

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	DATE <b>February 2008</b>
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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0208021F Information Warfare Support</b>
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	28.028	11.965	12.220	12.482	12.664	14.734	15.036	Continuing	TBD
0374 Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt	16.031	11.965	12.220	12.482	12.664	14.734	15.036	Continuing	TBD
4871 Information Operations Technology	11.997	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD

Funding for the Information Operations Planning Capability Joint (IOPC-J) BPAC 674871 transferred to JFCOM's PE 0303166D beginning in FY08.

**(U) A. Mission Description and Budget Item Justification**

This Program Element funds research and development of information operations (IO), electronic support, and intelligence capabilities required to execute counterspace and information operations in support of combatant commanders. As directed by SECAF and approved by OSD, programs that are supported include the Information Operations Planning Capability-Joint (IOPC-J), the Information Warfare Planning Capability (IWPC), the Counter Communications System (CCS) and the Rapid Attack Identification Detection and Reporting System (RAIDRS), and Counterspace Electronic Support.

IWPC is a full-spectrum, offensive and defensive, planning capability. IWPC is an Air and Space Operations Center (AOC) weapon system component which will enable operators to develop strategic courses of action for the Joint Forces Air Component Commander (JFACC) and create Air Operations Directives, Joint Air Operations Plans, Master Air Attack Plan and the Joint Integrated Prioritized Target List (JIPTL). AF specific IO and strategy planning functions may continue under requirements being explored by Air Combat Command during JEFX-08 that will include kinetic and IO effects.

CCS provides ground-based deployable capabilities for denying satellite communications to our adversaries.

RAIDRS provides a family of ground-based systems that rapidly detect, locate, characterize, identify and report attacks against DoD-used space assets.

The Counterspace effort provides Electronic Support (ES) for key find, fix, track, target, engage, and assess (F2T2EA) requirements supporting counterspace activities and also performs developmental intelligence collection to support new capability acquisition and development. This project funds transportable intelligence collection and analysis capabilities that are modular (plug-and-play), and can keep pace with technological advances and emerging threats. It also supports phased threat system analysis and studies (A&S), test support, lab equipment, and Material Acquisition and Exploitation (MAE) for system development and vulnerability/susceptibility assessments to support tactics, techniques and procedures (TTP) development, and future threat technology studies necessary for mission area success and achievement of space superiority.

This PE funds development and continued research to identify existing military and commercial efforts which can satisfy unfulfilled operational requirements for IO planning and integration.

This program is in Budget Activity 7, Operational System Development, because it studies, develops, and fields IO tools.

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

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	24.649	12.111	12.322
(U) Current PBR/President's Budget	28.028	11.965	12.220
(U) Total Adjustments	3.379	-0.146	
(U) Congressional Program Reductions	0.000	-0.069	
Congressional Rescissions	0.000	-0.077	
Congressional Increases			
Reprogrammings	4.051		
SBIR/STTR Transfer	-0.672		

(U) **Significant Program Changes:**

In FY07 the program received additional funding as a SECAF directed effort to provide required electronic support and intelligence capabilities in support of counterspace operations and Information Operations development activities.

Funding decreased in FY08 - 13 as a result of the Information Operations Planning Capability Joint (IOPC-J) BPAC 674871 transfer to JFCOM's PE 0303166D beginning in FY08.

FY08 - 13 funding decrease in BPAC 670374 as a result of realignment of IW Support to JFCOM's PE 0303166D.

## Exhibit R-2a, RDT&amp;E Project Justification

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BUDGET ACTIVITY		PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE		
07 Operational System Development		0208021F Information Warfare Support					0374 Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
0374 Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt	16.031	11.965	12.220	12.482	12.664	14.734	15.036	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

FY08 - 13 funding decrease in BPAC 670374 as a result of alignment and correction of IW Support to JFCOM's PE 0303166D.

(U) **A. Mission Description and Budget Item Justification**

The Information Warfare Planning Capability (IWPC) is a full-spectrum, offensive and defensive, planning capability. IWPC is an Air and Space Operations Center (AOC) weapon system component which will enable operators to develop strategic courses of action for the Joint Forces Air Component Commander (JFACC); create Air Operations Directives (AOPs) and Joint Air Operator Plans (JAOPs); and, nominate IO "targets" for inclusion into the Master Air Attack Plan and the Joint Integrated Prioritized Target List (JIPTL).

This project funds the development of an evolving suite of interoperable planning and decision support capabilities comprised of, software, hardware, and communications products. This project will identify and implement an open, scalable system architecture that will accommodate growth as the virtual world grows and cyber operations change. The project builds functional software modules that are designed to be interoperable with baseline C2 systems such as the Theater Battle Management Control System (TBMCS) and other AOC tools. IWPC will participate in the Joint Expeditionary Force Experiment (JEFX) as part of the overall IWPC software development and integration effort into the AOC.

IWPC will complete development, testing and fielding in FY07-FY08 concluding with version 4.2. Following final acceptance, AF sites will receive a technical refresh of all previously fielded versions of software to version 4.2. Combatant Command (COCOM) IWPC sites will utilize FY07 funds provided by OSD to upgrade to version 4.2. Until agreements are finalized with JFCOM only AF sites will be sustained after FY07. Sustainment of IWPC will continue through FY12 with recurring technology refreshes being fielded.

The Counterspace effort will provide Electronic Support (ES) for key find, fix, track, target, engage, and assess (F2T2EA) requirements supporting counterspace activities and also performs developmental intelligence collection to support new capability acquisition and development. This project funds transportable intelligence collection and analysis capabilities that are modular (plug-and-play), and can keep pace with technological advances and emerging threats. It also supports phased threat system analysis and studies (A&S), test support, lab equipment, and Material Acquisition and Exploitation (MAE) for system development and vulnerability/susceptibility assessments to support tactics, techniques and procedures (TTP) development, and future threat technology studies necessary for mission area success and achievement of space superiority.

This project is in Budget Activity 7, Operational System Development, because it studies, develops, and demonstrates IO prototypes. It identifies existing military and commercial research and development efforts which can satisfy unfulfilled operational requirements for an IO planning and integration tool.

Exhibit R-2a, RDT&E Project Justification

DATE

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BUDGET ACTIVITY <b>07 Operational System Development</b>	PE NUMBER AND TITLE <b>0208021F Information Warfare Support</b>	PROJECT NUMBER AND TITLE <b>0374 Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt</b>
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(U) <b><u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) IWPC Specialty Engineering Support	5.158	0.706	0.699
(U) IWPC Software Testing and Evaluation	0.539	0.310	0.316
(U) Advisory & Assistance Service (A&AS)	0.675	0.680	0.702
(U) IWPC MITRE Support	0.528	0.530	0.535
(U) Program Office Costs	0.116	0.135	0.137
(U) Counterspace Electronic Support/Intelligence	9.015	9.604	9.831
(U) Total Cost	16.031	11.965	12.220

(U) <b><u>C. Other Program Funding Summary (\$ in Millions)</u></b>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) IWPC Operations & Maintenance, AF (3400) PE 0208021	1.154	0.885	0.900	0.900	0.900	0.900	0.900	Continuing	TBD
(U) Counterspace Electronic Support and Intelligence Operations and Maintenance (3400) PE 0208021F	12.330	12.603	12.739	12.954	13.173			Continuing	TBD

(U) **D. Acquisition Strategy**  
 IWPC will use an evolutionary acquisition strategy using contracts awarded after full and open competition.

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**Exhibit R-3, RDT&E Project Cost Analysis**

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**February 2008**

BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE				
<b>07 Operational System Development</b>				<b>0208021F Information Warfare Support</b>					<b>0374 Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt</b>				
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>	
(U) <u>Product Development</u>													
A&AS	Various	Lackland AFB TX		0.675	Oct-06	0.680	Oct-07	0.702	Oct-08	Continuing	TBD	TBD	
IWPC Development Contract	Various	General Dynamics, Lackland AFB TX/Santa Clara CA; FY08 TBD		5.158	Oct-06	0.706	Oct-07	0.699	Oct-08	Continuing	TBD	TBD	
IWPC MITRE Support	Various	MITRE, Lackland AFB TX		0.528	Oct-06	0.530	Oct-07	0.535	Oct-08	Continuing	TBD	TBD	
Counterspace Electronic Support Intel R&D	TBD	TBD		9.015	Nov-06	9.604	Nov-07	9.831	Nov-08	Continuing	TBD	TBD	
Program Office Costs	Various	Lackland AFB TX		0.116	Oct-06	0.135	Oct-07	0.137	Oct-08	Continuing	TBD	TBD	
Subtotal Product Development			0.000	15.492		11.655		11.904		Continuing	TBD	TBD	
Remarks:													
(U) <u>Test &amp; Evaluation</u>													
IWPC Development Test	T&M	46th Test Squadron, Eglin AFB FL		0.539	Nov-06	0.310	Nov-07	0.316	Nov-08	Continuing	TBD	TBD	
Subtotal Test & Evaluation			0.000	0.539		0.310		0.316		Continuing	TBD	TBD	
Remarks:													
(U) Total Cost			0.000	16.031		11.965		12.220		Continuing	TBD	TBD	

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0208021F Information Warfare Support

PROJECT NUMBER AND TITLE  
0374 Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt



# CS ES & Intel Program Schedule

FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
	◆ Contract Award						
<b>Counterspace Electronic Support Intel R&amp;D</b>							
		◆ Contract Award					
			◆ Contract Award				

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Exhibit R-4 (PE 0208021F)

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Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY  
**07 Operational System Development**

PE NUMBER AND TITLE  
**0208021F Information Warfare Support**

PROJECT NUMBER AND TITLE  
**0374 Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt**



# IWPC Program Schedule



*Delivering what we promised when we promised*

*War-winning Capabilities... On Time, On Cost*

FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13
◆	<b>JEFX-06</b>	◆	<b>JEFX-08</b>	◆	<b>JEFX-10</b>		
<b>IWPCv4.2</b>		<b>Field</b>					
		<b>IWPC Sustainment Contract Award</b>					
		◆	<b>Sustain IWPC v4.2</b>				
			◆	<b>Version Release</b>	◆	<b>Version Release</b>	◆
					<b>Version Release</b>	<b>Version Release</b>	

*Integrity - Service - Excellence*

Exhibit R-4a, RDT&E Schedule Detail

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BUDGET ACTIVITY <b>07 Operational System Development</b>	PE NUMBER AND TITLE <b>0208021F Information Warfare Support</b>	PROJECT NUMBER AND TITLE <b>0374 Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt</b>
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(U) <u>Schedule Profile</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) IWPC v4.2 Development, Test & Integration	1-4Q	1-2Q	
(U) IWPC v4.2 Fielding		2-4Q	1-3Q
(U) JEFX 08		2Q	
(U) IWPC 4.0 Sustainment Contract Award	2Q		
(U) IWPC v4.0 and v4.2 Sustainment	2-4Q	1-4Q	1-4Q
(U) Counter Space Electronic Support (CS ES) & Intel Program	1Q	1Q	1Q
(U) Intel Support and R&D	1-4Q	1-4Q	1-4Q
(U) Contract Award	4Q		
(U) Contract Award		4Q	

**Exhibit R-2a, RDT&E Project Justification**

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BUDGET ACTIVITY <b>07 Operational System Development</b>				PE NUMBER AND TITLE <b>0208021F Information Warfare Support</b>			PROJECT NUMBER AND TITLE <b>4871 Information Operations Technology</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
4871 Information Operations Technology	11.997	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

Funding for the Information Operations Planning Capability Joint (IOPC-J) BPAC 674871 transferred to JFCOM's PE 0303166D beginning in FY08.

**(U) A. Mission Description and Budget Item Justification**

The Information Operations Planning Capability (IOPC-J) is a suite of tools developed to a joint integrated baseline. It leverages existing capabilities but also requires system and software development activities. The suite is comprised of Joint IO planning capabilities and Service-unique applications based on shared access to Service/Agency/joint-provided data sources in support of the Joint Forces Commander's (JFC) overall campaign plan and across the spectrum of military and peacekeeping operations. Studies and software interface documentation have already been completed that accommodate joint IO applications and are a possible follow-on to the AF's Information Warfare Planning Capability 4.X. The Information Warfare Planning Capability (IWPC) v4.2 serves as an initial joint capability, and an incremental pathfinder for the first developmental version of IOPC-J's baseline capabilities containing the complete AOC strategy to task planning.

This project funds development and continued research to identify existing military and commercial efforts which can satisfy unfulfilled operational requirements for an IO planning and integration tool.

This program is in Budget Activity 7, Operational System Development, because it studies, develops, and fields IO tools.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) IOPC-J Software Development and Integration	6.261	0.000	0.000
(U) Site Integration	0.985	0.000	0.000
(U) IOPC-J Software Testing and Evaluation	0.700	0.000	0.000
(U) Project Suter	4.051	0.000	0.000
(U) Total Cost	11.997	0.000	0.000

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

	<u>FY 2007</u> <u>Actual</u>	<u>FY 2008</u> <u>Estimate</u>	<u>FY 2009</u> <u>Estimate</u>	<u>FY 2010</u> <u>Estimate</u>	<u>FY 2011</u> <u>Estimate</u>	<u>FY 2012</u> <u>Estimate</u>	<u>FY 2013</u> <u>Estimate</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
(U) IW Supt Operations and maintenance, AF 3400 and PE 0208021	2.177	0.823	0.755	0.788	0.732	0.721	0.709	Continuing	TBD

**(U) D. Acquisition Strategy**

All major contracts will be awarded after full and open competition.

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**Exhibit R-3, RDT&E Project Cost Analysis**

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BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE				
<b>07 Operational System Development</b>				<b>0208021F Information Warfare Support</b>				<b>4871 Information Operations Technology</b>				
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2007 Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
(U) <u>Product Development</u> IOPC-J Software Development	Various	General Dynamics, Lackland AFB, TX/Santa Clara CA	6.477	1.395	May-07	0.000	N/A	0.000		Continuing	TBD	TBD
Site Integration	Various	General Dynamics, Lackland AFB, TX/Santa Clara CA	0.000	0.985	May-07	0.000	N/A				0.985	
Project Suter Development	Various	Wright-Patterson AFB, OH	0.000	4.051	Aug-07	0.000	N/A				4.051	
Subtotal Product Development			6.477	6.431		0.000		0.000		Continuing	TBD	TBD
Remarks:												
(U) <u>Support</u> Program Management/Technical Support	A&AS	Various, LAFB, TX	0.294	0.869	Feb-07	0.000	N/A			Continuing	TBD	TBD
Engineering Support	FFRDC	MITRE, Lackland, TX	0.311	0.287	Mar-07	0.000	N/A				0.598	
JFCOM	Various	JFCOM/J7, Suffolk, VA	0.000	3.626		0.000					3.626	
Subtotal Support			0.605	4.782		0.000		0.000		Continuing	TBD	TBD
Remarks:												
(U) <u>Test &amp; Evaluation</u> Software Testing & Evaluation and Exercise Support	Various	Various	0.000	0.700						Continuing	TBD	TBD
Subtotal Test & Evaluation			0.000	0.700		0.000		0.000		Continuing	TBD	TBD
Remarks:												
(U) <u>Management</u> Operating Costs		OL-AA 950 ELSG, Lackland AFB, TX	0.026	0.084						Continuing	TBD	TBD
Subtotal Management			0.026	0.084		0.000		0.000		Continuing	TBD	TBD
Remarks:												
(U) Total Cost			7.109	11.997		0.000		0.000		Continuing	TBD	TBD

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Exhibit R-3 (PE 0208021F)

Exhibit R-4, RDT&E Schedule Profile

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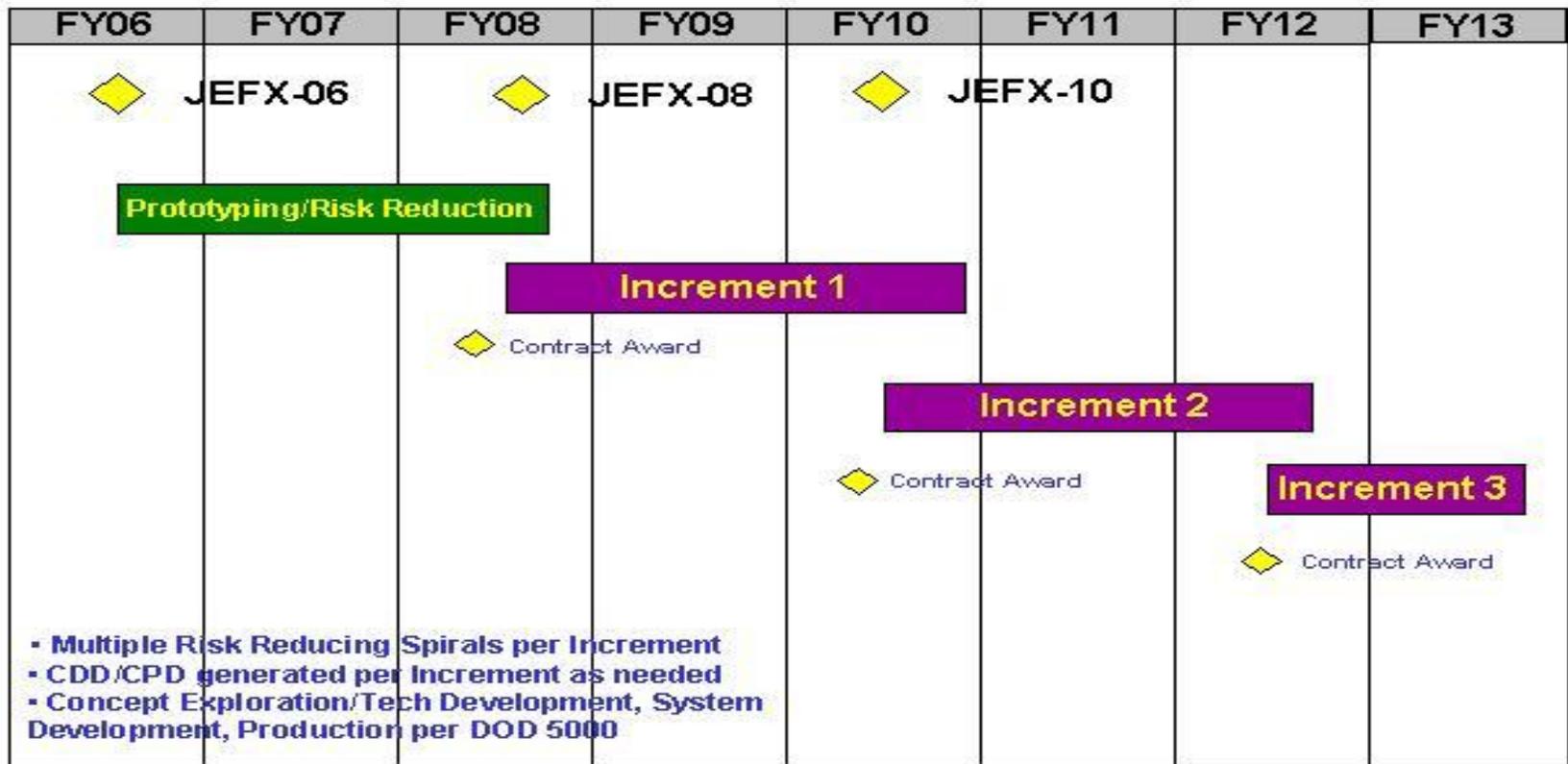
BUDGET ACTIVITY  
07 Operational System Development

PE NUMBER AND TITLE  
0208021F Information Warfare Support

PROJECT NUMBER AND TITLE  
4871 Information Operations Technology



# IOPC-J Program Schedule



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<b>Exhibit R-4a, RDT&amp;E Schedule Detail</b>	DATE <b>February 2008</b>
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<b>BUDGET ACTIVITY</b> <b>07 Operational System Development</b>	<b>PE NUMBER AND TITLE</b> <b>0208021F Information Warfare Support</b>	<b>PROJECT NUMBER AND TITLE</b> <b>4871 Information Operations Technology</b>
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	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <b><u>Schedule Profile</u></b>			
(U) Prototyping/Risk Reduction	1-4Q	1-3Q	
(U) JEFX 08		3Q	
(U) Increment 1 Contract Award		2Q	
(U) IOPC-J Software Increment 1		3-4Q	1-4Q