CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:						
							Februai	y 2005					
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMEN	CLATURE	•						
RESEARCH DEVELOPMENT TEST & EVALUATION	ION, NAVY /	BA-4			0603261N Tactica	Airborne Reconna	aissance						
COST (\$ in Millions)	COST (\$ in Millions) FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009												
Total PE Cost	2.029	6.386	3.938	3.950	11.646	11.891	12.137	12.386					
2467 UAV CONOPS	2.029	6.386	3.938	3.950	11.646	11.891	12.137	12.386					

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Department of the Navy leadership is committed to Naval Unmanned Aerial Vehicles (UAVs) and to procuring an operational UAV capability as soon as possible. The Naval UAV Strategy employs a family of UAVs to perform tactical, persistent and penetrating ISR in support of Naval and Joint missions from forward bases and naval ships.

In support of the Navy's overall UAV strategy, this program develops Concept of Operations (CONOPS) that integrate UAVs into CNO/Navy Vision of Sea Power 21 (Sea Shield, Sea Strike, Sea Basing, and FORCEnet). By providing fleet input based on current operations with UAVs in a simulated combat environment, this CONOPS development investment is the foundation of how the Carrier Strike Group will operate a combined Manned and Unmanned Naval Air Force. Specifically:

- Demonstrates CONOPS and assesses manning requirements of a ship-based tactical UAV.
- Leverages and assesses joint utility of Global Hawk Maritime Demonstration System and Predator integration into Expeditionary and Carrier Strike Group operations.
- Demonstrates UAV integration into USN battlespace dominance operations and network centric warfare.
- Demonstrates UAV integration into USN sensor-to-shooter and Sea Strike.
- Supports development of Joint UAV CONOPS through ISR Time Sensitive Operations Joint Test and Evaluation (JTE).
- Develops Intelligence, Surveillance, and Reconnaissance CONOPS in support of strike, Military Operations Other Than War (MOOTW), Anti-Air Warfare (AAW), Combat Search and Rescue (CSAR).
- Demonstrates UAV cross-cueing capability with theater and strategic intelligence sources.
- Develop Tactics, Techniques, and Procedures for multi- dissimilar UAV control, operations, and data dissemination utilizing NATO STANAG 4586.

R-1 SHOPPING LIST - Item No.

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Exhibit R-2, RDTEN Budget Item Justification (Exhibit R-2, page 1 of 10)

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMI	ENT NUMBER AND	NAME		PROJECT NUMBE	R AND NAME		
RDT&E, N / BA-4	0603261N Tactical	Airborne Reconna	issance		2467 UAV CONOF	rs		
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
2467 UAV CONOPS Research	2.029	6.386	3.938	3.950	11.646	11.891	12.137	12.386
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Department of the Navy leadership is committed to Naval Unmanned Aerial Vehicles (UAVs) and to procuring an operational UAV capability as soon as possible. The Naval UAV Strategy employs a family of UAVs to perform tactical, persistent and penetrating ISR in support of Naval and Joint missions from forward bases and naval ships.

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- Demonstrates UAV integration into USN sensor-to-shooter and Sea Strike.
- Supports development of Joint UAV CONOPS through ISR Time Sensitive Operations Joint Test and Evaluation (JTE).
- Develops Intelligence, Surveillance, and Reconnaissance CONOPS in support of strike, Military Operations Other Than War (MOOTW), Anti-Air Warfare (AAW), and Combat Search and Rescue (CSAR).
 - Demonstrates UAV cross cueing capability with theater and strategic intelligence sources.
 - Develop Tactics, Techniques, and Procedures for multi- dissimilar UAV control, operations, and data dissemination utilizing NATO STANAG 4586.

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justificat	ion			DATE:	om. 2005
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	MBER AND NAME	PROJECT NUMBER AND N		ary 2005
DT&E, N / BA-4	0603261N Tactical Airborne		2467 UAV CONOPS	·· ····=	
. Accomplishments/Planned Program					
	FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost	1.529	1.600	1.400	1.400	
RDT&E Articles Quantity					
	FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost	FY 04 0.500	FY 05 0.300	FY 06	FY 07	
RDT&E Articles Quantity	_		FY 06	FY 07	
	_		FY 06	FY 07	
RDT&E Articles Quantity	0.500	0.300			
RDT&E Articles Quantity	_		FY 06 FY 06 1.500	FY 07 FY 07 1.400	

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

	eation			DATE: Februar	v 2005
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME	PROJECT NUMBER AND N		y 2005
DT&E, N / BA-4	0603261N Tactical Airborne	Reconnaissance	2467 UAV CONOPS		
Accomplishments/Planned Program (Cont.	.)				
	FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost		1.620	0.738	0.850	
RDT&E Articles Quantity					
	FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost		0.504	0.300	0.300	
RDT&E Articles Quantity					
Program office travel, and contract support s	SETVICES.				
Accomplishments/Effort/Subtotal Cost	FY 04	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 04	FY 05	FY 06	FY 07	
	FY 04	FY 05	FY 06	FY 07	

R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE:	
	<u>_</u>			1		February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	R AND NAME		PROJECT NUMBER A	ND NAME	
RDT&E, N / BA-4	0603261N Tactical Airborne Rec	onnaissance		2467 UAV CONOPS		
C. PROGRAM CHANGE SUMMARY:						
Funding:	FY 04	FY 05	FY 06	FY 07		
Previous President's Budget:	2.029	6.448	3.906			
Current BES	2.029	6.386	3.938	3.950		
Total Adjustments	0.000	-0.062	0.032	0.047		
Summary of Adjustments						
Congressional program reductions						
Congressional undistributed reducti	ons	-0.060				
Congressional rescissions						
SBIR/STTR Transfer						
Other		-0.002	-0.006	-0.004		
Economic Assumptions			0.038	0.051		
Reprogrammings						
Congressional increases						
Subtotal	0.000	-0.062	0.032	0.047		
Schedule:						
In FY2004 4Q CVW-XX demonstration exercise was	cancelled. Schedule reflects current pla	nning through FY	′ 2011.			
		3 3				
Technical:						
Not Applicable						
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E	Project Justification			DATE: February 2005
APPROPRIATION/BUDGE	T ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	AME
RDT&E, N /	BA-4	0603261N Tactical Airborne Reconnaissance	2467 UAV CONOPS	
	AM FUNDING SUMMARY:			
Not Applicable				
E. ACQUISITION STR	ATEGY:			
Not Applicable				

CLASSIFICATION:

								DATE:				
Exhibit R-3 Cost Analysis (pa	ge 1)									February 20	05	
APPROPRIATION/BUDGET ACTI		PROGRAM E	LEMENT			PROJECT NU	JMBER AND N	IAME				
RDT&E, N / BA-4		0603261N Ta	actical Airborne I	Reconnaissand	ce	2467 UAV CC	NOPS					
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			
	Method	Activity &		FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Primary Hardware Development											0.000)
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Shipboard Integration	C/TBD	TBD		0.800	02/05	0.200	12/05	0.200	12/06	0.000	1.200	1.200
Ship Suitability											0.000	
Systems Engineering Test Tool	WX	NAWCAD, Pax River, MD		0.362	12/04	0.300	12/05	0.200	12/06		0.862	2
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	1.162		0.500)	0.400		0.000	2.062	2
Remarks:												

WX	NSAWC, Fallon, NV		1.600	12/04	1.400	12/05	1.400	12/06	Continuing	Continuing	
C/CPAF	Raytheon, Falls Church, Va		1.500	03/05	0.800	12/05	0.800	12/06	0.000	3.100	3.100
										0.000	
										0.000	
										0.000	
										0.000	
										0.000	
										0.000	
		0.000	3.100		2.200		2.200		Continuing	Continuing	
		, ,	C/CPAF Raytheon, Falls Church, Va	C/CPAF Raytheon, Falls Church, Va 1.500	C/CPAF Raytheon, Falls Church, Va 1.500 03/05	C/CPAF Raytheon, Falls Church, Va 1.500 03/05 0.800	C/CPAF Raytheon, Falls Church, Va 1.500 03/05 0.800 12/05	C/CPAF Raytheon, Falls Church, Va 1.500 03/05 0.800 12/05 0.800	C/CPAF Raytheon, Falls Church, Va 1.500 03/05 0.800 12/05 0.800 12/06	C/CPAF Raytheon, Falls Church, Va 1.500 03/05 0.800 12/05 0.800 12/06 0.000 Image: Company of the company of th	C/CPAF Raytheon, Falls Church, Va 1.500 03/05 0.800 12/05 0.800 12/06 0.000 3.100

Remarks:

CLASSIFICATION:

								DATE:				
Exhibit R-3 Cost Analysis (pag	e 2)									February 200	5	
APPROPRIATION/BUDGET ACTIV	ITY	PROGRAM E	LEMENT			PROJECT NU	IMBER AND I	NAME				
RDT&E, N / BA-4		0603261N Ta	ctical Airborne	Reconnaissan	ce	2467 UAV CC	NOPS					
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			
	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete		of Contract
Developmental Test & Evaluation	WX	JUAV, Vicksburg, MS	0.500	0.300	12/04						0.800	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Interoperability Testing	MP	JTC/SIL Huntsville, AL		0.500	12/04	0.400	12/05	0.400	12/06		1.300	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.50	0.800)	0.400		0.400		0.000	2.100	
Contractor Engineering Support											0.000	
Government Engineering Support	WX	NAWCAD Pax River	1.52	0.820	12/04	0.538	11/05	0.650	11/06		3.537	
Program Management Support	WX	NAWCAD Pax River		0.454	12/04	0.250	11/05	0.250	11/06	Continuing	Continuing	
Travel	WX	NAWCAD Pax River		0.050	12/04	0.050	11/05	0.050	11/06	Continuing	Continuing	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			1.52	1.324		0.838		0.950		Continuing	Continuing	
Remarks:												
Total Cost			2.02	6.386	;	3.938		3.950		Continuing	Continuing	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule	Profile)																							DATE	<u>:</u>						
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APPROPRIATION/BUDGE RDT&E, N /	BA-4													nnaissai		=					2467 U				D NAN	/IE						
RDTCE, IV		•							000320	0111 14	icticai z	Moon	Reco	imaissai	icc						2407	3711 C	ONOI	5								
Fiscal Year		20	004	ı		20	05	ı		20	06	ı		200	07			20	08	ı		20	009	1		20	10	ı		20	11	
	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	1	2	3	4
Acquisition Milestones																																
Test & Evaluation Milestones	LGB		vw-	(cvw-x	X VW-X	×	Desert Rescue		XX	CVW-	Desert Rescue		XX		Desert Rescue		/W-XX		Desert Rescue		CVW-:	XX	Desert Rescue		cvw-:	XX CVW-	Desert Rescue		CVX-X		Desert Rescue
Operational Test (Planning Schedule)	TAC D&E	A c	14 CVW-3		CVW-X	(X	CVW-	cvw-	XX	CVW-2	<u>/</u> ∖c xx 	vw-x	k △	CVW-2	ХХ	CVX-X		\sim	CVW-	cvw-2	<u> </u>		cvw-	CVW-					CVX-X	XX	cvx-x	x
Tactics Development												0.																				
and Evaluation						ı	1	ı		ı	ı	Stan	aaras	Based	intero	perabil	ıty	ı	1	1	1	1	1									
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R-1 SHOPPING LIST - Item No.

CLASSIFICATION:

Exhibit R-4a, Schedule Detail				DATE: February 2005					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	EMENT			PROJECT NUM			<u> </u>	
RDT&BA-4	0603261N Tact	ical Airborne Re	connaissance		2467 UAV CO	NOPS			
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
-									
Carrier Air Wing Test & Evaluation CVW-14	20								
CVW-14 CVW-17	2Q 3Q								
CVW-3	3Q								
CVW-XX (TBD)		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	
Desert Rescue (Joint Search & Rescue):									
Desert Rescue # (TBD)		4Q	4Q	4Q	4Q	4Q	4Q	4Q	
Tti D1									
Tactics Development & Evaluation:									
Standards Based Interoperability		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q			
Shipboard CONOPS		1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q			
				†					
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				1					