2008	FY 2009				
Accomplishment/Effort/Subtotal Cost	0	14.360	14.526				
RDT&E Articles Quantity	N/A	N/A	N/A				
<p>FY 2007 Accomplishments: N/A FY 2008 Plans: Purchase WARP appliances, enterprise software licenses and engineering support for integration of the WARP technology into all Vision and IOR network sites. FY 2009 Plans: N/A</p>							
C. Other Program Funding Summary: N/A							
D. Acquisition Strategy: N/A							
E. Major Performers: Circadence, Inc.							