

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY /						R-1 ITEM NOMENCLATURE PE 0305927N Navy Space Surveillance System (NSSS)					
BA-7											
COST (\$ in Millions)	Prior Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	1.411	2.906	9.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.628
Project X0125 Navy Space Surveillance System	1.411	1.226	9.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.948
Project X9119 SPAWAR Covert Communication and Information Transfer	0.000	1.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.680
											0.000
											0.000
											0.000
											0.000
Quantity of RDT&E Articles											0
<p>(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Naval Space Surveillance System (FENCE) is an integral component of the U.S. Space Command Surveillance Network. This system provides continuous surveillance and unalerted detection of space objects crossing the continental United States. The FENCE is also the only space surveillance system that provides satellite vulnerability and space control data to the fleet. It is a multistatic continuous wave radar fence consisting of three transmitter sites, six receiver sites, and a computation/communication center. The Alternate Space Control role assigned by U.S. Commander in Chief Space (USCINCSpace) requires that the Naval Network and Space Command (NNSOC), formerly Naval Space Command, maintain functional equivalence with the USCINCSpace Space Control Center and receive, process and distribute data from 26 surveillance sites.</p> <p>The Fence program transfers to US Air Force cognizance effective 2004. (X0125)</p> <p>Congressional Plus up - SPAWAR Covert Communication and Information Transfer (X9119).</p>											
<p>(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under Operational Systems Development because it encompasses engineering and manufacturing development for upgrading existing operational systems.</p>											

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 16)

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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME PE 0305927N Navy Space Surveillance System (NSSS)				PROJECT NUMBER AND NAME X0125 Navy Space Surveillance System (NSSS)					
COST (\$ in Millions)	Prior Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	1.411	1.226	9.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.948
RDT&E Articles Qty											0

(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project supports the Naval Space Surveillance System (FENCE), an integral component of the J.S. Space Command Space Surveillance Network. This system provides continuous surveillance and unalerted detection of space objects crossing the continental United States. The FENCE is also the only space surveillance system that provides satellite vulnerability and space control data to the fleet. It is a multistatic continuous wave radar fence consisting of three transmitter sites, six receiver sites, and a computation/communication center. The Alternate Space Control role assigned by U.S. Commander in Chief Space (USCINCSpace) requires that the Naval Network and Space Command (NNSOC), formerly Naval Space Command, maintain functional equivalence with the USCINCSpace Space Control Center and receive, process and distribute data from 26 surveillance sites. The increase in funding from FY01-FY03 supports this role and the research, design and development of high-powered transmitters and other component parts for the next generation FENCE System.

The Fence program transfers to US Air Force cognizance effective 2004.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME PE 0305927N Navy Space Surveillance System (NSSS)	PROJECT NUMBER AND NAME X0125 Navy Space Surveillance System (NSSS)

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.226	9.311	0.000	0.000
RDT&E Articles Quantity	0	0	0	0

(U) FY 2002 ACCOMPLISHMENTS: (\$1.226)
 (\$.191) Conducted environmental, safety and hazmat studies in support of frequency selection and allocation.
 (\$1.035) Developed preliminary architecture and design for RF sensor, communications, processing, modeling and simulation.

(U) FY 2003 PLAN: (\$9.311)
 (\$.487) Complete development of detailed architecture and design for RF sensors, communications, processing, modeling and simulation.
 (\$8.824) Develop RF sensor in order to provide a system demonstration prior to Critical Design Review (CDR).

(U) FY 2004 PLAN: Program transferred to U.S. Air Force.

(U) FY 2005 PLAN: N/A

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME PE 0305927N Navy Space Surveillance System (NSSS)	PROJECT NUMBER AND NAME X0125 Navy Space Surveillance System (NSSS)
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(U) C. PROGRAM CHANGE SUMMARY:

(U) Funding:	FY 2002	FY 2003	FY 2004	FY 2005
President's Budget :	4.237	9.548	2.285	2.278
Current BES/President's Budget	1.226	9.311	0.000	0.000
Total Adjustments	-3.011	-0.237	-2.285	-2.278

Summary of Adjustments

Congressional Reduction - Program Growth	-1.000			
Section 8123: Management Reform Initiative	-0.029			
Program transfer to Air Force			-2.285	-2.278
Section 313: PL107-206, Rev Econ Assumption	-0.009			
Link Plumeria	-1.200			
Section 8100: Business Process Reform		-0.038		
Section 8135: Economic Assumptions	-0.009	-0.054		
Section 8109: IT Cost Growth		-0.018		
Section 8029: PL107-248 FY03 FFRDC Reduction		-0.006		
Miscellaneous Navy Adjustments	-0.764			
Miscellaneous Department Adjustments		-0.121		
Subtotal	-3.011	-0.237	-2.285	-2.278

(U) Schedule:

NOT APPLICABLE

(U) Technical:

NOT APPLICABLE

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EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2003
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME PE 0305927N Navy Space Surveillance System (NSSS)	PROJECT NUMBER AND NAME X0125 Navy Space Surveillance System (NSSS)
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(U) D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</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>To Complete</u>	<u>Total Cost</u>
(U) OPN Line #2901	3.748	2.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing

(U) E. ACQUISITION STRATEGY:

NOT APPLICABLE

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			PE 0305927N Navy Space Surveillance System (NSSS)			X0125 Navy Space Surveillance System (NSSS)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	C/CPAF	TBD	1.200	7.500	05/03						8.700	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering			1.426	1.800							3.226	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			2.626	9.300		0.000		0.000		0.000	11.926	
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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Exhibit R-3 Cost Analysis (page 2)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			PE 0305927N Navy Space Surveillance System (NSSS)			X0125 Navy Space Surveillance System (NSSS)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											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	
Program Management Support	C/CPAF	TBD		0.011							0.011	
Travel											0.000	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.011		0.000		0.000		0.000	0.011	
Remarks:												
Total Cost			2.626	9.311		0.000		0.000		0.000	11.937	
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 7 of 16)

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EXHIBIT R4, Schedule Profile																								DATE: February 2003								
APPROPRIATION/BUDGET ACTIVITY								PROGRAM ELEMENT NUMBER AND NAME								PROJECT NUMBER AND NAME																
RDT&E, N / BA-7								PE 0305927N Navy Space Surveillance System (NSSS)								X0125 Navy Space Surveillance System (NSSS)																
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
	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	MS B △								MS C △				First Deploy ☆				IOC ☆															
Prototype Phase																																
Radar System Development					PDR △				CDR △																							
Test & Evaluation Milestones																																
Development Test									DT △																							
Operational Test																	TECHEVAL & OPEVAL □															
Procurements																																
Deliveries																																

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* Not required for Budget Activities 1, 2, 3, and 6

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Exhibit R-4a, Schedule Detail					DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT PE 0305927N Navy Space Surveillance System (NSSS)			PROJECT NUMBER AND NAME X0125 Navy Space Surveillance System (NSSS)			
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Milestone B (MSB)	1Q							
Contract Preparation	1Q							
Preliminary Design Review (PDR)		2Q						
System Development		1Q-4Q						
Critical Design Review (CDR)								
Preproduction Readiness Review (PRR)								
Milestone C (MS C)								
Functional Configuration Audit (FCA)								
Technical Evaluation (TECHEVAL)								
Physical Configuration Audit								
Operational Evaluation (OPEVAL)								
IOC								
First Deployment								

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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME PE 0305927N Navy Space Surveillance System (NSSS)				PROJECT NUMBER AND NAME X9119 SPAWAR Covert Communication and Information Transfer					
COST (\$ in Millions)	Prior Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	0.000	1.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.680
RDT&E Articles Qty											0

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Congressional Plus up - SPAWAR Covert Communication and Information Transfer (X9119).

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 10 of 16)

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7	PROGRAM ELEMENT NUMBER AND NAME PE 0305927N Navy Space Surveillance System (NSSS)	PROJECT NUMBER AND NAME X9119 SPAWAR Covert Communication and Information Transfer

(U) B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
CCIT	1.680			
RDT&E Articles Quantity				

FY02: SPAWAR Covert Communication and Information Transfer

	FY 02	FY 03	FY 04	FY 05
RDT&E Articles Quantity				

	FY 02	FY 03	FY 04	FY 05
RDT&E Articles Quantity				

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<p>(U) C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 40%;"></th> <th style="text-align: right; width: 15%;">FY 2002</th> <th style="text-align: right; width: 15%;">FY 2003</th> <th style="text-align: right; width: 15%;">FY 2004</th> <th style="text-align: right; width: 15%;">FY 2005</th> </tr> </thead> <tbody> <tr> <td colspan="5">(U) Funding:</td> </tr> <tr> <td>President's Budget:</td> <td style="text-align: right;">0.000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Current BES/President's Budget</td> <td style="text-align: right;">1.680</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">1.680</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td colspan="5"> Summary of Adjustments</td> </tr> <tr> <td> Cong. Plus-up - SPAWAR Covert Comm & Info Transfer</td> <td style="text-align: right;">1.700</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Section 8123: Mgmt Reform Initiative</td> <td style="text-align: right;">-0.015</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Section 313: PL 107-206:Revised Econ Assumptions</td> <td style="text-align: right;">-0.004</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Section 8135: Economic Assumptions</td> <td style="text-align: right;">-0.005</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Miscellaneous Department Adjustments</td> <td style="text-align: right;">0.004</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Subtotal</td> <td style="text-align: right; border-top: 1px solid black;">1.680</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td colspan="5"> (U) Schedule:</td> </tr> <tr> <td colspan="5">Not Applicable</td> </tr> <tr> <td colspan="5"> (U) Technical:</td> </tr> <tr> <td colspan="5">Not Applicable</td> </tr> </tbody> </table>				FY 2002	FY 2003	FY 2004	FY 2005	(U) Funding:					President's Budget:	0.000				Current BES/President's Budget	1.680				Total Adjustments	1.680	0.000	0.000	0.000	 Summary of Adjustments					Cong. Plus-up - SPAWAR Covert Comm & Info Transfer	1.700				Section 8123: Mgmt Reform Initiative	-0.015				Section 313: PL 107-206:Revised Econ Assumptions	-0.004				Section 8135: Economic Assumptions	-0.005				Miscellaneous Department Adjustments	0.004				Subtotal	1.680	0.000	0.000	0.000	 (U) Schedule:					Not Applicable					 (U) Technical:					Not Applicable				
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Line Item No. & Name	<u>FY 2002</u>	<u>FY 2003</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>	To Complete	Total Cost																					
Not applicable																															

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APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			PE 0305927N Navy Space Surveillance System (NSSS)			X9119 SPAWAR Covert Communication and Information Transfer						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											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	
Program Management Support											0.000	
Travel											0.000	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			1.680	0.000		0.000		0.000		0.000	1.680	
Remarks:												

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