

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: <b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RESEARCH DEVELOPMENT TEST &amp; EVALUATION, NAVY / BA-5</b>					R-1 ITEM NOMENCLATURE 0604603N Air to Surface Munitions			
COST (\$ in Millions)		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost		13.415	12.065					
A2183 SLAM-ER		10.551	9.593					
A9078 LIGHT DEFENDER PRECISION STRIKE MISSILE		2.864	2.472					

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

(U) A2183/STANDOFF LAND ATTACK MISSILE-EXPANDED RESPONSE (SLAM-ER) Description: This program funds the development of SLAM-ER designed to improve performance in the areas of launch and control aircraft survivability, immunity to countermeasures, probability of kill against hardened targets, and improved user interfaces for both missile planning and launch aircraft integration. The SLAM-ER systems consist of hardware and software upgrades to the missile, software upgrades to the F/A-18 aircraft, and software upgrades to the Joint Missile Planning System (JMPS).

(U) A9078/LIGHT DEFENDER PRECISION STRIKE MISSILE Description: This program has been initiated to integrate and adapt the existing Light Defender missile for the MH-60 aircraft for Anti-Surface Warfare mission applications. Initial IOC is anticipated in FY 2007. The funds are a Congressional add to pay for the integration of initial risk reduction efforts to the missile.

R-1 SHOPPING LIST - Item No.

119

UNCLASSIFIED

**Exhibit R-2, RDTEN Budget Item Justification**  
(Exhibit R-2, page 1 of 15)

CLASSIFICATION:

**UNCLASSIFIED**

EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>		0604603N Air to Surface Munitions			PROJECT NUMBER AND NAME A2183 SLAM-ER		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	<b>10.551</b>	<b>9.593</b>					
RDT&E Articles Qty							
<p><b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: A2183/STANDOFF LAND ATTACK MISSILE - EXPANDED RESPONSE (SLAM-ER) Description:</b> This program funds the development of SLAM-ER designed to improve performance in the areas of launch and control aircraft survivability, immunity to countermeasures, probability of kill against hardened targets and improved user interfaces for both missile planning and launch aircraft integration. The SLAM-ER consists of both hardware and software upgrades to the missile. SLAM-ER incorporates many non-development items i.e., the Embedded Global Positioning System/Inertial Navigation System (GPS/INS) (EGI), modified Tomahawk wings and warhead, and the existing advanced mode of the AWW-13 data link pod. The Automatic Target Acquisition (ATA) is being integrated into the SLAM-ER missile to enhance its capability to attack and kill in low thermal contrast, small targets in cluttered urban scenes, and in poor weather. The ATA capability will also reduce the overall number of Standoff Outside Area Defense (SOAD) missiles needed by increasing the probability of kill for part of the target set. In addition, ATA increases pilot and aircraft survivability by minimizing the time that the pilot needs to fly with his head down to control the weapon. SLAM-ER incorporates ATA. To accommodate future U.S. Air Force and Navy aircraft integration, SLAM-ER incorporates a MIL-STD-1760 interface. The SLAM-ER Mission Planning Module (MPM) development and modifications are required to remain compatible with the changes to the Tactical Automated Mission Planning System (TAMPS) and to migrate to the Joint Mission Planning System (JMPS). SLAM-ER aircraft software integration efforts need to remain compatible with ongoing F/A-18 periodic software builds.</p>							

R-1 SHOPPING LIST - Item No.

119

**UNCLASSIFIED**

**Exhibit R-2, RDTEN Budget Item Justification**  
(Exhibit R-2, page 2 of 15)

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>													
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /</b>	0604603N Air to Surface Munitions	PROJECT NUMBER AND NAME A2183 SLAM-ER													
<b>(U) B. Accomplishments/Planned Program</b>															
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 20%;">FY 03</th><th style="width: 20%;">FY 04</th><th style="width: 30%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">5.535</td><td style="text-align: center;">5.329</td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	5.535	5.329		RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	5.535	5.329													
RDT&E Articles Quantity															
Continue conversion of SLAM/SLAM-ER TAMPS MPM, and F/A-18 MPM into planning components of JMPS.															
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 20%;">FY 03</th><th style="width: 20%;">FY 04</th><th style="width: 30%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">5.016</td><td style="text-align: center;">4.264</td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	5.016	4.264		RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost	5.016	4.264													
RDT&E Articles Quantity															
Continue Missile Flight Test and Evaluation to support JMPS evolutionary acquisition strategy; F/A-18 Software (17C, 19C).															
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 20%;">FY 03</th><th style="width: 20%;">FY 04</th><th style="width: 30%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td></td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td></tr></tbody></table>					FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost				RDT&E Articles Quantity			
	FY 03	FY 04	FY 05												
Accomplishments/Effort/Subtotal Cost															
RDT&E Articles Quantity															

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604603N Air to Surface Munitions	PROJECT NUMBER AND NAME A2183 SLAM-ER	
<b>(U) C. PROGRAM CHANGE SUMMARY:</b>			
(U) Funding:	FY 2003	FY 2004	FY 2005
Previous President's Budget:	10.764	9.701	0.000
Current BES/President's Budget:	10.551	9.593	0.000
Total Adjustments	-0.213	-0.108	0.000
Summary of Adjustments			
Congressional program reductions			
Congressional undistributed reductions		-0.108	
Congressional rescissions			
SBIR/STTR Tranfer	-0.084		
Economic Assumptions			
Reprogramming	-0.129		
Other Adjustments			
Congressional increases			
Subtotal	-0.213	-0.108	
(U) Schedule: Not applicable			
(U) Technical: Not applicable			

R-1 SHOPPING LIST - Item No. 119

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification  
(Exhibit R-2a, page 4 of 15)

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2004</b>		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
<b>RDT&amp;E, N / BA-5</b>		0604603N Air to Surface Munitions			A2183 SLAM-ER				

  

**(U) D. OTHER PROGRAM FUNDING SUMMARY:**

<u>Line Item No. &amp; Name</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>
223100 SLAM-ER	82.616	50.765	0	0	0	0	0	0	133.381
WPN SLAM-ER Spares	0.782	0.652	0	0	0	0	0	0	1.434

  

**(U) E. ACQUISITION STRATEGY: \***

This is a ACAT II program, post milestone C in full rate production with an approved Acquisition Plan.

R-1 SHOPPING LIST - Item No. 119

UNCLASSIFIED

# UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-5			0604603N Air to Surface Munitions			A2183 SLAM-ER						
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											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Development Support											0.000	
Software Development	SS/CPIF	Boeing, Mo	140.488	7.022	11/02	6.592	11/03				154.102	154.102
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses	Various	Various	47.005	0.400	Various	0.441	Various				47.846	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			187.493	7.422		7.033		0.000		0.000	201.948	
Remarks:												

R-1 SHOPPING LIST - Item No. 119

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification  
(Exhibit R-2a, page 6 of 15)

# UNCLASSIFIED

## CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)									DATE: <b>February 2004</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDTE, N / BA-5</b>			PROGRAM ELEMENT 0604603N Air to Surface Munitions			PROJECT NUMBER AND NAME A2183 SLAM-ER						
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	WX	NAWC-WD	31.370	2.062	Various	1.500	Various				34.932	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			31.370	2.062		1.500		0.000		0.000	34.932	
Remarks:												
Contractor Engineering Support	C/FFP	Delex Corporation	1.161	0.067	08/03	0.060	08/04				1.288	1.288
Government Engineering Support	WX	TBD	0.400	0.940	Various	0.940	Various				2.280	
Program Management Support											0.000	
Travel	WX	NAWC-AD		0.060		0.060					0.120	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			1.561	1.067		1.060		0.000		0.000	3.688	
Remarks:												
Total Cost			220.424	10.551		9.593		0.000		0.000	240.568	
Remarks:												

R-1 SHOPPING LIST - Item No. 119

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis  
(Exhibit R-3, page 7 of 15)

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R4, Schedule Profile																									DATE: February 2004							
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME												
RDT&E, N / BA-5										0604603N Air to Surface Munitions										A2183 SLAM-ER												
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				
Acquisition Milestones			ATA IOC ★								17C IOC ★			SLAM-ER 19C/JMPS IOC ★																		
Engineering Milestones																																
SLAM-ER UPC Prototype Phase						IBR/DR △			IPR △																							
SLAM-ER UPC Development																																
SLAM-ER 17C S/W Upgrade																																
SLAM-ER 19C S/W Upgrade																																
Test & Evaluation Milestones																																
Development Test						17C DT/OT							19C DT		SLAM-ER JMPS DT																	
Operational Test																																
Contract Milestones																																
SLAM-ER ATA																																
JMPS/19C Development			JMPS/19C Contract Award ▲																													

R-1 SHOPPING LIST - Item No. 119

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

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis  
(Exhibit R-3, page 8 of 15)



**UNCLASSIFIED**

**CLASSIFICATION:**

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R-1 SHOPPING LIST - Item No. 119

**UNCLASSIFIED**

**Exhibit R-3, Project Cost Analysis**  
(Exhibit R-3, page 9 of 15)

CLASSIFICATION:

**UNCLASSIFIED**

EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	0604603N Air to Surface Munitions			PROJECT NUMBER AND NAME A9078 Light Defender Precision Strike Missile			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	2.864	2.472					
RDT&E Articles Qty							

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: A9078/LIGHT DEFENDER PRECISION STRIKE MISSILE** Description: This program has been initiated to integrate and adapt the existing Light Defender missile for the MH-60 aircraft for Anti-Surface Warfare mission applications. Initial IOC is anticipated in FY 2007. The funds are a Congressional add to pay for the integration of initial risk reduction efforts to the missile.

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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /</b>	0604603N Air to Surface Munitions	PROJECT NUMBER AND NAME A9078 Light Defender Precision Strike Missile	
<b>(U) B. Accomplishments/Planned Program</b>			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.864	2.472	
RDT&E Articles Quantity			
Integrate booster system onto Light Defender Weapon.			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			
RDT&E Articles Quantity			
	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			
RDT&E Articles Quantity			

UNCLASSIFIED

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604603N Air to Surface Munitions	PROJECT NUMBER AND NAME A9078 Light Defender Precision Strike Missile

**(U) C. PROGRAM CHANGE SUMMARY:**

	FY 2003	FY 2004	FY 2005
(U) Funding:			
Previous President's Budget:	0.000	0.000	0.000
Current BES/President's Budget:	2.864	2.472	0.000
Total Adjustments	2.864	2.472	0.000
Summary of Adjustments			
Congressional program reductions		-0.028	
Congressional undistributed reductions			
Congressional rescissions			
SBIR/STTR Tranfer	-0.069		
Economic Assumptions			
Reprogramming	2.933		
Congressional increases		2.500	
Subtotal	2.864	2.472	

(U) Schedule: Not applicable

(U) Technical: Not applicable

R-1 SHOPPING LIST - Item No. 119

**Exhibit R-2a, RDTEEN Project Justification**  
(Exhibit R-2a, page 12 of 15)

# UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2004</b>		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
<b>RDT&amp;E, N / BA-5</b>		0604603N Air to Surface Munitions			A9078 Light Defender Precision Strike Missile				
<b>(U) D. OTHER PROGRAM FUNDING SUMMARY:</b>									
<u>Line Item No. &amp; Name</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>
Not Applicable									0
Related RDT&E,N: Not Applicable									
<b>(U) E. ACQUISITION STRATEGY:</b>									
This is a non-ACAT program with no specific acquisition strategies.									

# UNCLASSIFIED

**CLASSIFICATION:**

Exhibit R-3 Cost Analysis (page 1)								DATE: <b>February 2004</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>			PROGRAM ELEMENT 0604603N Air to Surface Munitions			PROJECT NUMBER AND NAME A90782 Light Defender Precision Strike Missile						
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											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Integrated Logistics Support	WX	NAWCAD, Pax River		0.300	11/02						0.300	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses	FFP	Lockheed Martin	4.169	2.331	09/03	2.447	09/04				8.947	8.947
GFE											0.000	
Award Fees											0.000	
Subtotal Support			4.169	2.631		2.447		0.000		0.000	9.247	
Remarks:												

# UNCLASSIFIED

## CLASSIFICATION:

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APPROPRIATION/BUDGET ACTIVITY <b>RDTE, N / BA-5</b>			PROGRAM ELEMENT 0604603N Air to Surface Munitions			PROJECT NUMBER AND NAME A90782 Light Defender Precision Strike Missile						
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	0.000
Government Engineering Support	WX	Various		0.183	11/03						0.183	
Program Management Support											0.000	
Travel	WX	NAWCAD, Pax River		0.050	08/03	0.025	Various				0.075	0.075
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.233		0.025		0.000		0.000	0.258	
Remarks:												
Total Cost			4.169	2.864		2.472		0.000		0.000	9.505	
Remarks:												

R-1 SHOPPING LIST - Item No. 119

UNCLASSIFIED

Exhibit R-2a, RDTE Project Justification  
(Exhibit R-2a, page 15 of 15)