

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	42.832	50.484	51.693	0.000	51.693	48.614	42.829	42.126	43.063	Continuing	Continuing
3040: TADIRCM	35.342	50.484	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	154.739
3166: CH-53 DIRCM TAP	3.900	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	99.147
3302: JATAS	0.000	0.000	51.693	0.000	51.693	48.614	38.123	12.043	0.379	Continuing	Continuing
3304: CIRCM	0.000	0.000	0.000	0.000	0.000	0.000	4.706	30.083	42.684	Continuing	Continuing
9999: Congressional Adds	3.590	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.989
Note Joint and Allied Threat Awareness System (JATAS) work performed in this program element under project unit (PU) 3040 is moved to an individual PU 3302 for efforts beginning in FY11. New PU 3304 Common Infrared Countermeasures (CIRCM)is is a new start for the Navy with efforts to begin in FY13.											
A. Mission Description and Budget Item Justification This element includes development of electronic warfare systems for the United States Navy (USN) and United States Marine Corps (USMC) assault and strike aircraft. This includes the development and testing of advanced Infrared Countermeasures (IRCM) systems for emerging threats and emergency contingencies. Realignment of project units from Tactical Aircraft Directed Infrared Countermeasure (TADIRCM) to Joint and Allied Threat Awareness System (JATAS) begins in FY11. This program element includes \$0.285 million for the Defense Acquisition Workforce Development Fund (DAWDF).											

UNCLASSIFIED

R-1 Line Item #74

Page 1 of 31

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)		PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)			
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	66.568	63.702	0.000	0.000	0.000
Current President's Budget	42.832	50.484	51.693	0.000	51.693
Total Adjustments	-23.736	-13.218	51.693	0.000	51.693
• Congressional General Reductions		-0.210			
• Congressional Directed Reductions		-13.000			
• Congressional Rescissions	0.000	-0.008			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-21.839	0.000			
• SBIR/STTR Transfer	-1.897	0.000			
• Program Adjustments	0.000	0.000	51.693	0.000	51.693
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: 9999: Congressional Adds					
Congressional Add: ASSAULT DIRECTED INFRARED COUNTERMEASURES					
Congressional Add: Compact Ultra-Fast Laser System Development					
Congressional Add Subtotals for Project: 9999					
Congressional Add Totals for all Projects					
Change Summary Explanation					
Technical: The acquisition strategy has been revised to field an advanced IRCM capability for assault aircraft. An evolutionary acquisition approach will be implemented in fielding this capability. The capability will be fielded in two increments, with the first increment being an advanced Missile Warning System (MWS) capability. This capability has been designated as JATAS. The second increment Assault DIRCM designated by the Army as the Common Infrared Countermeasure (CIRCM) has a Milestone B decision planned in FY10.					
Schedule: The schedule for Tactical Aircraft Directed Infrared Countermeasure (TADIRCM) has changed due to new guidance from OPNAV. An Analysis of Alternatives (AoA) was conducted by N88 to assess the need for an advanced Infrared Countermeasure (IRCM) capability for assault and strike aircraft against					

UNCLASSIFIED

R-1 Line Item #74

Page 2 of 31

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>
<p>surface to air threats. Conclusions from the AoA determined there was an immediate need for an advanced IRCM capability for assault (rotary wing) aircraft, however, additional analysis was needed to evaluate strike aircraft IRCM requirements. The AoA conclusion was that advanced Missile Warning Technology was sufficiently mature to proceed into an Engineering Manufacturing Development (EMD) program. However, the Assault Directed Infrared countermeasure (DIRCM) technology for small to medium USN/USMC assault aircraft required maturity of several technologies prior to EMD. TADIRCM will now be executed via two separate programs. Subsequent to the AoA, an Under Secretary of Defense for Acquisition, Logistics and Technology USD (AT&L) directed Joint Analysis Team (JAT) was formed to analyze Aircraft Survivability Equipment (ASE) across all the services. As a result of the JAT's recommended roadmap for ASE, an Acquisition Decision Memorandum (ADM) by the USD (AT&L) on 15 April 09 directed the Navy to conduct a competitive prototyping technology development (TD) phase prior to EMD. In addition to designating the Army as the lead service for developing a DIRCM capability for assault aircraft, a Joint and Allied Threat Awareness System (JATAS) TD phase contract to conduct competitive prototyping prior to an EMD was awarded in FY09. The EMD contract award is planned for FY11 with an Initial Operational Capability (IOC) date of FY14 planned. Assault DIRCM, which has been designated by the Army as the Common Infrared Countermeasure (CIRCM) has a planned Milestone B of FY11.</p> <p>FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.</p>		

UNCLASSIFIED

R-1 Line Item #74

Page 3 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>				PROJECT 3040: <i>TADIRCM</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3040: <i>TADIRCM</i>	35.342	50.484	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	154.739
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Tactical Aircraft Directed Infrared Countermeasures (TADIRCM) system provides the war fighter with protection against surface and air-to-air missiles. This project looks at an advanced Infrared Countermeasure (IRCM) capability for USN/USMC rotary wing/tilt rotor assault aircraft against Infrared (IR) Man Portable Air Defense System (MANPADS) and Surface-to-Air (SAM) threats. This project is divided into two components: 1) An advanced missile warning threat detection capability Joint and Allied Threat Awareness System (JATAS) and 2) An advanced IR countermeasure capability Assault Directed Infrared Countermeasure (DIRCM). JATAS will be the front end of an integrated survivability suite. It will require integration with the APR-39 or follow-on Radar Warning Receiver/EW integration bus, the ALE-47 Countermeasures Dispensing System, and a number of joint and allied platforms. It will also provide advanced capabilities that require extensive testing & evaluation of IRCM techniques.

New PU 3302 (JATAS) Joint and Allied Threat Awareness System was established to begin in FY11. Prior year efforts (FY08-FY10) were funded via PU 3040 (TADIRCM).

This project unit includes \$0.285 million for the Defense Acquisition Workforce Development Fund (DAWDF).

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
TADIRCM JATAS	32.857	30.219	0.000	0.000	0.000
Joint and Allied Threat Awareness System (JATAS) is required to provide assault aircraft with a reliable surface-to-air IR missile/Hostile Fire Indication (HFI) threat detection system.					

UNCLASSIFIED

R-1 Line Item #74

Page 4 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)		R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)		PROJECT 3040: TADIRCM		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Completed a demonstration of the ability of advanced missile warning technology to detect hostile fire threats (i.e. rocket propelled grenade and small arms, etc.). Collected hostile fire data and generated a hostile fire data base that will be used to support the JATAS test and evaluation efforts.						
FY 2010 Plans: Plan to fund engineering and program management efforts to support the JATAS TD phase contract award. Plan to incrementally fund the JATAS TD contract and continue development of HFI algorithms.						
TADIRCM Assault Assault Directed Infrared Countermeasure (DIRCM) system will counter current and future Infrared (IR) threats.		1.000	19.265	0.000	0.000	0.000
FY 2009 Accomplishments: Funded efforts to support trade studies and analysis for assault DIRCM.						
FY 2010 Plans: Plan to fund engineering and program management efforts to support the US Army's Common Infrared Countermeasure (CIRCM) Milestone B and contract award in FY2010. Conduct an early operational assessment flight test demonstration of a light weight DIRCM capability on an assault aircraft.						
JATAS and CIRCM Pre-MS B, Risk Reduction, EMD Effort The Army was designated as the lead service for developing a DIRCM capability for assault aircraft. Risk reduction efforts for JATAS and CIRCM programs.		1.200	1.000	0.000	0.000	0.000

UNCLASSIFIED

R-1 Line Item #74

Page 5 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>		PROJECT 3040: <i>TADIRCM</i>		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Funded efforts to support engineering, program management, and risk reduction efforts for the JATAS and CIRCM programs. This includes requirement development and efforts for a JATAS Engineering and Manufacturing Development (EMD) contract.</p> <p><i>FY 2010 Plans:</i> Funding the development of applicable modeling and simulation for both programs. Risk reduction efforts in the area of HFI for JATAS and risk reduction/technology development efforts to reduce the size and weight an Assault DIRCM Pointer Tracker System.</p>						
DAWDF Realignment <i>FY 2009 Accomplishments:</i> DAWDF realignment		0.285	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		35.342	50.484	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions)						
N/A						
D. Acquisition Strategy						
<p>OPNAV (N88) completed an Analysis of Alternatives (AoA) in March 2007 to address the need for an Assault Directed Infrared Countermeasure (DIRCM) capability for assault (rotary wing) platforms. Based on the results of the AoA, an evolutionary acquisition strategy will be used to develop an advanced Infrared Countermeasure (IRCM) capability for USN/USMC rotary wing and tilt rotor assault aircraft. This acquisition approach will consist of two program increments 1) the development, test, and fielding of a Missile Warning capability to detect surface-to-air and air-to-air Infrared (IR) threats and 2) an Assault DIRCM system to counter current and future IR threats. The DIRCM sends directed laser energy to defeat the incoming IR threat when it is detected by the missile warning system. This approach will accelerate fielding of the missile warning capability while allowing Assault DIRCM technology to mature. Assault DIRCM technology maturation is required to support the size and weight constraints of USN/USMC assault platforms. The first increment of Assault DIRCM is the missile warning component designated by N88 as the Joint and Allied Threat Awareness System (JATAS). A JATAS Technology Development (TD) phase contract was awarded in FY09 and an Engineering Manufacturing</p>						

UNCLASSIFIED

R-1 Line Item #74

Page 6 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
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<p>Development (EMD) contract award is planned for FY11. JATAS Initial Operational Capability (IOC) is planned for FY14. The Army was designated as the lead service for developing a DIRCM capability for assault aircraft. Assault DIRCM designated by the Army as the Common Infrared Countermeasure (CIRCM), has a planned Milestone B of FY10.</p> <p><u>E. Performance Metrics</u></p> <p>Comptetive TD contract award (2 contractors) in Sept 2009. Incremental funding for FY10 to both contractors. Down select to one contractor in FY11 for EMD contract award.</p>		

UNCLASSIFIED

R-1 Line Item #74

Page 7 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)				PROJECT 3040: TADIRCM				
Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Primary Hdw Development JATAS	C/CPIF	LM, ATK LM, ATK	34.430	22.600	Feb 2010	0.000		0.000		0.000	0.000	57.030	49.822	
Aircraft Integration JATAS I	WR	Various Various	0.180	0.000		0.000		0.000		0.000	0.000	0.180	Continuing	
Aircraft Integration JATAS II	SS/CPIF	DCMA, LM Owego, NY	2.615	0.000		0.000		0.000		0.000	0.000	2.615	2.615	
Aircraft Integration JATAS III	C/CPIF	Various Various	4.238	5.723	Mar 2010	0.000		0.000		0.000	0.000	9.961	9.961	
Modeling/Simulation JATAS	WR	Various Various	2.550	0.400	Dec 2009	0.000		0.000		0.000	0.000	2.950	Continuing	
Systems Engineering JATAS I	C/CPFF	TEKLA Woodbridge, VA	2.896	0.000		0.000		0.000		0.000	0.000	2.896	2.896	
Systems Engineering JATAS II	C/CPFF	Various Various	0.330	0.000		0.000		0.000		0.000	0.000	0.330	0.330	
Sys Eng Govt JATAS I	WR	Various Various	4.625	1.952	Dec 2009	0.000		0.000		0.000	0.000	6.577	Continuing	
Sys Eng Govt JATAS II	WR	NRL Washington, DC	2.443	0.000		0.000		0.000		0.000	0.000	2.443	Continuing	
Sys Eng CONG HPFL	WR	NSWC Crane, IN	0.288	0.000		0.000		0.000		0.000	0.000	0.288	Continuing	
Sys Eng CONG Assault	WR	NSWC Crane, IN	3.648	0.000		0.000		0.000		0.000	0.000	3.648	Continuing	
Prototype Dev JATAS	MIPR	Ft Monmouth Ft Monmouth, NJ	0.800	0.000		0.000		0.000		0.000	0.000	0.800	Continuing	
	C/CPIF	TBD	0.000	4.770	Mar 2010	0.000		0.000		0.000	0.000	4.770	4.770	

UNCLASSIFIED

R-1 Line Item #74

Page 8 of 31

UNCLASSIFIED

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Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Primary Hdw Dev Assault		TBD												
Aircraft Integration Assault	C/CPIF	TBD TBD	0.000	2.375	Mar 2010	0.000		0.000		0.000	0.000	2.375	2.375	
Modeling/Simulation Assault	WR	Various Various	0.000	0.300	Dec 2009	0.000		0.000		0.000	0.000	0.300	Continuing	
Systems Eng Govt Assault	WR	Various Various	0.000	1.025	Dec 2009	0.000		0.000		0.000	0.000	1.025	Continuing	
Subtotal			59.043	39.145		0.000		0.000		0.000	0.000	98.188	72.769	
Remarks														
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Dev Support JATAS	WR	Various Various	3.900	0.000		0.000		0.000		0.000	0.000	3.900	Continuing	
Configuration Mgmt JATAS	WR	Various Various	0.000	0.100	Dec 2009	0.000		0.000		0.000	0.000	0.100	Continuing	
Integrated Logistics JATAS I	WR	Various Various	0.962	0.636	Dec 2009	0.000		0.000		0.000	0.000	1.598	Continuing	

UNCLASSIFIED

R-1 Line Item #74

Page 9 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)				PROJECT 3040: TADIRCM					
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Integrated Logistics JATAS II	C/CPFF	TSD Orlando	0.012	0.000	Jun 2010	0.000		0.000		0.000	0.000	0.012	0.012	
Software Dev JATAS	WR	NAWCAD Pt Mugu	0.751	0.400	Dec 2009	0.000		0.000		0.000	0.000	1.151	Continuing	
Studies & Analyses Gov JATAS	WR	Various Various	6.240	0.000		0.000		0.000		0.000	0.000	6.240	Continuing	
S & A NonFFRDC JATAS	C/CPFF	Bell Boeing Bell Boeing, TX	1.344	0.000		0.000		0.000		0.000	0.000	1.344	1.344	
Technical Data JATAS	WR	NRL Washington, DC	1.450	0.000		0.000		0.000		0.000	0.000	1.450	Continuing	
S & A CONG HPFL GOV	WR	NSWC Crane, IN	0.140	0.000		0.000		0.000		0.000	0.000	0.140	Continuing	
S & A CONG HPFL	C/CPFF	Amsec Amsec, VA	1.000	0.000		0.000		0.000		0.000	0.000	1.000	1.000	
Software Dev Assault	WR	Various Various	0.000	0.300	Dec 2009	0.000		0.000		0.000	0.000	0.300	Continuing	
Integrated Logistics Assault	WR	Various Various	0.000	1.525	Dec 2009	0.000		0.000		0.000	0.000	1.525	Continuing	
Configuration Mgmt Assault	WR	Various Various	0.000	0.100	Dec 2009	0.000		0.000		0.000	0.000	0.100	Continuing	
Subtotal			15.799	3.061		0.000		0.000		0.000	0.000	18.860	2.356	
Remarks														

UNCLASSIFIED

R-1 Line Item #74

Page 10 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)				PROJECT 3040: TADIRCM					
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Developmental T & E JATAS	WR	NRL Washington, DC	1.132	0.136	Dec 2009	0.000		0.000		0.000	0.000	1.268	Continuing	
Operational T & E JATAS	WR	Various Various	0.577	0.400	Jan 2010	0.000		0.000		0.000	0.000	0.977	Continuing	
ENG and Evaluation JATAS	C/CPFF	Various Various	4.892	0.000		0.000		0.000		0.000	0.000	4.892	4.892	
ENG and Eval Govt JATAS	WR	Various Various	4.466	0.630	Dec 2009	0.000		0.000		0.000	0.000	5.096	Continuing	
Live Fire Support JATAS	WR	Various Various	0.990	0.200	Feb 2010	0.000		0.000		0.000	0.000	1.190	Continuing	
Technical Maturation JATAS I	WR	NAWCAD Pax River, MD	2.655	0.000		0.000		0.000		0.000	0.000	2.655	Continuing	
Technical Maturation JATAS II	MIPR	DTIS Fort Belvoir	0.280	0.000		0.000		0.000		0.000	0.000	0.280	Continuing	
Developmental T&E MH60S JATAS	WR	NAWCAD Pax River, MD	0.236	0.000		0.000		0.000		0.000	0.000	0.236	Continuing	
Test Assets JATAS	WR	NAWCWD China Lake	3.600	0.820	Jan 2010	0.000		0.000		0.000	0.000	4.420	Continuing	
ENG and Eval Govt Assault	WR	Various Various	0.000	0.202	Dec 2009	0.000		0.000		0.000	0.000	0.202	Continuing	
Developmental T&E Assault	WR	NRL Washington, DC	0.000	0.000		0.000		0.000		0.000	0.000	0.000	Continuing	
Test Assets Assault	WR	Various Various	0.000	0.851	Jan 2010	0.000		0.000		0.000	0.000	0.851	Continuing	
Subtotal			18.828	3.239		0.000		0.000		0.000	0.000	22.067	4.892	

UNCLASSIFIED

R-1 Line Item #74

Page 11 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)				PROJECT 3040: TADIRCM				
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks													
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Eng Supt JATAS	C/CPFF	Various Various	4.219	0.600	Dec 2009	0.000		0.000		0.000	0.000	4.819	4.819
Govt Eng Supt JATAS	WR	Various Various	3.209	0.430	Dec 2009	0.000		0.000		0.000	0.000	3.639	Continuing
Program Mgmt Supt JATAS	C/CPFF	Various Various	2.756	0.750	Dec 2009	0.000		0.000		0.000	0.000	3.506	3.506
Travel JATAS	WR	NAVAIR Various	0.768	0.000		0.000		0.000		0.000	0.000	0.768	Continuing
Transportation JATAS	MIPR	DIA Redstone, AL	0.015	0.000		0.000		0.000		0.000	0.000	0.015	Continuing
Direct Support Costs JATAS	WR	Various Various	0.458	0.000		0.000		0.000		0.000	0.000	0.458	Continuing
Cost Analysis Supt JATAS	WR	NAWCAD Pax River, MD	1.005	0.300	Dec 2009	0.000		0.000		0.000	0.000	1.305	Continuing
Contracting Procure Fee JATAS	WR	NAWCAD Pax River, MD	0.048	0.000		0.000		0.000		0.000	0.000	0.048	Continuing

UNCLASSIFIED

R-1 Line Item #74

Page 12 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)					PROJECT 3040: TADIRCM				
Management Services (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Acquisition Program Office JATAS	WR	NAWCAD Pax River, MD	0.185	0.000		0.000		0.000		0.000	0.000	0.185	Continuing	
Eng & Eval CONG HPFL Gov	WR	NSWC Crane, IN	0.095	0.000		0.000		0.000		0.000	0.000	0.095	Continuing	
Eng & Eval CONG ASSAULT	MIPR	Fort Monmouth, NJ Fort Monmouth, NJ	0.326	0.000		0.000		0.000		0.000	0.000	0.326	Continuing	
DAWDF Realignment	Various/ Various	FMB FMB	0.285	0.000		0.000		0.000		0.000	0.000	0.285	Continuing	
Travel CONG HPFL	WR	NSWC Crane, IN	0.020	0.000		0.000		0.000		0.000	0.000	0.020	Continuing	
NAWCAD Pax Support JATAS	WR	NAWCAD Pax River, MD	1.006	0.620	Dec 2009	0.000		0.000		0.000	0.000	1.626	Continuing	
Contractor Eng Supt Assault	C/CPFF	Various Various	0.000	0.600	Dec 2009	0.000		0.000		0.000	0.000	0.600	0.600	
Govt Eng Supt Assault	WR	Various Various	0.000	0.430	Dec 2009	0.000		0.000		0.000	0.000	0.430	Continuing	
Cost Analysis Support Assault	WR	NAWCAD Pax River, MD	0.000	0.389	Dec 2009	0.000		0.000		0.000	0.000	0.389	Continuing	
NAWCAD Pax Support Assault	WR	NAWCAD Pax River, MD	0.000	0.620	Dec 2009	0.000		0.000		0.000	0.000	0.620	Continuing	
Program Mgmt Supt Assault	C/CPFF	Various Various	0.000	0.300	Dec 2009	0.000		0.000		0.000	0.000	0.300	0.300	
Subtotal			14.395	5.039		0.000		0.000		0.000	0.000	19.434	9.225	

UNCLASSIFIED

R-1 Line Item #74

Page 13 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>				PROJECT 3040: <i>TADIRCM</i>					
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			108.065	50.484		0.000		0.000		0.000	0.000	158.549	89.242
Remarks													

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy																								DATE: February 2010					
APPROPRIATION/BUDGET ACTIVITY												R-1 ITEM NOMENCLATURE												PROJECT					
1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)												PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)												3040: TADIRCM					
Fiscal Year		2009				2010				2011				2012				2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition																													
Milestones																													
Production Deliveries																													
JATAS System																													
Development																													
Test & Evaluation																													
Milestones																													
Development Test																													
Operational Test																													

UNCLASSIFIED

R-1 Line Item #74

Page 15 of 31

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>	PROJECT 3040: <i>TADIRCM</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Technology Readiness Assessment for Milestone B (TRA MB)	1	2009	1	2011
Request for Proposal for Technology Demo (RFP for TD)	1	2009	1	2009
Technology Demonstration Award	4	2009	4	2009
System Requirements Review 1 (SRR)	2	2010	2	2010
Schedule Risk Assessment (SRA)	2	2010	2	2010
System Functional Review/System Requirements Review 2 (SFR/SRR)	2	2010	3	2010
Integrated Baseline Review 1 (IBR)	2	2010	2	2010
Prototype Delivery (2)	3	2010	4	2010
Request for Proposal for EM Development and Demonstration (RFP for EMDD)	3	2010	3	2010
Capabilities Development Document (CDD)	3	2010	3	2010
Prototyping Test and Evaluation (T&E)	3	2010	4	2010
Preliminary Design Review (PDR)	4	2010	4	2010
Platform Integration Award (PA)	1	2011	1	2011
Milestone B	2	2011	2	2011

UNCLASSIFIED

R-1 Line Item #74

Page 16 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>				PROJECT 3166: <i>CH-53 DIRCM TAP</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3166: <i>CH-53 DIRCM TAP</i>	3.900	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	99.147
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
Note This funding was used to complete an FY 2007 Supplemental requirement.											
A. Mission Description and Budget Item Justification This supplemental helps to accelerate the fielding of an advanced InfraRed Countermeasure (IRCM) capability for United States Navy (USN)/ United States Marine Corps (USMC) rotary wing platforms. This capability will significantly increase platform survivability against Man Portable Air Defense (MANPADs) and is required to defeat advanced threats expected to be encountered in the Global War on Terrorism (GWOT) theaters. Without this capability USN / USMC rotary wing platform will be limited in their ability to engage/complete mission in support of GWOT. This effort will entail the qualification and tests required to field an advanced IRCM capability on the CH-53E, in addition to the nonrecurring engineering costs necessary to address the limitation of the current Assault Support Equipment (ASE) Missile Warning Sensor (MWS) capability on forward deployed USN / USMC rotary wing platforms.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
CH-53 DIRCM TAP						3.900	0.000	0.000	0.000	0.000	
<i>FY 2009 Accomplishments:</i> This funding completed the qualification tests required to field an advanced IRCM capability on the CH-53E and the non recurring engineering costs necessary to address limitations of the current ASE MWS capability on forward deployed USN / USMC rotary wing platforms. The advanced IRCM capability requires system integration and engineering manufacturing development to existing hardware and software configuration of the CH-53 platform. Ancillary hardware development is required to support optimal utilization of IRCM detecting, tracking and targeting of the sensors and											

UNCLASSIFIED

R-1 Line Item #74

Page 17 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>		PROJECT 3166: <i>CH-53 DIRCM TAP</i>	
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>					
				FY 2009	FY 2010
				FY 2011 Base	FY 2011 OCO
				FY 2011 Total	
lasers. Modeling and simulation will support development of software and operability testing. The MWS will be integrated on multiple forward deployed USN / USMC rotary wing platforms.					
Accomplishments/Planned Programs Subtotals				3.900	0.000
				0.000	0.000
				0.000	0.000
<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A					
<u>D. Acquisition Strategy</u> Initial Qualification of the CH-53 DIRCM capability for operational use occurred in FY 2006 and FY 2007. Contract execution of this effort began in the 3rd quarter of FY 2007 to procure initial DIRCM test assets. Upon completion of validation the CH-53 DIRCM, the system will be identified suitable and effective for operational use.					
<u>E. Performance Metrics</u> Complete.					

UNCLASSIFIED

R-1 Line Item #74

Page 18 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)				PROJECT 3302: JATAS			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3302: JATAS	0.000	0.000	51.693	0.000	51.693	48.614	38.123	12.043	0.379	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
The Joint and Allied Threat Awareness System (JATAS) is required to provide assault aircraft with a reliable surface-to-air IR missile/Hostile Fire Indication (HFI) threat detection system. This capability must provide accurate and timely warning in all flight regimes, ambient light conditions, clutter backgrounds and weather conditions. It must be capable of providing countermeasure cueing to flares and/or a Directional Infra-red Countermeasures (DIRCM). JATAS will enable assault Aircraft Survivability Equipment (ASE) to detect and provide countermeasure cueing to current and emerging threats. Lead Department of the Navy platform for this capability is the MV-22. Project was previously funded by the Tactical Aircraft Directed Infrared Countermeasure (TADIRCM) project unit.											
New PU 3302 (JATAS) Joint and Allied Threat Awareness System was established to begin in FY11. Prior year efforts (FY08-FY10) were funded via PU 3040 (TADIRCM).											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
JATAS Technology Demonstration						0.000	0.000	4.534	0.000	4.534	
Provide Technology Development phase support for Joint and Allied Threat Awareness System (JATAS). Program will provide assault aircraft with a reliable surface-to-air IR missile/Hostile Fire Indication (HFI) threat detection system.											
FY 2011 Base Plans:											
FY 11 Base: Complete the execution of the JATAS Technology Development phase efforts including the down select to the Engineering Manufacturing Development (EMD) vendor.											
JATAS Engineering Manufacturing Development						0.000	0.000	35.116	0.000	35.116	

UNCLASSIFIED

R-1 Line Item #74

Page 19 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>		PROJECT 3302: JATAS	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>Provide Engineering and Manufacturing Development (EMD) phase support for JATAS. Program will provide assault aircraft with a reliable surface-to-air IR missile/HFI threat detection system.</p> <p><i>FY 2011 Base Plans:</i> Execution of the EMD contract award to begin development of JATAS. Tasks to be completed include Integrated Baseline Review (IBR) and Critical Design Review (CDR).</p>					
<p>JATAS Integration</p> <p>Provide required platform integration support for JATAS.</p> <p><i>FY 2011 Base Plans:</i> Continuation of aircraft integration efforts with the JATAS lead platform. Plan to complete A-kit Preliminary Design Review (PDR) second quarter of FY11.</p>	0.000	0.000	12.043	0.000	12.043
Accomplishments/Planned Programs Subtotals	0.000	0.000	51.693	0.000	51.693
C. Other Program Funding Summary (\$ in Millions)					
N/A					
D. Acquisition Strategy					
<p>OPNAV (N88) completed an Analysis of Alternatives (AoA) in March 2007 to address the need for an Assault Directed Infrared Countermeasure (DIRCM) capability for assault (rotary wing) platforms. Based on the results of the AoA, an evolutionary acquisition strategy will be used to develop an advanced Infrared Countermeasure (IRCM) capability for USN/USMC rotary wing and tilt rotor assault aircraft. This acquisition approach will consist of two program increments 1) the development, test, and fielding of a Missile Warning capability to detect surface-to-air and air-to-air Infrared (IR) threats and 2) an Assault DIRCM system to counter current and future IR threats. The DIRCM sends directed laser energy to the incoming IR threat once detected by the missile warning system. This approach will accelerate fielding of the missile warning capability while allowing Assault DIRCM technology to mature. Assault DIRCM technology maturation is required to support the size and weight constraints of USN/USMC assault platforms. The first increment of Assault DIRCM is the missile warning component designated by N88 as the Joint and Allied Threat</p>					

UNCLASSIFIED

R-1 Line Item #74

Page 20 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM</i> (TADIRCM)	PROJECT 3302: JATAS
Awareness System (JATAS). A JATAS Technology Development (TD) phase contract was awarded in FY09 and an Engineering Manufacturing Development (EMD) contract award is planned for FY11. JATAS Initial Operational Capability (IOC) is planned for FY14.		
<u>E. Performance Metrics</u> Award of JATAS EMD contract in FY11.		

UNCLASSIFIED

R-1 Line Item #74

Page 21 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)					PROJECT 3302: JATAS				
Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Primary Hdw Dev JATAS I	C/CPIF	TD TBD	0.000	0.000		8.534	Dec 2010	0.000		8.534	0.000	8.534	8.534	
Primary Hdw Dev JATAS II	C/CPIF	EMD TBD	0.000	0.000		20.751	Mar 2011	0.000		20.751	56.250	77.001	77.001	
Aircraft Integration JATAS I	WR	Various Various	0.000	0.000		0.000		0.000		0.000	1.200	1.200	Continuing	
Aircraft Integration JATAS II	C/CPIF	Various Various	0.000	0.000		6.700	Dec 2010	0.000		6.700	9.200	15.900	15.900	
Modeling/Simulation JATAS	WR	Various Various	0.000	0.000		0.800	Dec 2010	0.000		0.800	1.500	2.300	Continuing	
Sys Eng Govt JATAS	WR	Various Various	0.000	0.000		1.195	Dec 2010	0.000		1.195	2.425	3.620	Continuing	
Subtotal			0.000	0.000		37.980		0.000		37.980	70.575	108.555	101.435	
Remarks														
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Configuration Mgmt JATAS	WR	Various Various	0.000	0.000		0.200	Dec 2010	0.000		0.200	0.250	0.450	Continuing	

UNCLASSIFIED

R-1 Line Item #74

Page 22 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)				PROJECT 3302: JATAS					
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Integrated Logistics JATAS I	WR	Various Various	0.000	0.000		1.600	Dec 2010	0.000		1.600	3.270	4.870	Continuing	
Integrated Logistics JATAS II	C/CPFF	TSD Orlando	0.000	0.000		0.525	Jun 2011	0.000		0.525	0.600	1.125	1.125	
Sw Dev JATAS	WR	NAWCWD Point Mugu	0.000	0.000		0.750	Dec 2010	0.000		0.750	1.200	1.950	Continuing	
S & A NonFFRDC JATAS	Various/ Various	Various Various	0.000	0.000		0.000		0.000		0.000	2.000	2.000	Continuing	
Subtotal			0.000	0.000		3.075		0.000		3.075	7.320	10.395	1.125	
Remarks														
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Developmental T&E JATAS	WR	NRL Washington, DC	0.000	0.000		1.110	Dec 2010	0.000		1.110	1.400	2.510	Continuing	
Operational T&E JATAS	WR	Various Various	0.000	0.000		0.400	Jan 2011	0.000		0.400	4.200	4.600	Continuing	
ENG & Eval JATAS	C/CPFF	TBD Not Specified	0.000	0.000		0.000		0.000		0.000	1.500	1.500	1.500	

UNCLASSIFIED

R-1 Line Item #74

Page 23 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)				PROJECT 3302: JATAS					
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
ENG & Eval Govt JATAS	WR	Various Various	0.000	0.000		1.030	Jan 2011	0.000		1.030	2.860	3.890	Continuing	
Live Fire Support JATAS	WR	Various Various	0.000	0.000		1.560	Feb 2011	0.000		1.560	1.130	2.690	Continuing	
Test Assets JATAS	WR	NAWCWD China Lake	0.000	0.000		0.540	Jan 2011	0.000		0.540	1.250	1.790	Continuing	
Subtotal			0.000	0.000		4.640		0.000		4.640	12.340	16.980	1.500	
Remarks														
Management Services (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Contractor Eng Supt JATAS	C/CPFF	Various Various	0.000	0.000		0.726	Dec 2010	0.000		0.726	2.200	2.926	2.926	
Govt Eng Supt JATAS	WR	Various Various	0.000	0.000		1.252	Dec 2010	0.000		1.252	4.075	5.327	Continuing	
Program Mgmt Supt JATAS	C/CPFF	Various Various	0.000	0.000		0.750	Dec 2010	0.000		0.750	0.900	1.650	1.650	
Travel JATAS	WR	NAVAIR Various	0.000	0.000		0.200		0.000		0.200	0.600	0.800	Continuing	

UNCLASSIFIED

R-1 Line Item #74

Page 24 of 31

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)				PROJECT 3302: JATAS					
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Direct Support Costs JATAS	WR	Various Various	0.000	0.000		1.150	Dec 2010	0.000		1.150	1.950	3.100	Continuing
Cost Analysis Supt JATAS	WR	NAWCAD Pax River, MD	0.000	0.000		0.700	Dec 2010	0.000		0.700	2.700	3.400	Continuing
NAWCAD Pax Supt JATAS	WR	NAWCAD Pax River, MD	0.000	0.000		1.220	Dec 2010	0.000		1.220	3.845	5.065	Continuing
Subtotal			0.000	0.000		5.998		0.000		5.998	16.270	22.268	4.576
Remarks													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			0.000	0.000		51.693		0.000		51.693	106.505	158.198	108.636
Remarks													

UNCLASSIFIED

R-1 Line Item #74

Page 25 of 31

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy																				DATE: February 2010									
APPROPRIATION/BUDGET ACTIVITY										R-1 ITEM NOMENCLATURE										PROJECT									
1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)										PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)										3302: JATAS									
Fiscal Year		2009				2010				2011				2012				2013				2014				2015			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Acquisition Milestones																													
Production Deliveries																													
JATAS System Development																													
Test & Evaluation Milestones																													
Development Test																													

UNCLASSIFIED

R-1 Line Item #74

Page 26 of 31

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>	PROJECT 3302: <i>JATAS</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
EM Development and Demonstration Award (EMDD)	1	2011	1	2011
Preliminary Design Review (PDR) - A-kit	2	2011	2	2011
Integrated Baseline Review 2 IBR	3	2011	3	2011
Critical Design Review (CDR)	4	2011	4	2011
Critical Design Review (CDR) - A-kit	1	2012	1	2012
EM Development and Demonstration (EMDD) Deliveries (2)	2	2012	2	2012
Test Readiness Review - Contractor (TRR Cont)	2	2012	2	2012
Contractor Test and Evaluation (CT+E)	2	2012	4	2012
EM Development and Demonstration (EMDD) Deliveries (7)	3	2012	3	2012
Capabilities Production Document (CPD)	4	2012	4	2012
Test Readiness Review - Government (TRR Govt)	4	2012	4	2012
Flight Readiness Review (FRR)	4	2012	4	2012
Initial Test and Evaluation (IT&E)	4	2012	4	2013
Technology Readiness Assessment for Milestone C (TRA MC)	1	2013	2	2013
EM Development and Demonstration (EMDD) Deliveries (3)	2	2013	2	2013
Operational Assessment (OA)	2	2013	2	2013
OT Report 1 (OT)	3	2013	3	2013
Functional Configuration Audit (FCA)	3	2013	3	2013

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>	PROJECT 3302: JATAS	

Event	Start		End	
	Quarter	Year	Quarter	Year
Reproduction Readiness Review (PRR)	3	2013	3	2013
Milestone C	3	2013	3	2013
Operational Test Readiness Review (OTRR)	4	2013	4	2013
Low-Rate Initial Production (LRIP) I	4	2013	4	2013
Independent Operational Test and Evaluation (IOT&E)	4	2013	1	2014
OT Report 2 (OT)	2	2014	2	2014
Beyond Low-Rate Initial Production Report (BLRIP)	2	2014	2	2014
Low-Rate Initial Production Deliveries	2	2014	2	2015
Joint Allied Threat Awareness System (JATAS) Initial Operational Capability (IOC)	3	2014	3	2014
Full Rate Production (FRP) I Award	3	2014	3	2014
Physical Configuration Audit (PCA)	4	2014	4	2014
Full Rate Production (FRP) I Deliveries	2	2015	4	2015
Full Rate Production (FRP) 2 Award	3	2015	3	2015

UNCLASSIFIED

R-1 Line Item #74

Page 28 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>				PROJECT 3304: <i>CIRCM</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3304: <i>CIRCM</i>	0.000	0.000	0.000	0.000	0.000	0.000	4.706	30.083	42.684	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note
New start in FY13.

A. Mission Description and Budget Item Justification
Planned new start for FY13.

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

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• APN/057600: JATAS	0.000	0.000	0.000	0.000	0.000	0.000	28.286	19.126	41.248	1,102.100	1,190.760

D. Acquisition Strategy
N/A

E. Performance Metrics
TBD.

UNCLASSIFIED

R-1 Line Item #74

Page 29 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM (TADIRCM)</i>				PROJECT 9999: <i>Congressional Adds</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
9999: <i>Congressional Adds</i>	3.590	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.989
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification FY09 Assault Directed Infrared Countermeasure Congressional Add funding was authorized for risk reduction efforts to include the incorporation of laser warning and advanced infrared missile warning in a form factor consistent with current aircraft installation hardware and to demonstrate a reduced cost Infrared Countermeasure (IRCM) solution that addresses not only surface to air and air to air missile threats but also enhanced collision avoidance and protection against the downing of aircraft by small arms and rocket propelled grenade assaults. FY09 Compact Ultra-Fast Laser System Development Congressional Add funding was authorized for risk reduction efforts to include development and testing of High Power Fiber Laser (HPFL) and Ultra-Short Pulse Lasers (USPL) for application to airborne self-protection against surface-to-air and air-to-air missile threats consistent with current aircraft installation and hardware.											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010				
Congressional Add: ASSAULT DIRECTED INFRARED COUNTERMEASURES						1.994	0.000				
<i>FY 2009 Accomplishments:</i> Funding was utilized for risk reduction efforts to include the incorporation of laser warning and advanced infrared missile warning in a form consistent with current aircraft installation hardware and to demonstrate a reduced cost Infrared Countermeasure (IRCM) solution that addresses not only surface to air and air to air missile threats but also enhanced collision avoidance and protection against the downing of aircraft by small arms and rocket propelled grenade assaults.											
Congressional Add: Compact Ultra-Fast Laser System Development						1.596	0.000				

UNCLASSIFIED

R-1 Line Item #74

Page 30 of 31

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0604272N: <i>Tact Air Dir Infrared CM</i> (TADIRCM)	PROJECT 9999: <i>Congressional Adds</i>	
B. Accomplishments/Planned Program (\$ in Millions)			
		FY 2009	FY 2010
<i>FY 2009 Accomplishments:</i> Funding was utilized for risk reduction efforts to include development and testing of High Power Fiber Laser (HPFL) and Ultra-Short Pulse Lasers (USPL) for application to airborne self-protection against surface-to-air and air-to-air missile threats consistent with current aircraft installation and hardware.			
Congressional Adds Subtotals		3.590	0.000
C. Other Program Funding Summary (\$ in Millions)			
N/A			
D. Acquisition Strategy			
N/A			
E. Performance Metrics			
Congressional Adds.			

UNCLASSIFIED

R-1 Line Item #74

Page 31 of 31