

APPROPRIATION/BUDGET ACTIVITY RDT&E.N / 0204575N					R-1 ITEM NOMENCLATURE Electronic Warfare (EW) Readiness Support					
COST (\$ in Millions)	FY 06	FY 07	FY 08	FY09	FY10	FY11	FY12	FY13	TO COMPLETE	TOTAL
Total / 0204575N	13.671	20.595	34.340	29.576	29.552	30.861	32.196	33.146	Cont	Cont
Information Warfare Sys/Z2263	10.242	15.612	34.340	29.576	29.552	30.861	32.196	33.146	Cont	Cont
Retract Barley/Z2462	3.429	4.983	0.000	0.000	0.000	0.000	0.000	0.000	N/A	8.431
Quantity of RDT&E Articles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A. Mission Description and Budget Item Justification

Information Warfare Systems/Z2263

(U) The Navy Information Operations Command Suitland (NIOC) serves as the Program Management Office of the Offensive Information Warfare (IW) program. As such, NIOC Suitland is tasked as the Navy's principal technical agent to research, assess, and develop IW capabilities. The key focus areas include Information Operations (IO) Mission Management, Electronic Attack (EA), and Computer Network Operations.

(U) IO Mission Management: Develops software to account for antenna modeling, weather calculations, RF modeling, signals mapping and terrain modeling for warfighter use in configuring optimal Electronic Attacks from afloat. Develops command and control mechanism for remote use of Electronic Attack assets to include frequency, antenna alignment and weapon firing data transfer. Develops a modeling and simulation laboratory for the program office to use in the development, intended effect, and risk reduction of new EA capabilities.

(U) Electronic Attack (EA): Develops and fields spiral EA capabilities against Fleet Forces Command prioritized signals and target sets. EA capabilities will be integrated into a software architecture baseline that is deployed on subsurface, airborne and surface IO platforms (Classic Troll, Banshee and SSEE-Inc E/F.)

(U) Computer Network Operations (CNO): Funds development and testing of adversary target networks for modeling, simulation, and tailoring of CNO capabilities. Develops specific CNO capabilities to be used against adversary networks. Supports Electronic Target Folder database which provides a means of sharing and storing common CNO data. Studies unique adversary CNO vulnerabilities for exploitation.

(U) This program differs greatly between FY07 - FY08 and out due to the designation of NIOC Suitland as the Information Operations Research and Development Innovation Center. This caused a realignment of funds from an existing program (details are held at a higher classification level) and a re-appropriation of funds to all RTD&E. Specific variances in FY08 funding will be discussed at the project level.

(U) In FY08 this program transfers from BSO 41 to BSO 39.

(U) This program received a POM06 CNO plus-up which added approximately \$7M in FY07 and \$13M in FY08.

Retract Barley/Z2462

Details held at a higher classification level

Exhibit R-2a, RDT&E Project Justification									Date: January 2007	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER					
RDT&E.N /7		0204575N			Information Warfare/Z2263					
Cost (\$ in Millions)	FY 06	FY 07	FY 08	FY 09	FY10	FY11	FY12	FY13	Cost to Complete	Total Cost
Project Cost-IO Mission Mgmt	3.622	2.598	4.830	4.878	4.930	5.030	5.231	5.440	Continuing	Continuing
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION										
<p>FY2006 Plans</p> <p>(1.2) –RF modeling development</p> <p>(0.4) – IO Mission Management Remote Control</p> <p>(2.0) – Modeling & Simulation Lab</p> <p>FY2007 Plans</p> <p>(0.9) – RF modeling development</p> <p>(0.2) – IO Mission Management Remote Control</p> <p>(0.1) – Antenna Modeling</p> <p>(0.1) – Terrain Modeling</p> <p>(1.3) – Modeling & Simulation Lab</p> <p>FY2008 Plans</p> <p>(2.5) – RF modeling architecture integration</p> <p>(0.9) – IO Mission Management Remote Control</p> <p>(0.1) – Antenna Modeling</p> <p>(0.2) – Terrain Modeling</p> <p>(1.1) – Modeling & Simulation Lab</p> <p>FY2009 Plans</p> <p>(2.5) – RF modeling architecture integration</p> <p>(0.9) – IO Mission Management Remote Control</p> <p>(0.1) – Antenna Modeling</p> <p>(0.2) – Terrain Modeling</p> <p>(1.1) – Modeling & Simulation Lab</p> <p>In FY08 IO Mission management will fund integration onto a new, web-based architecture, reflecting an increase in funding.</p> <p>The modeling and simulation laboratory was started in FY06. Higher costs in FY06 reflect initial lab development costs.</p>										

Exhibit R-2a, RDT&E Project Justification									Date: January 2007	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER					
RDT&E.N /7		0204575N			Information Warfare/Z2263					
Cost (\$ in Millions)	FY 06	FY 07	FY 08	FY 09	FY10	FY11	FY12	FY13	Cost to Complete	Total Cost
Project Cost-Electronic Attack	1.064	3.370	11.940	13.073	12.771	12.674	13.196	13.299	Continuing	Continuing
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
<p>(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION</p> <p>FY2006 Plans (0.3) – EA Systems Development (0.1) – EA Antenna Development (0.5) – IW/IO EA capability development (0.1) – Testing</p> <p>FY2007 Plans (0.1) – EA antenna development (3.1) – IW/IO EA capability development (0.2) – Testing</p> <p>FY2008 Plans (8.5) – EA Systems Development (0.4) – EA Antenna development (2.8) – IW/IO EA capability development (0.2) – Testing</p> <p>FY2009 Plans (9.2) – EA Systems Development (0.6) – EA antenna development (2.9) – IW/IO EA capability development (0.3) – Testing</p> <p>An existing RTD&E EA systems program was realigned in FY08 from another sponsor to N6, reflecting an increase in this project line.</p>										

Exhibit R-2a, RDT&E Project Justification									Date: January 2007	
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER				
RDT&E.N /7			0204575N			Information Warfare/Z2263				
Cost (\$ in Millions)	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	Cost to Complete	Total Cost
Project Cost-CNO	2.516	5.932	13.865	7.911	7.907	8.971	9.330	9.703	Continuing	Continuing
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION										
<p>FY2006 Plans</p> <ul style="list-style-type: none"> (0.2) – Computer Network Defense (0.5) – Navy IO Architecture (0.6) – Electronic Target Folder Development (0.6) – Computer Network Attack Capabilities Development (0.6) – Navy Computer Assessment Team (NCAT) <p>FY2007 Plans</p> <ul style="list-style-type: none"> (0.6) – Navy IO Architecture (1.8) – Counter Anti-Ship Missile (0.8) – Tactical IO Initiatives (0.5) – Electronic Target Folder Development (0.3) – CNO for boarding teams (1.9) – Computer Network Attack Capabilities Development <p>FY2008 Plans</p> <ul style="list-style-type: none"> (0.6) – Navy IO Architecture (4.0) – Counter Anti-Ship Missile (1.0) – Tactical IO Initiatives (0.6) – Electronic Target Folder Development (0.4) – CNO for boarding teams (7.0) – Computer Network Attack Capabilities Development (0.3) – CNO for Maritime Domain Awareness <p>FY2009 Plans</p> <ul style="list-style-type: none"> (0.6) – Navy IO Architecture (0.4) – Electronic Target Folder Development (6.6) – Computer Network Attack Capabilities Development (0.3) – CNO for Maritime Domain Awareness <p>A POM06 CNO plus-up increased funding for FY06, FY07 and FY08 to build CNO capabilities. A POM08 issue continued CNO funding support for the capabilities developed with the POM06 add.</p>										

Exhibit R-2a, RDT&E Project Justification									Date: January 2007	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER					
RDT&E.N /7		0204575N			Information Warfare/Z2263					
Cost (\$ in Millions)	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	Cost to Complete	Total Cost
Project Cost-NVACM	2.524	2.812	0.000	0.000	0.000	0.000	0.000	0.000		
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION										
<p>FY2006 Plans (2.5) – NVACM</p> <p>FY2007 Plans (2.8) – NVACM</p> <p>The Navy Vulnerability Assessment Counter-Measures Program is being terminated beginning in FY08.</p>										

Exhibit R-2a, RDT&E Project Justification									Date: January 2007	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NAME AND NUMBER					
RDT&E.N /7		0204575N			Information Warfare/Z2263					
Cost (\$ in Millions)	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	Cost to Complete	Total Cost
Project Cost-Program Mgmt	0.516	0.900	3.705	3.714	3.944	4.186	4.439	4.704	Continuing	Continuing
RDT&E Articles Qty	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION										
FY2006 Plans										
(0.5) – Government Engineering Support										
FY2007 Plans										
(0.5) – Government Engineering Support										
(0.4) – Program Management Personnel										
FY2008 Plans										
(0.7) – Contractor Engineering Support										
(3.0) – Research Personnel										
FY2009 Plans										
(0.7) – Contractor Engineering Support										
(3.0) – Research Personnel										

APPROPRIATION/BUDGET ACTIVITY RDT&E,N /7	PROGRAM ELEMENT 0204575N	PROJECT NAME AND NUMBER Information Warfare/Z2263
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B. Other Program Funding Summary

	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>
OMN Line 4B7N	2.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0
OPN 234000/6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OPN 234000/6	3.4	5.0	0.0	0.0	0.0	0.0	0.0	0.0
0604270N/Z1742	0.9	0.7	7.9	5.0	5.1	5.2	5.3	5.4

C. Acquisition Strategy: N/A.**D. Schedule Profile: N/A****E. Program Change Summary:**

	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>
Previous President's Budget	10.299	15.671	19.936	11.481	11.200	11.241	0.000	0.000
Current President's Budget	<u>10.242</u>	<u>15.612</u>	<u>34.340</u>	<u>29.576</u>	<u>29.552</u>	<u>30.861</u>	<u>32.196</u>	<u>33.146</u>
Total Adjustments	-0.057	-0.059	+14.404	+18.095	+18.352	+19.620	+32.196	+33.146
Summary of Adjustments:								
SBIR Tax	-0.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Congressional Adjustments	+0.005	-0.059	0.000	0.000	0.000	0.000	0.000	0.000
Program Adjustments	+0.003	0.000	+14.404	+18.095	+18.352	+19.620	+32.196	+33.146
Total Adjustments	-0.057	-0.059	+14.404	+18.095	+18.352	+19.620	+32.196	+33.146

Exhibit R-3 Cost Analysis										Date: January 2007			
RDT&E,N/7			Program Element: 0204575N							Information Warfare/Z2263			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY07 Cost	FY07 Award Date	FY08 Cost	FY08 Award Date	FY09 Cost	FY09 Award Date	Cost To Complete	Total Cost	Target Value of Contract	
Primary Hardware Development	Var	Var	10.353	0.000	Var	2.420	Var	1.915	Var	Cont.	Cont.		
Ancillary Hardware Development			3.500	1.500		3.750		3.267					
Systems Engineering			0.000	0.000		0.215		0.228					
Subtotal Product Development			13.853	1.500	Var	6.385	Var	5.410	Var	Cont.	Cont.		
Development Support	Var	Var	6.237	0.000	Var	1.511	Var	3.050	Var	Cont.	Cont.		
Software Development	Var	Var	14.954	13.045	Var	21.956	Var	17.221	Var	Cont.	Cont.		
Integrated Logistics Support													
Technical Data													
Subtotal Support			21.191	13.045		23.467	Var	20.271	Var	Cont.	Cont.		
Remarks													
1/ Development support for Mission Management starts in FY07 since the first prototype software model was deployed.													
2/ Software development increased from FY07 to FY08 due to a realignment of funds from another sponsor and increased CNO capability development.													

Exhibit R-3 Cost Analysis										Date: January 2007		
RDT&E,N/7				Program Element: 0204575N						INFORMATION WARFARE/Z2263		
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY07 Cost	FY07 Award Date	FY08 Cost	FY08 Award Date	FY09 Cost	FY09 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Var	Var	3.100	0.167	Var	0.783	Var	0.181	Var	Cont.	Cont.	
Subtotal T&E			3.100	0.167	Var	0.783	Var	0.181	Var	Cont.	Cont.	
Remarks												
Testing support decreased increased in FY08 due to DT/ OT and OPEVAL being conducted on a prototype Electronic Attack system previously funded from another sponsor. Testing support returns to expected levels in FY09.												
Contractor Engineering Support	Var	Var	0.350	0.000	N/A	0.705	10/07	0.714	Var	Cont.	Cont.	
Government Engineering Support	Var	Var	2.436	0.478	10/06	0.000	N/A	0.000	N/A	Cont.	Cont.	
Program Management Support	Var	Var	2.285	0.000	Var	0.000	N/A	0.000	N/A	Cont.	2.285	
Program Management Personnel	Var	NNWC/Ft. Meade MD	0.000	0.422	10/06	0.000	N/A	0.000	N/A	Cont.	0.422	
Labor(Research Personnel)Studies & Vulnerability Analysis	Var	Var	0.000	0.000	11/06	3.000	11/07	3.000	10/08	Cont.	Cont.	
Subtotal Management			5.071	0.900	Var	3.705	Var	3.714	Var	Cont.	Cont.	
Remarks												
Research Personnel increased from FY 06 to FY07 due to a realignment of the existing effort from another sponsor. (Details held at a higher classification.)												
Total Cost			43.215	15.612	Var	34.340	Var	29.576	Var	Cont.	Cont.	
Remarks												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile														DATE: January 2007																		
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT NUMBER AND NAME								PROJECT NUMBER AND NAME																				
RDT&E, N / BA-7				0204575N								Information Warfare/ 2263																				
Fiscal Year	2006				2007				2008				2009				2010				2011				2012				2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	5	6	7	8	9	10	11	12
Acquisition Milestones																																
Prototype EA System Development																FAT																
Mission Mgmt Software Segment A on GCCS- 4.0																FAT																
Segment A on GCCS-M 4.1																FAT																
Segment A&B on GCCS-M 4.2																FAT																
continued development																FAT																
EA capability software dev																FAT																
Lighthouse Delivery																FAT																
Computer Network Operations Capabilities Developmnt																Liberty Del. A																
Counter-Anti Ship																Study 1 Delivery																
Maritime Domain Awareness																MDA Cell IOC																
																Liberty Del. B																
																FIOC Del. 1																
																FIOC Del. 2																
																FIOC Del. 3																
																FIOC Del. 4																
Test & Evaluation Milestones																																
Surface IO capabilities																FOT&E																
DT Airborne IO capabilities																AC1																
MCS-21 IO capabilities																AC2																
EA Prototype System																AC3																
																AC4																
																AC5																
																AC6																
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Production Milestones																																
N/A																																

Note: EA Software deliveries will be integrated into existing programs of record on surface, subsurface and airborne platforms to include SSEE-Inc E/F, Classic Troll and Banshee.

