EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-05**					R-1 ITEM NOMENCLATURE 0604261N Acoustic Search Sensors			
COST ($ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	**16.140**	**13.621**	**15.831**	**20.290**	**29.402**	**56.593**	**66.862**	**43.551**
H0480 ASW SENSORS & PROCESSING	**16.140**	**13.621**	**15.831**	**17.427**	**17.699**	**9.962**	**10.150**	**10.340**
H4017 ARPDD				**2.863**	**11.703**	**46.631**	**56.712**	**33.211**

(U) (H0480) – The ASW Sensors and Processing project provides the tools and methods necessary to maintain maritime superiority by preventing hostile submarines from disrupting the US Navy's ability to maintain naval superiority, control the sea lines of communication, and carry out their missions. This project encompasses the System Development and Demonstration (SDD) of sensor systems to improve the mission effectiveness of airborne Anti-Submarine Warfare (ASW) cueing, search, localization, and attack. Smaller and quieter threat submarines drive the requirement for continued advancement in ASW sensor capabilities for both blue water and littoral environments. The littoral regions of the world create an additional ASW challenge to defeat the increase in background clutter caused by the shallow water depth, high volume of shipping, and commercial radio frequency interference. Project H0480 provides funding for the engineering development of solutions that acquire, confirm, and attack threat submarines. Efforts being funded during the period identified are the Generic Acoustic Stimulation System (GASS), the Extended Echo Ranging (EER) family of multi-static active sensor systems, the Hydrostatic Sensor Firing Device (HSFD), the Non-Traditional Acoustic Processing (NTAP), and the Tactical Acoustics Measurement and Decision Aid (TAMDA) programs. GASS provides real time ocean, sensor, and target modeling that will couple with all ASW trainers and add shallow water and range dependent capabilities; multi-static active sensor systems provides improved threat target detection capabilities for harsh water environments; HSFD provides an ASW depth bomb capability; and TAMDA provides a real time ocean environmental measurement capability for modifying sensor field management and sensor utilization. Technology adjuncts to these programs include Sonobuoy Precise Positioning, Air Deployed Low Frequency Projector (ADLFP), Shallow Water Localization and Attack, and Light Weight Search System.

(U) (H4017) - The Automatic Radar Periscope Detection and Discrimination (ARPDD) Project provides a fully automated periscope detection, classification, and tracking capability to reliably detect periscopes and masts, and reliably discriminate periscopes from other targets. This capability is suitable for air and surface platforms. This project funds only the airborne application.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: **February 2003**	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-05**	PROGRAM ELEMENT NUMBER AND NAME 0604261N Acoustic Search Sensors				PROJECT NUMBER AND NAME H0480 ASW Sensors and Processing			
COST ($ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
H0480 ASW Sensors and Processing	**16.140**	**13.621**	**15.831**	**17.427**	**17.699**	**9.962**	**10.150**	**10.340**
RDT&E Articles Quantity								

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The ASW Sensors and Processing project provides the tools and methods necessary to maintain maritime superiority by preventing hostile submarines from disrupting the US Navy's ability to maintain naval superiority, control the sea lines of communication, and carry out their missions. This project encompasses the System Development and Demonstration (SDD) of sensor systems to improve the mission effectiveness of airborne Anti-Submarine Warfare (ASW) cueing, search, localization, and attack. Smaller and quieter threat submarines drive the requirement for continued advancement in ASW sensor capabilities for both blue water and littoral environments. The littoral regions of the world create an additional ASW challenge to defeat the increase in background clutter caused by the shallow water depth, high volume of shipping, and commercial radio frequency interference. Project H0480 provides funding for the engineering development of solutions that acquire, confirm, and attack threat submarines. Efforts being funded during the period identified are the Generic Acoustic Stimulation System (GASS), the Extended Echo Ranging (EER) family of multi-static active sensor systems, the Hydrostatic Sensor Firing Device (HSFD), the Non-Traditional Acoustic Processing (NTAP), and the Tactical Acoustics Measurement and Decision Aid (TAMDA) programs. GASS provides real time ocean, sensor, and target modeling that will couple with all ASW trainers and add shallow water and range dependent capabilities; multi-static active sensor systems provides improved threat target detection capabilities for harsh water environments; HSFD provides an ASW depth bomb capability; and TAMDA provides a real time ocean environmental measurement capability for modifying sensor field management and sensor utilization. Tehcnology adjuncts to these programs include Sonobuoy Precise Positioning, Air Deployed Low Frequency Projector (ADLFP), Shallow Water Localization and Attack, and Light Weight Search System.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-05	0604261N Acoustic Search Sensors	H0480 ASW Sensors & Processing

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	9.107			
RDT&E Articles Quantity				

GASS contract terminated in August 2002 for convenience of the government. Remaining funds will be used to complete the termination and for trainer/training capability for Multi-Static Active Systems.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	5.733	12.621	15.831	17.427
RDT&E Articles Quantity				

Software, integration, and test for Multi-Static active sensor systems.

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.300	1.000		
RDT&E Articles Quantity				

Hydrostatic Device system design and trade offs. Prepare for production.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-05	0604261N Acoustic Search Sensors	H0480 ASW Sensors & Processing	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:	16.676	13.929	16.332	18.000
Current BES/President's Budget	16.140	13.621	15.831	17.427
Total Adjustments	-0.536	-0.308	-0.501	-0.573
Summary of Adjustments				
Congressional program reductions	-0.036			
Congressional undistributed reductions		-0.082		
Congressional rescissions				
SBIR/STTR Transfer	-0.101			
Economic Assumptions	-0.046	-0.226	-0.431	-0.423
Reprogrammings	-0.353			
Other Navy/OSD Adjustments			-0.070	-0.150
Congressional increases				
Subtotal	-0.536	-0.308	-0.501	-0.573

Schedule:

(U) Schedule: Impulsive active source (Q110B) improvement effort added as an Abbreviated Acquisition Program (AAP). 1Q/02 GASS CDR#4 and 3Q/02 GASS MS III deleted - Due to a GASS contract restructure, per NPDM dated 22 January 2002, GIM#4 was dropped, therefore, no CDR required. Also no production tail, therefore no MS III required. TTPRR deleted due to contract termination. TAMDA deleted due to POM-02 budget cut forcing postponment of environmental measurements effort. Added multistatic active integration milestones into emerging P-3 acoustic configurations to provide additional program definition.

Technical:

N/A

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-05	0604261N Acoustic Search Sensors	H0480 ASW Sensors & Processing	

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
(U) APN/SH-60R/(018200)	0	0	0	0	0	0	0	0	0	0
(U) OPN (404800) Q110B	0	9.7	6.8	0	11.5	0	0	3.9	Continuing	Continuing
(U) OPN (404800) HSFD	0	1.9	1.1	0.7	0.7	0.7	0.7	0.7	Continuing	Continuing
(U) Related RDT&E										
(U) P.E. 0603254N (ASW Systems Development)										

E. ACQUISITION STRATEGY:

The integration of MSA into increased number of P-3 Aircraft can be achieved as an option under the current MSA contracts. Various alternatives of MSA implementation are also being investigated that could require Full and Open competition.

F. MAJOR PERFORMERS:

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-05**

PROGRAM ELEMENT: 0604261N Acoustic Search Sensors

PROJECT NUMBER AND NAME: H0480 ASW Sensors & Processing

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/FFP	Sparton, FL	3.178								3.178	3.178
	C/FFP	USSI, IN	2.710								2.710	2.710
	C/CPFF	Misc Contracts	1.000								1.000	1.000
Subtotal Product Development			6.888	0.000		0.000		0.000		0.000	6.888	

Remarks:

Software Development (GASS)	C/CPIF	Northrop Grumman, NY	46.314								46.314	46.314
Integrated Logistics Support	C/CPFF	Misc GASS Con	12.834								12.834	12.834
Software Development (Phase I)	C/CPFF	Misc /P-3 Baseline Cont's	8.300								8.300	8.300
Software Development (Phase II)	WX	Misc In-House				1.000	10/03	7.040	10/04		8.040	
Technical Data	WX	Misc In-House	1.861	1.291	11/31/02	1.230	10/03	1.630	10/04		6.012	
Studies & Analyses												
Award Fees												
Subtotal Support			69.309	1.291		2.230		8.670		0.000	81.500	

Remarks:

R-1 SHOPPING LIST - Item No. 99

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-05**

PROGRAM ELEMENT: 0604261N Acoustic Search Sensors

PROJECT NUMBER AND NAME: H0480 ASW Sensors & Processing

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	WX	Misc In-House	1.850	0.900	11/02	0.450	11/03	0.400	11/04	Continuing	Continuing	
Subtotal T&E			1.850	0.900		0.450		0.400		Continuing	Continuing	
Remarks:												
Program Mgmt Support (Cont)	C/FFP	Misc/Contracts	38.575	0.817	11/02	0.817	11/03	0.817	11/04		41.026	41.026
Government Engineering Support	WX	Misc In-House	37.736	10.473	10/02	12.184	10/03	7.390	10/04	Continuing	Continuing	
Program Mgmt Support (Gov)	WX	Misc In-House	6.733	0.140	10/02	0.150	10/03	0.150	10/04	Continuing	Continuing	
Travel												
Transportation												
Subtotal Management			83.044	11.430		13.151		8.357		Continuing	Continuing	
Remarks:												
Total Cost			161.091	13.621		15.831		17.427		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 99

CLASSIFICATION:

EXHIBIT R4, Schedule Profile **Multi-Static Active**			DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-05**	PROGRAM ELEMENT NUMBER AND NAME 0604261N Acoustic Search Sensors	PROJECT NUMBER AND NAME H0480 ASW Sensors & Processing	

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										MSA Integration Contract △																						
Prototype Phase																																
System Development		Q110B CDR △														MSA Integration CDR △																
EDM Delivery																																
Software Integration								Q110B △																								
Test & Evaluation Milestones Development Test Operational Test										Q110B FOT&E △												MSA Integration TECH EVAL △				MSA Integration OPEVAL △							
Production Milestones LRIP I FY 05 LRIPII FY 06 FRP FY 07																																
Deliveries																																

R-1 SHOPPING LIST - Item No. 99

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 8 of 19)

CLASSIFICATION:

Exhibit R-4a, Schedule Detail **Multi-Static Active**						DATE: **February 2003**		
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-05**	PROGRAM ELEMENT 0604261N Acoustic Search Sensors				PROJECT NUMBER AND NAME H0480 ASW Sensors & Processing			
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Prototype Phase								
System Design Review (SDR)								
Milestone II (MSII)								
Integration Contract			2Q					
Software Specification Review (SSR)								
Preliminary Design Review (PDR)								
System Development								
Critical Design Review (CDR)	2Q			4Q				
Quality Design and Build								
Test Readiness Review (TRR)								
Developmental Testing (DT-IIA)								
Eng Dev Model (EDM) Radar Delivery - Lab								
Software Intergration		4Q						
Preproduction Readiness Review (PRR)								
EDM Radar Delivery - Flt Related								
Milestone C (MS C)								
Operational Testing (OT-IIA)								
Start Low-Rate Initial Production I (LRIP I)								
Software Delivery 2XXSW								
Developmental Testing (DT-IIB1)								
Developmental Testing (DT-IIB2)								
Start Low-Rate Initial Production II								
Operational Testing (OT-IIB)								
Developmental Testing (DT-IIC)								
Functional Configuration Audit (FCA)								
Low-Rate Initial Production I Delivery								
Technical Evaluation (TECHEVAL)						2Q		
Physical Configuration Audit								
Operational Evaluation (OT-IIC) (OPEVAL)			2Q			4Q		
Low-Rate Initail Production II Delivery								
IOC								
Full Rate Production (FRP) Decision								
Full Rate Production Start								
First Deployment								

R-1 SHOPPING LIST - Item No. 99

CLASSIFICATION:

EXHIBIT R4, Schedule Profile
Hydrostatic Device

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-05**

PROGRAM ELEMENT NUMBER AND NAME: 0604261N Acoustic Search Sensors

PROJECT NUMBER AND NAME: H0480 ASW Sensors and Processing

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																										
Prototype Phase																																
System Development	Contract Award	PDR	CDR			FCA/PCA																										
EDM Delivery					Lab 30	Flight 60																										
Software **N/A**																																
Test & Evaluation Milestones					TRR																											
Development Test					Design Verification Testing (DVT) DT Assist																											
Operational Test **(Not Required)**																																
Production Milestones						PRR	Lot I (950)			Lot II (535)				Lot III (306)			New Contract Award(306) Lot IV				Lot V (306)											
Contract Production Options							Production Decision																									
FRP FY 06							HSFD Production										FRP															
Deliveries												950			535				306				306				306					

R-1 SHOPPING LIST - Item No. 99

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 10 of 19)

CLASSIFICATION:

Exhibit R-4a, Schedule Detail **Hydrostatic Device**						DATE: **February 2003**		
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-05**	PROGRAM ELEMENT 0604261N Acoustic Search Sensors				PROJECT NUMBER AND NAME H0480 ASW Sensors and Processing			
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Prototype Phase (Prior to FY02)								
System Design Review (SDR) (Prior ro FY02)								
Milestone II (MSII) (4Qtr FY01)								
Contract Preparation (FY01)								
Software Specification Review (SSR) (N/A)								
Preliminary Design Review (PDR)	2Q							
System Development	1Q - 4Q	1Q - 3Q						
Critical Design Review (CDR)	3Q							
Quality Design and Build	1Q - 4Q	1Q - 3Q						
Test Readiness Review (TRR)		1Q						
Developmental Testing (DVT/DT Assist)		1Q - 3Q						
Eng Dev Model (EDM) Radar Delivery - Lab (Prior FY02)								
Software Delivery (N/A)								
Preproduction Readiness Review (PRR)		2Q						
Milestone C (MS C)		2Q						
Operational Testing (OT-IIA) (N/A)								
Start Low-Rate Initial Production I (LRIP I) (N/A)								
Software Delivery 2XXSW (N/A)								
Developmental Testing (DT-IIB1) (N/A)								
Developmental Testing (DT-IIB2) (N/A)								
Start Low-Rate Initial Production II (N/A)								
Operational Testing (OT-IIB) (N/A)								
Developmental Testing (DT-IIC) (N/A)								
Functional Configuration Audit (FCA)		2Q						
Low-Rate Initial Production I Delivery (N/A)								
Technical Evaluation (TECHEVAL) (N/A)								
Physical Configuration Audit		2Q						
Operational Evaluation (OT-IIC) (OPEVAL) (N/A)								
Low-Rate Initail Production II Delivery (N/A)								
IOC								
Full Rate Production (FRP) Decision					1Q			
Full Rate Production Start					1Q			
First Deployment			3Q					

R-1 SHOPPING LIST - Item No. 99

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-05**	PROGRAM ELEMENT NUMBER AND NAME 0604261N Acoustic Search Sensors				PROJECT NUMBER AND NAME H4017 ARPDD			
COST ($ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
H4017 ARPDD				**2.863**	**11.703**	**46.631**	**56.712**	**33.211**

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Automatic Radar Periscope Detection and Discrimination (ARPDD) Project provides a fully automated periscope detection, classification, and tracking capability to reliably detect periscopes and masts, and reliably discriminate periscopes from other targets. This capability is suitable for air and surface platforms. This project funds only the airborne application. This capability is essential for effective detection of submarines in congested Littoral areas. This funding is for engineering development of the ARPDD system. The output will be a productionized form, fit, function incorporation of ARPDD into the AN/APS-137 radar. Two engineering develpment models for systems integration testing and four pre-production prototypes for environmental, reliability, development and operational testing will be provided. Full testing will be performed to support the production approval milestone (milestone C).

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-05	0604261N Acoustic Search Sensors	H4017 ARPDD

B. Accomplishments/Planned Program

	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	2.863
RDT&E Articles Quantity				

ARPDD is a new start in FY05 that is a follow-on to a Science and Technology program previously funded by the Office of Naval Research in PE060374N. FY05 funding will be used for project planning, exploring alternatives, acquisition documentation preparation, developing an independent government cost estimate, performing technical trade-off studies, preparation of discrimination software package, developing specifications, and a Statement of Work in preparation for awarding a contract for develpment of an airborne ARPDD capability.

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

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

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: **February 2003**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-05	0604261N Acoustic Search Sensors	H4017 ARPDD	

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:	0.000	0.000	0.000	0.000
Current BES/President's Budget	0.000	0.000	0.000	2.863
Total Adjustments	0.000	0.000	0.000	2.863
Summary of Adjustments				
Congressional program reductions				
Congressional undistributed reductions				
Congressional rescissions				
SBIR/STTR Transfer				
Economic Assumptions				-0.060
Reprogrammings				
Other Navy/OSD Adjustments				2.923
Congressional increases				
Subtotal	0.000	0.000	0.000	2.863

Schedule:

(U) Schedule: N/A

Technical:

N/A

R-1 SHOPPING LIST - Item No. 99

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-05	0604261N Acoustic Search Sensors	H4017 ARPDD	

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
Line Item #36 (APN P-3 OSIP 29-94)	0	0	0	0	0	0	0	50.1	TBD	TBD

E. ACQUISITION STRATEGY:

Analyze merits of sole source verses competitive procurement. Explore Alternatives. Award prime contract to TBD contractor. Technical support will be provided by NAWCWD (China Lake) and JHU/APL.

F. MAJOR PERFORMERS:

Major Performer	Location	Description of Work	FY03 Amt & Award Date	FY04 Amt & Award Date	FY05 Amt & Award Date

R-1 SHOPPING LIST - Item No. 99

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)											DATE: **February 2003**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-05**			PROGRAM ELEMENT 0604261N Acoustic Search Sensors				PROJECT NUMBER AND NAME H4017 ARPDD						
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													
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000	0.000		
Remarks:													
Software Development	WX	MISC In-House						1.163	10/04		1.163		
Integrated Logistics Support													
Configuration Management													
Technical Data													
Studies & Analyses	CPFF	Misc/Contracts						0.500	11/04		0.500	0.500	
GFE													
Award Fees													
Subtotal Support			0.000	0.000		0.000		1.663		0.000	1.663		
Remarks:													

R-1 SHOPPING LIST - Item No. 99

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY: **RDT&E, N / BA-05**

PROGRAM ELEMENT: 0604261N Acoustic Search Sensors

PROJECT NUMBER AND NAME: H4017 ARPDD

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												
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Program Mgmt Support (Cont)	TBD	Misc/Contracts						0.250	11/04		0.250	
Government Engineering Support	WX	Misc In-House						0.400	10/04		0.400	
Program Mgmt Support (Gov)	WX	Misc In-House						0.540	10/04		0.540	
Travel								0.010	10/04		0.010	
Transportation												
Subtotal Management			0.000	0.000		0.000		1.200		0.000	1.200	
Remarks:												
Total Cost			0.000	0.000		0.000		2.863		0.000	2.863	
Remarks:												

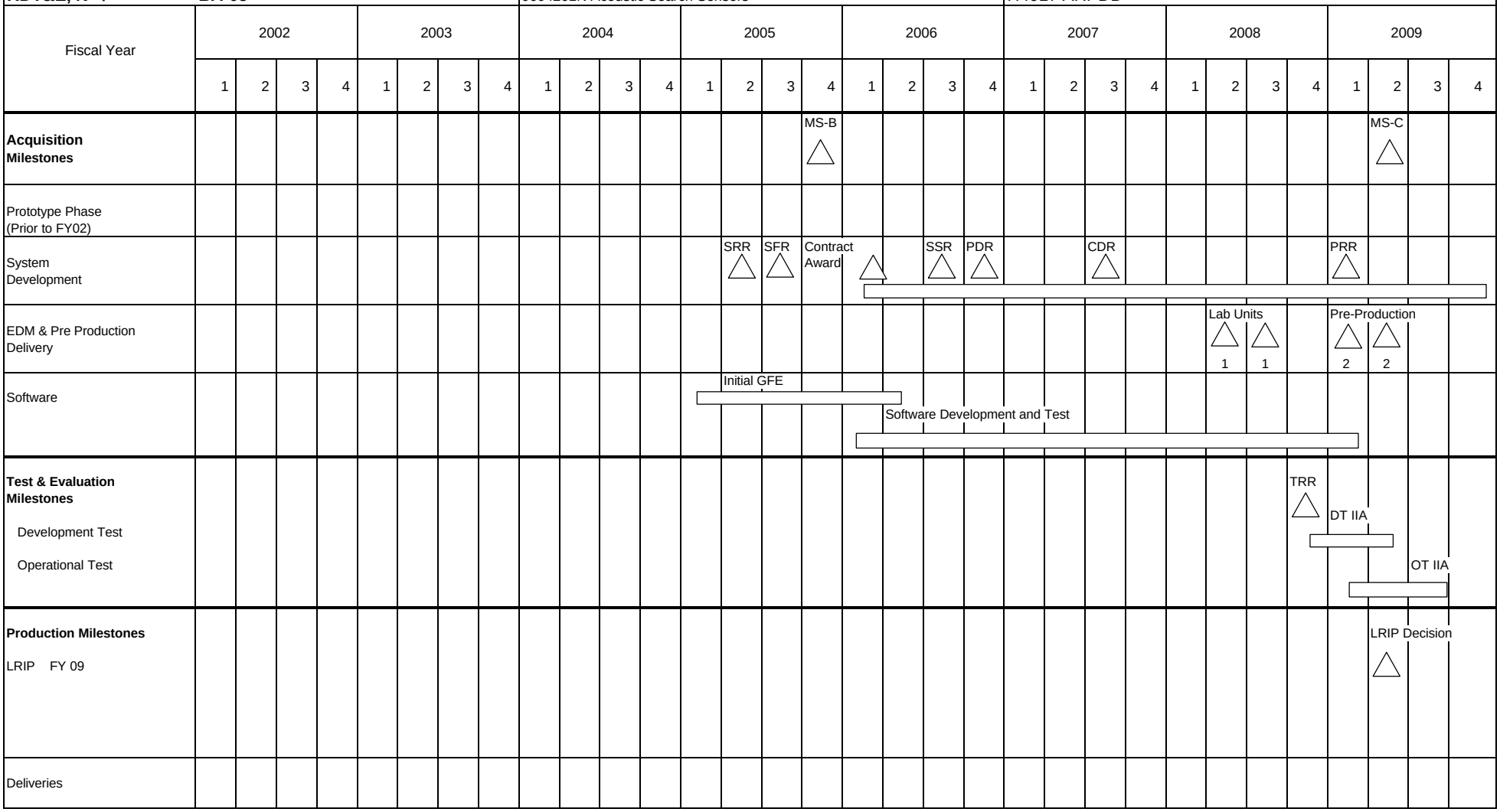
R-1 SHOPPING LIST - Item No. 99

CLASSIFICATION:

EXHIBIT R4, Schedule Profile
Automatic Radar Periscope Detection and Discrimination (ARPDD)

DATE: **February 2003**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-05	0604261N Acoustic Search Sensors	H4017 ARPDD



R-1 SHOPPING LIST - Item No. 99

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 18 of 19)

CLASSIFICATION:

Exhibit R-4a, Schedule Detail **Automatic Radar Periscope Detection and Discrimination (ARPDD)**						DATE: **February 2003**		
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-05**	PROGRAM ELEMENT 0604261N Acoustic Search Sensors				PROJECT NUMBER AND NAME H4017 ARPDD			
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Prototype Phase								
Systems Requirement Review (SRR)				2Q				
System Functional Review (SFR)				3Q				
Milestone II (MS B)				4Q				
Contract Preparation				1Q - 4Q				
Software Specification Review (SSR)					3Q			
Preliminary Design Review (PDR)					4Q			
System Development					1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q
Critical Design Review (CDR)						3Q		
Quality Design and Build						3Q-4Q	1Q - 4Q	
Test Readiness Review (TRR)							4Q	
Developmental Testing (DT-IIA)							4Q	1Q - 2Q
Lab Units							2Q - 3Q	
Software Delivery							4Q	
Preproduction Readiness Review (PRR)								1Q
EDM & Pre Production Prototype Delivery								1Q - 2Q
Milestone C (MS C)								2Q
Operational Testing (OT-IIA)								1Q - 3Q
Start Low-Rate Initial Production (LRIP)								2Q
Software Delivery 2XXSW								
Developmental Testing (DT-IIB1)								
Developmental Testing (DT-IIB2)								
Start Low-Rate Initial Production II								
Operational Testing (OT-IIB)								
Developmental Testing (DT-IIC)								
Functional Configuration Audit (FCA)								
Low-Rate Initial Production I Delivery								
Technical Evaluation (TECHEVAL)								
Physical Configuration Audit								
Operational Evaluation (OT-IIC) (OPEVAL)								
Low-Rate Initail Production II Delivery								
IOC								
Full Rate Production (FRP) Decision								
Full Rate Production Start								
First Deployment								

R-1 SHOPPING LIST - Item No. 99