

CLASSIFICATION:

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EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6					R-1 ITEM NOMENCLATURE 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	48.935	45.618	37.638	39.571	44.372	45.828	46.681	47.533
20612 Surface Targets Development	1.103	1.112	0.864	0.968	0.992	1.193	1.216	1.239
K3045 Terrier/SSST	0.000	2.914	2.908	0.000	0.000	0.000	0.000	0.000
A0609 Aerial Target Systems Development	36.774	29.772	22.189	23.417	14.177	14.458	14.730	15.001
A0610 Wpn SysTs T&E Development/Procurement	11.058	11.820	11.677	15.186	29.203	30.177	30.735	31.293
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. This requirement is necessary to support weapons systems test and evaluation and fleet training. This program element includes the 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 Extended Range testing and procurement of TA/AS Vector Scoring.								

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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		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME			
RDT&E, N / BA-6		0604258N/Target Systems Development			20612/Surface Targets Development			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	1.103	1.112	0.864	0.968	0.992	1.193	1.216	1.239
RDT&E Articles Qty	1	1	1	1	1	1	1	1
<div>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</div> <div>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.</div>								

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

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME 20612/Surface Targets Development																	
B. Accomplishments/Planned Program																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.866	0.645	0.192	0.202															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 80px;"><ul style="list-style-type: none">-Continued requirements Study/Analysis of target requirements in response to weapons systems development and upgrades.-Continued development of real-time surface target scoring systems, including move to vector scorer.-Continued command and control upgrade development.-Continued Weapons System/Emitter, Target Augmentation System (TAS) upgrade.-Continued Target/Threat Characterization and Validation.</div>																			
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RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 120px;"><ul style="list-style-type: none">-Procured prototype off-the-shelf boat for testing and evaluation of enhanced High Speed Maneuverable Seaborne Target (HSMST).-Initiated requirements study, prepare source selection criteria, prepare integration plan, performance test plan, evaluation plan and select prototype hull(s). Procure prototype small (50-60'), high speed, missile-capable, patrol craft threat; integrate target systems, test and evaluate for QST-35 replacement.-Revise/update design package for medium (40M) Coastal Patrol Craft threat.-Procure prototype Medium (130') missile-capable, patrol craft threat to address known threat (Got) design. Integration of on-board control system to be completed in FY06 upon receipt of vessel.-Conduct testing of small, high-speed, missile capable patrol craft threat, finalize reports and prepare procurement recommendations to sponsors.-Develop high-speed (>45 knots) tow platform to be utilized in conjunction with small high-speed patrol craft threat to enhance platform survivability.</div>																			
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			February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N / BA-6	0604258N/Target Systems Development	20612/Surface Targets Development		
C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2002	FY 2003	FY 2004	FY2005
Previous President's Budget: (FY 03 Pres Controls)	1.139	1.138	1.137	1.190
Current BES/President's Budget: (FY04/05 Pres Controls)	1.103	1.112	0.864	0.968
Total Adjustments	-0.036	-0.026	-0.273	-0.222
Summary of Adjustments				
Congressional Program reductions				
Congressional undistributed reductions		-0.007		
Congressional rescissions	-0.004			
SBIR/STTR transfer	-0.023			
Economic assumptions	-0.003	-0.019	-0.031	-0.030
Reprogrammings	-0.006			
Other Navy/OSD adjustments			-0.242	-0.192
Congressional increases				
Subtotal	-0.036	-0.026	-0.273	-0.222
Schedule:				
Not applicable				
Technical:				
Not applicable				

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Exhibit R-2a, RDTEEN Project Justification
(Exhibit R-2a, page 4 of 16)

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development			PROJECT NUMBER AND NAME 20612/Surface Targets Development					
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>
OPN Line 545500 ASW Range Spt Equipmen	5.883	7.196	7.275	7.191	7.422	7.529	7.743	7.896		58.135
 E. ACQUISITION STRATEGY:										
Not applicable										

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)				PROJECT NUMBER AND NAME K3045 Terrier/SSST			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost		2.914	2.908					
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project funds the Terrier Supersonic Sea Skimming Target (SSST) development to provide both a low-fidelity and a moderate-fidelity Terrier Missile Target (TMT) for Fleet training against a supersonic sea skimming threat. Major efforts involve integrating a Flight Termination System (FTS), running 6-DOF simulations, recertifying rocket motors, modifying the launch control system, modifying the initialization code, and the build up and firing of rounds.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development			PROJECT NUMBER AND NAME A0609/Aerial Target Systems Development			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	36.774	29.772	22.189	23.417	14.177	14.458	14.730	15.001
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Aerial Target Systems and associated target augmentation and auxiliary systems are developed 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. This project includes:

- Subsonic Subscale Aerial Target (SSAT) development (including pre-planned product improvements to the existing recoverable, remote-controlled subsonic target - upgraded engine, fuselage, swept wing configuration). The SSAT simulates the anti-ship Cruise Missile threat.
- Supersonic Sea Skimming Target (SSST) development. The current developmental SSST replicates anti-ship cruise missile Threat-C performance.
- Target Augmentation and Auxiliary Systems (TAAS) development. TAAS items allow each target to be uniquely configured for specific mission profiles. TAAS configured targets are used for radar acquisition test, electronic countermeasures (jamming) evaluation, infrared measurement/test, radar cross section evaluation, decoy effectiveness, maneuver analysis, electronic warfare, warhead effectiveness and evaluation of fleet tactics, readiness and effectiveness.
- Support for core modeling & simulation lab capability, including development and integration of analytical and hardware-in-the-loop simulations, and engineering/technical support to verify and validate target simulations.
- Target Threat Characterization (TTC).

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

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development	PROJECT NUMBER AND NAME A0609/Aerial Target Systems Development																	
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<div style="border: 1px solid black; padding: 10px; min-height: 100px;"><p>Complete GQM-163A SSST Engineering and Manufacturing Development and initiate Block Upgrades/evolutionary development to keep pace with evolving threat and associated ORD requirements. Efforts include:</p><ul style="list-style-type: none">-Initiate development of salvo firing and multiple target control capabilities.-Conduct alternative booster system study and initiate alternative booster system development.-Continue improvement of system deficiencies identified during EMD.-Conduct Aerial Target Launch Ship (ATLS) integration.-Develop improved telemetry transmission capabilities.</div>																			
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Exhibit R-2a, RD TEN Project Justification
(Exhibit R-2a, page 12 of 16)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N/Target Systems Development				PROJECT NUMBER AND NAME A-0610/Weapons Systems T&E Development Procurement			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	11.058	11.820	11.677	15.186	29.203	30.177	30.735	31.293
RDT&E Articles Qty	2	3	5	4	3	3	3	3

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides for the development and procurement of Aerial Targets used exclusively 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 and 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.

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Exhibit R-2a, RDTEN Project Justification
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(U) C. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
(U) Funding:				
Previous President's Budget:	11.508	12.099	12.100	15.595
Current BES/President's Budget	11.058	11.820	11.677	15.186
Total Adjustments	-0.450	-0.279	-0.423	-0.409

Summary of Adjustments

Congressional program reductions				
Congressional undistributed reductions		-0.070		
Congressional rescissions				
SBIR/STTR Transfer	-0.064			
Economic Assumptions	-0.059	-0.209	-0.264	-0.273
Reprogrammings	-0.079		-0.147	
Other Navy/OSD Adjustments	-0.248		-0.012	-0.136
Congressional increases				
Subtotal	-0.450	-0.279	-0.423	-0.409

(U) Schedule:
Not applicable.

(U) Technical:
Not applicable.

(U) D. OTHER PROGRAM FUNDING SUMMARY:

	<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>
228000 Aerial Target System	57.763	68.985	70.676	103.684	127.698	88.597	90.233	91.875	Continuing	

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Exhibit R-2a, RDTE Project Justification
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