

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7				R-1 ITEM NOMENCLATURE 0305204N Tactical Unmanned Aerial Vehicles				
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	85.652	76.985	99.349	71.938	31.458	13.287	12.786	13.391
2478 Tactical Control System	27.081	13.293	10.902	9.110	9.396	8.879	9.040	9.271
2768 VTUAV	36.021	59.129	77.601	53.172	12.253	1.659	1.978	2.314
2910 Joint Technology Center/ Sys Integ Lab	1.633	1.591	1.659	1.662	1.700	1.734	1.768	1.806
3135 USMC VUAV			9.187	7.994	8.109	1.015		
4012 Pioneer	14.002							
9432 Coastline Security Technology Initiative	1.728							
9434 Mini Detection Devices for UAV Payload	0.988							
9435 Precision Re-Supply Vehicle	4.199							
9650 Advanced Airship Flying Laboratory		2.972						

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:** These programs provide for the development of Tactical Unmanned Aerial Vehicle systems that provide warfighters with dedicated day/night Aerial Reconnaissance, Surveillance and Target Acquisition (RSTA) capabilities; and, intelligence, communications/data dissemination; electronic warfare; weather data collection to support combat operations; minefield detection; and nuclear/biological/chemical reconnaissance in limited adverse weather.

**Tactical Control System (TCS):** TCS provides interoperability for command and control of the present and future Tactical and Medium Altitude Endurance (MAE) UAVs and their payloads utilized for RSTA and combat assessment. Interoperability is achieved through the use of the Tactical Control System (TCS) software in the ground control station, implementation of NATO STANAG-4586 and through the use of the Tactical Common Data Link (TCDL). TCS provides connectivity to designated C4I systems for the Navy Fire Scout Vertical Takeoff and Landing (VTOL) Tactical UAV (VTUAV). TCS and Fire Scout will implement NATO STANAG 4586 compliance, and weaponization and plug-and-play functionality. TCS will also be evaluated for all future Naval UAVs.

**Vertical Takeoff and Landing UAV (VTUAV):** VTUAV (also referred to as the Fire Scout VTUAV) provides real-time and non-real-time intelligence, surveillance and reconnaissance data to tactical users, including line-of-sight tactical reconnaissance, classification, targeting and laser designation, and battle management (including communications relay), without the use of manned aircraft or reliance on limited joint theater or national assets. The Fire Scout VTUAV air vehicle is designed for modular mission payloads, autonomous vertical launch and recovery, autonomous waypoint navigation, command override capability, and can operate from all air capable ships as well as confined area land bases. Interoperability is achieved through the Tactical Control System (TCS) software in the ground control station, NATO STANAG 4586, implementation, and through the use of the Tactical Common Data Link. The FY 2004 program funding completes initial shipboard testing and integration; begins design activities for system upgrades including weaponization, survivability, plug-and-play architecture, to meet fielding on LCS in FY08; and initiates the procurement of four RQ-8B EMD Air Vehicles (two in FY04, two in FY05).

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<p>The U.S. Army has selected the Fire Scout RQ-8B as their Class IV UAV for the Future Combat System (FCS). Coordination with the U.S. Army FCS Program is on-going to investigate potential cost savings for both programs where system commonalities and common logistics support can be identified.</p> <p><b>JTC/SIL:</b> The Joint Technology Center/System Integration Laboratory provides experimentation for UAV technology assessment, insertion, demonstration, transfer, as well as simulation and exercise support.</p> <p><b>USMC VUAV:</b> The Vertical Take-Off and Landing (VTOL) Unmanned Aerial Vehicle (VUAV) is an expeditionary, tactical UAV system capable of operations from air capable ships and confined austere landing zones and is currently being procured by the United States Coast Guard.</p> <p><b>Pioneer Unmanned Aerial Vehicle:</b> The Pioneer Unmanned Aerial Vehicle (UAV) provides near real time reconnaissance, surveillance, target acquisition, combat assessment and battlefield management within line-of-sight (LOS) of a Ground Control Station (GCS) in limited weather, both day and night. Deployments have supported numerous joint military operations and contingencies including Bosnia Herzegovina, Somalia, the Adriatic, Persian Gulf operations, DESERT SHIELD and DESERT STORM and OPERATION IRAQI FREEDOM (OIF). During OIF I both Marine Pioneer VMU systems were deployed and flew a total of 2357 hours in support of combat operations. The VMUs are currently deployed to Iraq and plan to continue operations as long as U.S. Forces are deployed. To date, the system has flown in excess of 26,000 flight hours.</p> <p><b>Coastline Security Technology Initiative:</b> Congressional Add - The Coastline Security Technology Initiative is only for continuation of work with the Institute for Ocean and Systems Engineering to develop surface and airborne autonomous and remotely operated platform surveillance systems for deployment along US Coastlines.</p> <p><b>Miniature Detection Devices for Navy UAV Payload:</b> Congressional Add - Continued development of lightweight, low power NBC sensors and isotope identification techniques utilizing MEMS technology and innovative detection devices to identify airborne chemical/biological threats and hazardous material.</p> <p><b>Precision Re-Supply Vehicle:</b> Congressional Add - Precision Re-Supply Vehicle.</p> <p><b>Advance Airship Flying Laboratory:</b> Congressional Add - For initial capability studies for development of a modernized naval airship featuring contemporary composited, digital flight controls, vectored thrust and remote piloted capabilities that can provide immediate utility for missions requiring heavy lift (logistics and/or sensor suites), long endurance (measured in days vs. hours), and persistent broad-area Intelligence, Surveillance, and Reconnaissance (ISR).</p>	

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>		PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles			PROJECT NUMBER AND NAME 2478 Tactical Control System			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
2478 Tactical Control System	<b>27.081</b>	<b>13.293</b>	<b>10.902</b>	<b>9.110</b>	<b>9.396</b>	<b>8.879</b>	<b>9.040</b>	<b>9.271</b>
RDT&E Articles Qty								

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

In FY2004, \$2.4M Congressional Add for JOTBS, less \$.027M Congressional undistributed reductions.  
 In FY2005 \$4.5M Congressional Add for JOTBS less \$.121M Congressional undistributed reductions.

The Tactical Control System (TCS) is developing a standards based system that provides interoperability and commonality for C4I interfaces and command and control of Navy Unmanned Aerial Vehicles (UAVs) including the Navy Fire Scout Vertical Takeoff and Landing (VTOL) Tactical UAV (VTUAV). Interoperability is achieved through the use of the Tactical Control System (TCS) software in the ground control station, NATO STANAG-4586 and through the use of the Tactical Common Data Link (TCDL). TCS and Fire Scout will implement NATO STANAG 4586 compliance, and weaponization and plug-and-play functionality. TCS will also be evaluated for all future Naval UAVs.

Provides a full range of scaleable UAV capabilities from passive receipt of air vehicle and payload data to full air vehicle and payload command and control. TCS offers the war fighter a common core operating environment to simultaneously receive, process, and disseminate UAV data from different UAV types for reconnaissance, surveillance, and combat assessment.

Provides UAV command, control and processing from land and sea based ground control stations.

TCS maximizes the use of contractor and government off-the shelf hardware and software whenever possible. TCS software is interoperable and is compliant with the OSD(C3I) Joint Technical Architecture (JTA) and Distributed Common Ground/Surface System (DCGS) standards.

TCS development continues to meet the updated Fire Scout VTUAV ORD requirements and add key technologies that will be used by UAV Systems.

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**B. Accomplishments/Planned Program**

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	21.912	6.718	8.518	7.139
RDT&E Articles Quantity				

Continue TCS integration with Fire Scout VTUAV development. Complete multi-vehicle UAV control. Initiate new TCS capabilities to support requirements for Littoral Combat Ship (LCS) integration. Initiate TCS NATO STANAG 4586 compliance. Continue TCS Command, Control, Communications, Computers and Intelligence (C4I) interface testing for Fire Scout VTUAV required C4I systems. Complete multi-vehicle UAV control FY2005 through FY2007: Continue new TCS capabilities to support requirements for Fire Scout VTUAV LCS integration. Continue standards compliance. Continue TCS Command, Control, Communications, Computers and Intelligence (C4I) interface testing for Fire Scout VTUAV required C4I systems.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	2.373	4.379		
RDT&E Articles Quantity				

Continue JOTBS enhancements and support of UAV experimentation.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	2.796	2.196	2.384	1.971
RDT&E Articles Quantity				

Continue government engineering and program management support for TCS.

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<b>APPROPRIATION/BUDGET ACTIVITY</b> <b>RDT&amp;E, N / BA-7</b>	<b>PROGRAM ELEMENT NUMBER AND NAME</b> 0305204N Tactical Unmanned Aerial Vehicles	<b>PROJECT NUMBER AND NAME</b> 2478 Tactical Control System			
<b>C. PROGRAM CHANGE SUMMARY:</b>					
Funding:		FY 04	FY 05	FY 06	FY 07
Previous President's Budget:		27.106	8.917	9.293	9.450
Current BES/President's Budget:		27.081	13.293	10.902	9.110
Total Adjustments		-0.025	4.376	1.609	-0.340
Summary of Adjustments					
Congressional program reductions					
Congressional undistributed reductions			-0.121		
Congressional rescissions					
SBIR/STTR Transfer					
Other			-0.003	-0.459	-0.476
Economic Assumptions		-0.025		2.068	0.136
Reprogrammings					
Congressional increases			4.500		
Subtotal		-0.025	4.376	1.609	-0.340
Schedule:					
The current schedule reflects the restructured TCS program to address FY 2004 Congressional direction for a standards based system and to support the Navy Fire Scout VTUAV system with Littoral Combat Ship.					
Technical:					
Not applicable					

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<p><b>D. OTHER PROGRAM FUNDING SUMMARY:</b></p> <p>Not Applicable</p> <p><b>E. ACQUISITION STRATEGY:</b></p> <p>These acquisitions will be made by modifying the competitively awarded TCS contract, awarded to Raytheon in 2000; as well as, through the TCS Basic Order Agreement with Raytheon, both of which are cost-plus contracts. TCS development and testing will be accomplished via a Government/Industry team.</p>		

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Exhibit R-3 Cost Analysis (page 1)								DATE: <b>February 2005</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0305204N Tactical Unmanned Aerial Vehicles			2478 Tactical Control System						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPAF	Raytheon, Falls Church, VA	75.321	3.550	11/04	6.934	11/05	5.193	11/06	13.401	104.399	104.399
Ancillary Hardware Development	WX	Various	5.761								5.761	
Aircraft Integration											0.000	
Ship Integration											0.000	
Systems Engineering	WX	NAWCAD, Pax River, MD	2.321								2.321	
Systems Engineering	WX	NSWC-Dahlgren, VA	4.634								4.634	
Training Development	WX	NSWC-IH, Indian Head, MD	5.584								5.584	
Licenses											0.000	
Primary Hardware Development	C/CPAF	NGC-Ryan, San Diego, CA	1.571								1.571	1.571
GFE											0.000	
Award Fees	C/CPAF	Raytheon, Falls Church, VA	7.005	1.970	06/05	0.426	06/06	0.745	06/07	1.608	11.754	11.754
Subtotal Product Development			102.197	5.520		7.360		5.938		15.009	136.024	
Remarks:												
Development Support											0.000	
Software Development	MIPR	JTC/SIL, Redstone, AL	3.800								3.800	
Integrated Logistics Support	WX	Various	1.630								1.630	
Configuration Management											0.000	
Technical Data	WX	Various	2.755								2.755	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			8.185	0.000		0.000		0.000		0.000	8.185	
Remarks:												

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**Exhibit R-3, Project Cost Analysis**  
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Exhibit R-3 Cost Analysis (page 2)										DATE: <b>February 2005</b>		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0305204N Tactical Unmanned Aerial Vehicles			2478 Tactical Control System						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WX	JITC, Indian Head, MD	1.140	0.031	11/04	0.030	11/05	0.030	11/06	Continuing	Continuing	
Developmental Test & Evaluation	WX	NSWC, Dahlgren, VA	2.051								2.051	
Operational Test & Evaluation	WX,MIPR	Various	1.480								1.480	
Test Assets	WX	NSWC, Dahlgren, VA	2.500								2.500	
Test Assets	WX	USJFCOM, Norfolk, VA	6.078	4.379							10.457	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			13.249	4.410		0.030		0.030		Continuing	Continuing	
Remarks:												
Contractor Engineering Support	C/FFP	Various	0.100	0.610	12/04	0.625	12/05	0.641	12/06		1.976	1.976
Government Engineering Support	WX	NAWCAD, Pax River, MD	4.083	1.334	12/04	1.462	11/05	1.144	11/06	Continuing	Continuing	
Government Engineering Support	WX	SPAWAR, San Diego, CA	0.050	0.090	11/04	0.096	11/05	0.097	11/06	Continuing	Continuing	
Program Management Support	WX	Various	2.631	1.314	11/04	1.314	11/05	1.244	11/06	Continuing	Continuing	
Travel	WX	Various	1.489	0.015	11/04	0.015	11/05	0.016	11/06	Continuing	Continuing	
SBIR Assessment											0.000	
Subtotal Management			8.353	3.363		3.512		3.142		Continuing	Continuing	
Remarks:												
Total Cost			131.984	13.293		10.902		9.110		Continuing	Continuing	
Remarks:												

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EXHIBIT R4, Schedule Profile																								DATE: <b>February 2005</b>								
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>								PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles								PROJECT NUMBER AND NAME 2478 Tactical Control System																
Fiscal Year	2004				2005				2006				2007				2008				2009				2010				2011			
	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
<b>Acquisition Milestones</b>				TCS \$RR ▲			TCS CDR △												TCS/FS IOC ★													
Completion of current TCS/FS Requirements																																
New Requirements (STANAG 4586, Weaponization, Plug & Play) Development																																
TCS GHMD Requirements Identification																																
<b>Test &amp; Evaluation Milestones</b>																																
Development Test																																
Operational Test																																
<b>Production Milestones</b>																																
Software/Updates																																
Software Deliveries																																

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>		PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles			PROJECT NUMBER AND NAME 2768 VTUAV				
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
2768 VTUAV		<b>36.021</b>	<b>59.129</b>	<b>77.601</b>	<b>53.172</b>	<b>12.253</b>	<b>1.659</b>	<b>1.978</b>	<b>2.314</b>
RDT&E Articles Qty		<b>2</b>	<b>2</b>	<b>3</b>					

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

The Fire Scout Vertical Takeoff and Landing Tactical Unmanned Aerial Vehicle (VTUAV) was designed to provide real-time intelligence, surveillance and reconnaissance data to tactical users without the use of manned aircraft or reliance on limited joint theater or national assets. The baseline Fire Scout VTUAV can accomplish missions including over-the-horizon tactical reconnaissance, classification, targeting and laser designation, and battle management (including communications relay). The Fire Scout VTUAV launches and recovers vertically and can operate from all air capable ships as well as confined area land bases. Other characteristics include autonomous air vehicle launch and recovery, autonomous waypoint navigation with command override capability, a heavy fuel engine and the ability to incorporate Electro-Optical/Infrared/Laser Designator-Laser Range Finder modular mission payload. Interoperability is achieved through the use of the Tactical Control System (TCS) software in the ground control station, will implement STANAG-4586 and through the use of the Tactical Common Data Link (TCDL). The data from the Fire Scout VTUAV will be provided through standard DoD Command, Control, Communications, Computers and Intelligence system architectures and protocols.

A Fire Scout VTUAV system is composed of three air vehicles, three electro-optical/infrared/laser designator-rangefinder payloads, two Ground Control Stations (with TCS and TCDL integrated for interoperability), one UAV Common Automatic Recovery System (UCARS) for automatic take-off and landings, and associated spares and support equipment.

A program to continue development of the Fire Scout VTUAV to meet LCS mission requirements was initiated in FY04. Engineering and Manufacturing Development (EMD) is continuing in FY04 and will include design activities for system upgrades, testing aboard HSV-2, and TCS integration. Fabrication of the RQ-8A LRIP 1 system was completed in FY03. Procurement of two EMD RQ-8B Air Vehicles was initiated in FY04, and two additional EMD RQ-8B Air Vehicles are planned for FY05. Procurement of three RQ-8B LRIP Air Vehicles is planned starting in FY06. As of 12 January 2005, Fire Scout VTUAV has completed 142 flights, accumulating more than 120 flight hours.

The U.S. Army has selected the Fire Scout RQ-8B as their Class IV UAV for the Future Combat System (FCS). Coordination with the U.S. Army FCS Program is on-going to investigate the potential cost savings for both programs where system commonalities and common logistics support can be identified.

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**B. Accomplishments/Planned Program**

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	30.050	46.233	60.101	37.855
RDT&E Articles Quantity	2	2	3	

Initiate incremental procurement and integration of four EMD RQ-8B Air Vehicles and three LRIP RQ-8B Air Vehicles to support the Engineering and Manufacturing Development (EMD) program. Continue to completion EMD of the Fire Scout VTUAV system. Complete developmental testing, and complete combined developmental and operational testing.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.100	2.900	4.600	7.670
RDT&E Articles Quantity				

Continue ILS, technical data, and training system development. Procurement of trainers and spares to support OPEVAL.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.500	1.196	2.500	3.093
RDT&E Articles Quantity				

Complete developmental testing of the Fire Scout VTUAV system. Complete combined developmental and operational testing TECHEVAL and planning for OPEVAL.

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**B. Accomplishments/Planned Program (Cont.)**

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	3.371	8.800	10.400	4.554
RDT&E Articles Quantity				

Continue engineering management, program technical management, and management support for the Fire Scout VTUAV system. These include transportation of system assets, fleet introduction team and program office personnel travel, and contract support services. Increases for FY05 and FY06 support system development, system integration and test, and TECHEVAL in those years.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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<b>C. PROGRAM CHANGE SUMMARY:</b>					
Funding:		FY 04	FY 05	FY 06	FY 07
Previous President's Budget:		36.050	42.876	58.815	44.865
Current BES/President's Budget:		36.021	59.129	77.601	53.172
Total Adjustments		-0.029	16.253	18.786	8.307
Summary of Adjustments					
Congressional program reductions					
Congressional undistributed reductions			-0.535		
Congressional rescissions					
SBIR/STTR Transfer					
Other			-0.012	15.945	7.669
Economic Assumptions		-0.029		2.841	0.638
Reprogrammings					
Congressional increases			16.800		
Subtotal		-0.029	16.253	18.786	8.307
Schedule:					
Following schedule changes are due to technical changes discussed below:					
Contract award for incremental procurement of two Fire Scout RQ-8B EMD air vehicles was awarded 2Q, FY04. Delivery begins in 4Q FY06. 1Q schedule slip for EMD technical review. Procurement of two Fire Scout RQ-8B EMD vehicles is planned for 2Q FY05. Procurement of three Fire Scout RQ-8B LRIP air vehicles planned for 2Q, FY06. Combined DT/OT planned for 3Q-4Q, FY07. OPEVAL planned for 1Q-2Q, FY08. IOC planned for 3Q, FY08. MS III planned for 3Q, FY08.					
Technical:					
Fire Scout Air Vehicle configuration changed from RQ-8A to RQ-8B during FY04 to improve endurance and address new requirements in support of the Littoral Combat Ship program. Additional EMD effort required for the RQ-8A to RQ-8B configuration change.					

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<b>D. OTHER PROGRAM FUNDING SUMMARY:</b>										
<u>Line Item No. &amp; Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	To Complete	Total Cost
APN: 044300 VTUAV				38.184	54.266	66.777	100.273	100.371		
APN Initial Spares: 060510 VTUAV				5.335	2.520	2.376	1.895			
<b>E. ACQUISITION STRATEGY:</b>										
Continue sole source to Northrop Grumman to continue Fire Scout EMD to increase payload capacity. Design and development of an improved Fire Scout System initiated in FY04 to support the Littoral Combat Ship Program. Four EMD RQ-8B Air Vehicles and three LRIP RQ-8B Air Vehicles will be procured. Full Rate Production and IOC will follow completion of OPEVAL.										

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Exhibit R-3 Cost Analysis (page 1)								DATE: <b>February 2005</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0305204N Tactical Unmanned Aerial Vehicles			2768 VTUAV						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPIF/C	NGC-Ryan, San Diego, CA	177.045	46.233	03/05	60.101	11/05	37.855	11/06	5.900	327.134	327.134
Ancillary Hardware Development											0.000	
Aircraft Integration	WX	NSWC Indian Head, MD	0.152								0.152	
Ship Integration	PD	NAVSEA, Arlington, VA	3.466								3.466	
Ship Integration											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Primary Hardware Development											0.000	
GFE											0.000	
Award Fees	C/CPIF	NGC-Ryan, San Diego, CA	4.456								4.456	4.456
Subtotal Product Development			185.119	46.233		60.101		37.855		5.900	335.208	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support	WX	Various	8.723	2.900	11/04	4.600	11/05	7.670	11/06	Continuing	Continuing	
Configuration Management											0.000	
Technical Data	WX	NSWC, Crane, IN	0.900								0.900	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			9.623	2.900		4.600		7.670		Continuing	Continuing	
Remarks:												

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**Exhibit R-3, Project Cost Analysis**  
(Exhibit R-3, page 16 of 39)

**UNCLASSIFIED**

**CLASSIFICATION:**

Exhibit R-3 Cost Analysis (page 2)									DATE: <b>February 2005</b>			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0305204N Tactical Unmanned Aerial Vehicles			2768 VTUAV						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WX	NAWC-AD, Pax River, MD	5.034								5.034	
Developmental Test & Evaluation	WX	Various	1.691	1.196	11/04	2.500	11/05	3.093	11/06	Continuing	Continuing	
Operational Test & Evaluation	WX	NAWC-WD, China Lake, CA	1.512								1.512	
Test Assets											0.000	
Test Assets											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			8.237	1.196		2.500		3.093		Continuing	Continuing	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Government Engineering Support	WX	Various	12.220	4.150	11/04	5.550	11/05	2.134	11/06	Continuing	Continuing	
Program Management Support	WX	Various	8.272	4.600	11/04	4.800	11/05	2.370	11/06	Continuing	Continuing	
Travel	WX	Various	0.517	0.050	11/04	0.050	11/05	0.050	11/06	Continuing	Continuing	
SBIR Assessment											0.000	
Subtotal Management			21.009	8.800		10.400		4.554		Continuing	Continuing	
Remarks:												
Total Cost			223.988	59.129		77.601		53.172		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE: <b>February 2005</b>								
APPROPRIATION/BUDGET ACTIVITY								PROGRAM ELEMENT NUMBER AND NAME								PROJECT NUMBER AND NAME																
<b>RDT&amp;E, N / BA-7</b>								0305204N Tactical Unmanned Aerial Vehicles								2768 VTUAV																
Fiscal Year	2004				2005				2006				2007				2008				2009				2010				2011			
	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
<b>Acquisition Milestones</b>	MS II ▲ Feb 2000				IBR △												MS III/FRP Decision △ ★ △															
<b>Fire Scout RQ-8B EMD</b>					AV SRR ▲ AV PDR ▲ MS SRR ▲				AV CDR △ MS PDR △ MS CDR △																							
<b>Test &amp; Evaluation</b>	Land Based UCARS and Flight Test				Lab Test				Gnd △ RQ-8B DT-IB				Flight Test △				Combined DT/OT-IB △ OT-IB OPEVAL △															
<b>Production Milestones</b>	LRIP I FY 03 ▲ LRIP I Complete				Procurement of 2 RQ-8B EMD Air Vehicles ▲				Procurement of 2 RQ-8B EMD Air Vehicles △				Procurement of 3 LRIP RQ-8B Air Vehicles △																			
<b>Deliveries</b>									EMD-1/2 △				EMD-3/4 △				LRIP-5/6/7 △															

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**CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>		PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles			PROJECT NUMBER AND NAME 2910 Joint Technology Center/Systems Integration Lab			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
2910 Joint Technology Center/Sys Integ Lab	<b>1.633</b>	<b>1.591</b>	<b>1.659</b>	<b>1.662</b>	<b>1.700</b>	<b>1.734</b>	<b>1.768</b>	<b>1.806</b>
RDT&E Articles Qty								

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

The Joint Technology Center/Systems Integration Laboratory (JTC/SIL) is a center of technical excellence to support all UAV programs within the services. The mission includes Service-specific and Joint ISR programs throughout DoD. The JTC/SIL provides a Government test bed for rapid prototyping, technology insertion and transition, systems engineering, modeling/simulation, training and C4I optimization. The cornerstone of its diverse tool set is the Multiple Unified Simulation Environment (MUSE), which is the Department's simulation/training system of choice for ISR systems, sensors, and platforms.

The Services and Warfighting Commanders have a requirement for the capability to train with a system that provides a real-time simulation environment containing multiple intelligence systems that can be integrated with larger force-on force simulations. The MUSE creates a realistic operational environment which supports the ability to assess military utility, architecture and CONOPS development, Tactics, Techniques, and Procedures (TTP) development and refinement, conduct emerging concepts experimentation, and C4I optimization within warfighting exercises and experiments. It is the only simulation system used by the Combat Commanders and Joint Services to support command and battle staff ISR training; there is no alternative available to satisfy those requirements.

The MUSE also creates a realistic operational environment that supports an embedded training capability for multiple Program Managers; tools to minimize acquisition and life cycle cost and schedule impacts; the ability to conduct emerging concepts experimentation, future systems exploration, systems integration, and technology insertion; applications for Joint and Service-specific warfighting exercises; and C4I optimization.

MUSE is currently in use within all services and unified commands simulating PREDATOR, GLOBAL HAWK, HUNTER, Shadow 200, and PIONEER UAVs, National and commercial satellite collectors, P-3, and the U-2. During warfighting exercises, the JTC/SIL integrates imagery simulations with associated C4I systems to support execution of critical imagery processes. For those assets normally not available for training, the JTC/SIL provides surrogate systems and interfaces. Distributed training environments, virtually linking participants from various locations worldwide, are routinely supported within the MUSE architecture.

Additionally, the JTC/SIL supports a range of materiel developers, integrating prototypes and trainers into the C4I and training environments of supported units. The Tactical UAV (TUAV) ground station developed by the JTC/SIL includes an embedded MUSE trainer and plans to incorporate into Fire Scout GCS. Interim training capabilities for the Tactical Exploitation System (TES) are currently employed in the joint exercises.

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**CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2005</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>	PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles	PROJECT NUMBER AND NAME 2910 Joint Technology Center/Systems Integration Lab

**B. Accomplishments/Planned Program**

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.311	0.271	0.339	0.342
RDT&E Articles Quantity				

Laboratory Sustainment includes government management, contracts administration, cost accounting, configuration management, administrative support of the lab, MUSE architecture development, property management/accountability, and procurement of equipment.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.822	0.820	0.820	0.820
RDT&E Articles Quantity				

MUSE Development - Initial development of Fire Scout model, continued Common Trainer for current platforms, continue to provide ISR simulation support to major exercises and demonstrations, complete integration of TENCAP simulation into PC-based MUSE, complete development of virtual SIGINT platform, continue development of Laser Designator capability, continued upgrade for National Space Assets Enhancements, continue C4I Enhancements, continued initial Fixed Target Damage simulation.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.500	0.500	0.500	0.500
RDT&E Articles Quantity				

Maintenance, Licenses and Equipment Purchases includes the day-to-day maintenance of lab equipment, license maintenance and license renewals from vendors for individual pieces of equipment, purchases of equipment to support the MUSE, and purchases to upgrade the MUSE capability.

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**CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>																																																																																	
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<p><b>C. PROGRAM CHANGE SUMMARY:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Funding:</th> <th style="text-align: right;">FY 04</th> <th style="text-align: right;">FY 05</th> <th style="text-align: right;">FY 06</th> <th style="text-align: right;">FY 07</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget:</td> <td style="text-align: right;">1.633</td> <td style="text-align: right;">1.646</td> <td style="text-align: right;">1.645</td> <td style="text-align: right;">1.642</td> </tr> <tr> <td>Current BES/President's Budget:</td> <td style="text-align: right;">1.633</td> <td style="text-align: right;">1.591</td> <td style="text-align: right;">1.659</td> <td style="text-align: right;">1.662</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">-0.055</td> <td style="text-align: right; border-top: 1px solid black;">0.014</td> <td style="text-align: right; border-top: 1px solid black;">0.020</td> </tr> <tr> <td colspan="5" style="padding-left: 20px;">Summary of Adjustments</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">Congressional program reductions</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">Congressional undistributed reductions</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">Congressional rescissions</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">SBIR/STTR Transfer</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">Other</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">Economic Assumptions</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">Reprogrammings</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">Congressional increases</td> </tr> <tr> <td colspan="5" style="padding-left: 40px;">Subtotal</td> </tr> <tr> <td colspan="5" style="padding-left: 40px; border-top: 1px solid black;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">-0.055</td> <td style="text-align: right;">0.014</td> <td style="text-align: right;">0.020</td> </tr> </table> </td> </tr> </tbody> </table> <p>Schedule: Not Applicable</p> <p>Technical: Not Applicable</p>					Funding:	FY 04	FY 05	FY 06	FY 07	Previous President's Budget:	1.633	1.646	1.645	1.642	Current BES/President's Budget:	1.633	1.591	1.659	1.662	Total Adjustments	0.000	-0.055	0.014	0.020	Summary of Adjustments					Congressional program reductions					Congressional undistributed reductions					Congressional rescissions					SBIR/STTR Transfer					Other					Economic Assumptions					Reprogrammings					Congressional increases					Subtotal					<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">-0.055</td> <td style="text-align: right;">0.014</td> <td style="text-align: right;">0.020</td> </tr> </table>						0.000	-0.055	0.014	0.020
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**CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2005</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>	PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles	PROJECT NUMBER AND NAME 2910 Joint Technology Center/Systems Integration Lab
<p><b>D. OTHER PROGRAM FUNDING SUMMARY:</b></p> <p>Not Applicable</p> <p><b>E. ACQUISITION STRATEGY:</b></p> <p>Not Applicable</p>		

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: <b>February 2005</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0305204N Tactical Unmanned Aerial Vehicles			2910 Joint Technology Center/Systems Integration Lab						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	MIPR	Redstone Arsenal, AL	2.678	0.820	11/04	0.820	11/05	0.820	11/06	Continuing	Continuing	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Integration											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Primary Hardware Development											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			2.678	0.820		0.820		0.820		Continuing	Continuing	
Remarks:												
Development Support	MIPR	Redstone Arsenal, AL	1.900	0.500	11/04	0.500	11/05	0.500	11/06	Continuing	Continuing	
Software Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			1.900	0.500		0.500		0.500		Continuing	Continuing	
Remarks:												

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**Exhibit R-3, Project Cost Analysis**  
(Exhibit R-3, page 24 of 39)

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**CLASSIFICATION:**

Exhibit R-3 Cost Analysis (page 2)										DATE: <b>February 2005</b>		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0305204N Tactical Unmanned Aerial Vehicles			2910 Joint Technology Center/Systems Integration Lab						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Test Assets											0.000	
Test Assets											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000			0.000	
Remarks:												
Contractor Engineering Support	MIPR	Redstone Arsenal, AL	0.990	0.271	11/04	0.339	11/05	0.342	11/06	Continuing	Continuing	
Government Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support											0.000	
Travel											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.990	0.271		0.339		0.342		Continuing	Continuing	
Remarks:												
Total Cost			5.568	1.591		1.659		1.662		Continuing	Continuing	
Remarks:												

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**CLASSIFICATION:**

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>		PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles			PROJECT NUMBER AND NAME 3135 USMC VUAV			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
3135 USMC VUAV			<b>9.187</b>	<b>7.994</b>	<b>8.109</b>	<b>1.015</b>		
RDT&E Articles Qty			<b>2</b>					

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

The Vertical Take-Off and Landing (VTOL) Unmanned Aerial Vehicle (VUAV) is an expeditionary, tactical UAV system capable of operations from air capable ships and confined austere landing zones and is currently being procured by the United States Coast Guard.

This system will maintain current Marine Corps warfighter capabilities as UAV assets operational availability decreases in the 2009 to 2015 timeframe. With capabilities that surpass the current Marine Corps Pioneer UAV, the VUAV system will provide battlespace awareness for the Marine commanders while simultaneously allowing the Marine Corps to develop new concepts of operations for the integration of the next generation UAVs with emerging doctrine.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2005</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>	PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles	PROJECT NUMBER AND NAME 3135 USMC VUAV

**B. Accomplishments/Planned Program**

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost			2.000	
RDT&E Articles Quantity				

Development of a Marine specific ground control station (GCS).

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost			1.100	1.100
RDT&E Articles Quantity				

Integration of the VUAV system with Marine command and control systems.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost			6.087	6.894
RDT&E Articles Quantity			2	

Buy two off-the-shelf air vehicles for test and abbreviated flight certification with the Marine specific GCS, and Program Management Support, to include two test articles and associated long lead items.

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APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N / BA-7</b>			0305204N Tactical Unmanned Aerial Vehicles			3135 USMC VUAV						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	MIPR	Bell-Textron, Ft Worth TX				2.600	12/05	0.400	10/06	1.000	4.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Integration											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Primary Hardware Development											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	0.000		2.600		0.400		1.000	4.000	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000			0.000	
Remarks:												

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Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	MIPR	Bell-Textron, Ft Worth TX				5.800	12/05	6.700	10/06	3.000	15.500	
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Test Assets											0.000	
Test Assets											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		5.800		6.700		3.000	15.500	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Government Engineering Support	TBD	TBD				0.500	12/05	0.700	10/06	5.000	6.200	
Program Management Support	TBD	TBD				0.287	12/05	0.194	10/06	0.124	0.605	
Travel											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.787		0.894		5.124	6.805	
Remarks:												
Total Cost			0.000	0.000		9.187		7.994		9.124	26.305	
Remarks:												

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>		PROGRAM ELEMENT NUMBER AND NAME 0305204N Tactical Unmanned Aerial Vehicles			PROJECT NUMBER AND NAME 9650 Advanced Airship Flying Laboratory			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
9650 Advanced Airship Flying Lab		<b>2.972</b>						
RDT&E Articles Qty								

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

Congressional Add of \$3.0M less \$.028M Congressional undistributed reductions . The Navy needs efficient airborne platforms for the development and test of transformational airborne sensors and platforms. Airships boast very low cost-per-hour operation and can economically support those portions flight-testing that concentrate on sensor performance (vice platform integration).

Develop an airship-based platform for affordable testing of transformational airborne sensors in a stable, vibration-free, laboratory-like environment. Conduct initial capability studies for development of a modernized naval airship featuring contemporary composites, digital flight controls, vectored thrust and remote piloted capabilities that can provide immediate utility for missions requiring heavy lift (logistics and/or sensor suites), long endurance (measured in days vs. hours), and Persistent broad-area Intelligence, Surveillance, and Reconnaissance (ISR).

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**B. Accomplishments/Planned Program**

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		2.650		
RDT&E Articles Quantity				

Develop new technologies to advance the state-of-the-art of modern airships such as: digital automated flight controls, bow thrusters, and heavy fuel engines.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		0.322		
RDT&E Articles Quantity				

Government Engineering Support, contractor support services, and travel.

	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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<b>C. PROGRAM CHANGE SUMMARY:</b>					
Funding:		FY 04	FY 05	FY 06	FY 07
Previous President's Budget:		0.000	0.000	0.000	0.000
Current BES/President's Budget:		0.000	2.972		
Total Adjustments		0.000	2.972	0.000	0.000
Summary of Adjustments					
Congressional program reductions					
Congressional undistributed reductions			-0.027		
Congressional rescissions					
SBIR/STTR Transfer					
Other			-0.001		
Economic Assumptions					
Reprogrammings					
Congressional increases			3.000		
Subtotal		0.000	2.972	0.000	0.000
Schedule: Not Applicable					
Technical: Not Applicable					

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<b>RDT&amp;E, N / BA-7</b>	0305204N Tactical Unmanned Aerial Vehicles	9650 Advanced Airship Flying Laboratory	
<b>D. OTHER PROGRAM FUNDING SUMMARY:</b>			
Not Applicable			
<b>E. ACQUISITION STRATEGY:</b>			
Not Applicable			

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Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	IDIQ	ARNIC, Annapolis, MD		2.650	03/05					0.000	2.650	2.650
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Integration											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Primary Hardware Development											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	2.650		0.000		0.000		0.000	2.650	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

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Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Test Assets											0.000	
Test Assets											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Government Engineering Support	WX	NAWCAD Pax River, MD		0.322	03/05						0.322	
Program Management Support											0.000	
Travel											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.322		0.000		0.000		0.000	0.322	
Remarks:												
Total Cost			0.000	2.972		0.000		0.000		0.000	2.972	
Remarks:												

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