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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE:			
								June 2001			
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE					
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY						0604258N TARGET SYSTEMS DEVELOPMENT (TSD)					
		BA-6									
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost		51.592	40.699	49.511							
20612 Surface Targets Development		1.065	1.117	1.149							
A0609 Aerial Target Systems Development		31.425	29.795	36.751							
A0610 Weapon Systems T&E Development/Procurement		19.102	9.787	11.611							
Quantity of RDT&E Articles		10	4	4							
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element funds the development and procurement of aerial and surface targets and associated Target Augmentation and Auxiliary Systems (TA/AS) necessary to duplicate or simulate threat characteristics in support of weapons systems test and evaluation and fleet training. Included within this program element are development of: Subsonic Subscale Aerial Target (SSAT), various TA/AS, Target Threat Characterization (TTC), Supersonic Sea Skimming Target (SSST), Navy Full Scale Aerial Target (FSAT) for conversions, the FSAT Follow-On (FO), surface targets for test and evaluation, surface towed targets, improved target control system, and an anti-radiation missile target. This program element also includes Vandal (EER) testing and procurement of TA/AS Vector Scoring.											
(U) B. JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E Management Support because it supports the operations and installations required for general research and development use.											

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Exhibit R-2, RDTE Budget Item Justification
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EXHIBIT R-2a, RDT&E Project Justification						DATE: <div>June 2001</div>				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NAME AND NUMBER				PROJECT NAME AND NUMBER					
RDT&E, N	0604258N/Target Systems Development				20612/Surface Targets Development					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Project Cost	1.065	1.117	1.149							
RDT&E Articles Qty	1	1	1							
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project develops seaborne targets systems and their related target augmentation systems in support of air-to-surface and surface-to-surface weapons test and evaluation and fleet training.										
FY 2000 ACCOMPLISHMENTS:										
<div>- (\$40) Continued Requirements Study Update. (Oct 99- Sep 00)</div> <div>- (\$170) Continued Weapons System/Emitter, TAS Upgrade. (Oct 99-Sep 00)</div> <div>- (\$53) Continued Target/Threat Characterization and Validation. (Oct 99-Sep 00)</div> <div>- (\$272) Continued Command and Control System Upgrade Development. (Oct 99- Sep 00)</div> <div>- (\$290) Continued development of Target Scoring System. (Oct 99-Sep 00)</div> <div>- (\$240) Procured prototype off-the-shelf boat for testing and evaluation of enhanced HSMST. (Oct 99-Sep 00)</div>										
FY 2001 PLAN:										
<div>- (\$45) Continue Requirements Study Update. (Oct 00-Sep 01)</div> <div>- (\$180) Continue Weapons System/Emitter, TAS Upgrade. (Oct 00-Sep 01)</div> <div>- (\$60) Continue Target/Threat Characterization and Validation. (Oct 00-Sep 01)</div> <div>- (\$290) Continue Command and Control System Upgrade Development. (Oct 00-Sep 01)</div> <div>- (\$297) Continue development of Target Scoring System. (Oct 00-Sep 01)</div> <div>- (\$242) Procure prototype off-the-shelf boat for testing and evaluation of enhanced HSMST. (Oct 00-Sep 01)</div> <div>- (\$3) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 68.</div>										
FY 2002 PLAN:										
<div>- (\$50) Continue Requirements Study Update. (Oct 01-Sep 02)</div> <div>- (\$185) Continue Weapons System/Emitter, TAS Upgrade. (Oct 01-Sep 02)</div> <div>- (\$65) Continue Target/Threat Characterization and Validation. (Oct 01-Sep 02)</div> <div>- (\$295) Continue Command and Control System Upgrade Development. (Oct 01-Sep 02)</div> <div>- (\$310) Continue development of Target Scoring System. (Oct 01-Sep 02)</div> <div>- (\$244) Procure prototype off-the-shelf boat for testing and evaluation of enhanced HSMST. (Oct 01-Sep 02)</div>										

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EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDTE, N	PROGRAM ELEMENT NAME AND NUMBER 0604258N/Target Systems Development	PROJECT NAME AND NUMBER 20612/Surface Targets Development

B. Program Change Summary:	FY 2000	FY 2001	FY 2002
FY 2001 President's Budget:	1 .094	1.127	1.165
Adjustments from President's Budget :	-0.029	-0.010	-0.016
FY 2002 President's Budget Submit:	1 .065	1.117	1,149

CHANGE SUMMARY EXPLANATION:

Funding: The FY 2000 net decrease of -\$0.029 is due to reprioritization of requirements within the Navy.
The FY 2001 net decrease of -\$0.010 consists of -\$0.008 if for Congression reductions (Pro-Rata reduction and Recission).
The FY 2002 net decrease of -\$0.016 is due to reprioritization of requirements within the Navy.

Schedule: Not applicable.

OTHER PROGRAM FUNDING SUMMARY:

	FY 2000	FY 2001	FY 2002
OPN Line 545500 ASW Range Support Equipment	6,292	6,841	6,012

Related RDT&E: Not applicable

D. ACQUISITION STRATEGY: Not applicable

E. SCHEDULE PROFILE: Not applicable

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Exhibit R-2a, RDT&E Project Justification
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EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME						
RDT&E, N / BA-6		0604258N Target Systems Development (TSD)				A0609 Aerial Target Systems Development						
COST (\$ in Millions)		Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			31.425	29.795	36.751							
RDT&E Articles Qty Not Applicable			NA	NA	NA							
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Aerial Target Systems and associated target augmentation and auxiliary systems are developed in response to the need to test and provide training for Joint strike and littoral warfare systems required to defend fleet surface and air units in a hostile environment. The threat envelope covered extends from the surface to 100K feet for speeds in the low subsonic range to MACH 4.</p> <p>(U) B. PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2000 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> -(U) (\$14.663) Initiated Subsonic Subscale Aerial Target (SSAT) Development. -(U) (\$0.674) Continued Target Threat Characterization (TTC). -(U) (\$1.059) Continued Target Augmentation and Auxillary Systems (TA/AS) development. -(U) (\$13.111) Continued Supersonic Sea Skimming Target (SSST) development. -(U) (\$1.918) Continued Target Support. <p>2. FY 2001 PLANS:</p> <ul style="list-style-type: none"> -(U) (\$13.776) Continued Subsonic Subscale Aerial Target (SSAT) Development.. -(U) (\$1.477) Continue Target Threat Characterization (TTC). -(U) (\$1.878) Continue Target Augmentation and Auxillary Systems (TA/AS) development. -(U) (\$10.000) Continue Supersonic Sea Skimming Target (SSST) development. -(U) (\$1.822) Continue Target Support. -(U) (\$0.842) Protion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 68. <p>3. FY 2002 PLANS:</p> <ul style="list-style-type: none"> -(U) (\$16.745) Continued Subsonic Subscale Aerial Target (SSAT) Development.. -(U) (\$1.288) Continue Target Threat Characterization (TTC). -(U) (\$4.003) Continue Target Augmentation and Auxillary Systems (TA/AS) development. -(U) (\$12.078) Continue Supersonic Sea Skimming Target (SSST) development. -(U) (\$2.637) Continue Target Support. 												

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Exhibit R-2a, RDTE Project Justification
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EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)	PROJECT NUMBER AND NAME A0609 Aerial Target Systems Development

(U) C. PROGRAM CHANGE SUMMARY:

	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>
(U) FY 2001 President's Budget:	32.697	30.118	34.801
(U) Adjustments from the President's Budget:	-1.272	-0.323	1.950
(U) FY 2002 President's Budget submit:	31.425	29.795	36.751

(U) D. CHANGE SUMMARY EXPLANATION:

U) Funding: FY 2000 net decrease of **\$1.272** million consists of a decrease of \$.735 million for a SBIR assessment, **\$0.637** million for reprioritization of requirements within the Navy and \$.115 million for a Congressional Reduction; offset by an increase of \$.215 million realignment from A0610. FY 2001 net decrease of **\$0.123** million consists of a decrease of \$.257 million for a reprioritization of requirements within the Navy and a decrease of **\$0.066 million for Congressional Recission**. FY 2002 net increase of **\$1.950** million consists of an increase of \$3.000 million for the SSST Program offset by a decrease of \$1.104 million for a reprioritization of requirements within the Navy and an increase of **\$0.054 million for economic assumptions**.

(U) Schedule: Not required.

(U) Technical: Not required.

(U) E. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
228000 WPN	45.242	58.351	66.349

Related RDT&E
(U) P.E. 0207161N (Tactical Air Intercept)
(U) P.E. 0207163N (Advanced Medium Range Air-to-Air Missile)

(U) F. ACQUISITION STRATEGY: Not required

(U) G. SCHEDULE PROFILE: Not required

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Exhibit R-2a, RD TEN Project Justification
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Exhibit R-3 Cost Analysis (page 1)								DATE:				
APPROPRIATION/BUDGET ACTIVITY								June 2001				
RDT&E, N / BA-6			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
			0604258N Target Systems Development (TSD)			A0609 Aerial Target Systems Development						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SSAT	C/CPIF	Northrop-Grumman/TBD	16.210	9.964	Various	13.507	12/01					
SSST (Follow-On) 1)	SS/CPIF	Orbital Sciences Corp.,	18.135	8.200	02/01	10.000	11/01					
		Chandler,AZ.										
SSST (Precision Guidance)	CPFF	McDonnell Douglas Corp.	4.389	1.200	06/01	0.000						
		St. Louis, MO.										
Miscellaneous Contracts	Various	Various	27.586	2.128	Various	4.926	Various					
Miscellaneous (NAWC/Other)	WXs	Various	49.075	3.729	Various	3.424	Various					
Subtotal Product Development			115.395	25.221		31.857						
Remarks: 1) FY01 MA-31 Alternative source non-recurring engineering to integrate Passive Autopilot.												
Miscellaneous (HQ/NAWC)	Various	Various	1.232	0.561	Various	0.367	Various					
Subtotal Support			1.232	0.561		0.367						
Remarks:												

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Exhibit R-3, Project Cost Analysis
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Exhibit R-3 Cost Analysis (page 2)										DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6				PROGRAM ELEMENT 0604258N Target Systems Development (TSD)			PROJECT NUMBER AND NAME A0609 Aerial Targets Systems Development					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Miscellaneous (NAWCs)	Various	Various	8.382	1.929	Various	2.570	Various					
SBIR assessment				0.842								
Subtotal T&E			8.382	2.771		2.570						
Remarks:												
Miscellaneous (HQ/NAWCs)	Various	Various	5.764	1.242	Various	1.957	Various					
Subtotal Management			5.764	1.242		1.957						
Remarks:												
Total Cost			130.773	29.795		36.751						
Remarks:												

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Exhibit R-3, Project Cost Analysis

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EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)				PROJECT NUMBER AND NAME A0610 Weapon SystemsT&E Dev/Procurement					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		19.102	9.787	11.611							
RDT&E Articles Qty		9	3	3							

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides for the development and procurement of aerial targets used solely for test and evaluation of Naval Weapons Systems which closely replicate current and projected threats to fleet units in the Joint Strike and the Littoral Warfare environments. This replication must include characteristics related to size, performance envelope, and electromagnetic a infrared signatures. As threats change, changes must be made to keep the targets as threat representative as possible. This is done in response to changes in the requirements of the developers of naval weapons systems.

(U) B. PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$18.219) Programmed engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of nine F-4S aircraft into FSAT targets.
- (U) (\$0.562) Continued T & E TA/AS Vector Scoring development/procurement/support.
- (U) (\$0.181) Continued VANDAL support.
- (U) (\$0.140) Continued Target Support.

2. FY 2001 PLANS:

- (U) (\$8.222) Continue program, engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of three F-4S aircraft into FSAT targets.
- (U) (\$1.004) Continue T & E TA/AS Vector Scoring development/procurement/support.
- (U) (\$0.202) Continue VANDAL support.
- (U) (\$0.272) Continue Target Support.
- (U) (\$0.087) Protion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 68.

3. FY 2002 PLANS:

- (U) (\$8.728) Continue Program, engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of three F-4S aircraft into FSAT targets.
- (U) (\$2.261) Continue T & E TA/AS Vector Scoring development/procurement/support.
- (U) (\$0.200) Continue VANDAL support.
- (U) (\$0.422) Continue Target Support .

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Exhibit R-2a, RDTEN Project Justification
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EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDTE&, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)	PROJECT NUMBER AND NAME A0610 Weapon Systems T&E Development/Procurement

(U) C. PROGRAM CHANGE SUMMARY:

	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>
(U) FY 2001 President's Budget:	21.169	9.893	15.239
(U) Adjustments from the President's Budget:	-2.067	-0.106	-3.628
(U) FY 2002 President's Budget Submit:	19.102	9.787	11.611

(U) D. CHANGE SUMMARY EXPLANATION:

(U) Funding: FY2000 net decrease of \$2.067 million consists of a decrease of \$1.727 million for reprioritization of requirements within the Navy, a decrease of \$.215 million for realignment to A060 a decrease of \$.041 million for SBIR reduction, and \$.084 million for Congressional Reduction. FY2001 net decrease \$1.06 consists of a decrease of \$.084 million for reprioritization of requirements within the Navy and \$.022 for Congressional Recission. FY2002 net decrease of \$3.628 million consists of a decrease of \$3.000 to be realigned to the SSST Program, a decrease of \$.621 million for reprioritization of requirements within the Navy, and a decrease of \$.007 million for economic assumptions.

(U) E. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

Related RDT&E
 (U) P.E. 0207161N (Tactical Air Intercept)
 (U) P.E. 0207163N (Advanced Medium Range Air-to-Air Missile)

(U) F. ACQUISITION STRATEGY: This is a non-ACAT program with no specific acquisition strategies.

(U) G. SCHEDULE PROFILE: Not required

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Exhibit R-3 Cost Analysis (page 1)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604258N Target Systems Development (TSD)			A0610 Weapons Systems T & E Development/Procurement						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Vector Scorer Development	SS/FFP	Aeronautical Systems Center	0.972	0.850	07/01	1.776	07/02					
		Eglin AFB,FL										
Miscellaneous contracts	Various	Various	23.640	0.361	Various	0.373	Various					
Miscellaneous (NAWC/NADEP)	WXs	Various	83.192	8.073	Various	8.743	Various					
Subtotal Product Development			107.804	9.284		10.892						
Remarks:												
Miscellaneous(HQ/NAWC/NADEP)	Various	Various	4.642	0.305	Various	0.487	Various					
Subtotal Support			4.642	0.305		0.487						
Remarks:												

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Exhibit R-3, Project Cost Analysis (TSD Exhibits R-3, page 10 of 10)