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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						R-1 ITEM NOMENCLATURE 0604603N Air to Surface Munitions					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost			6.254	17.038	12.142	12.137				Continuing	Continuing
A2183 SLAM ER			6.254	12.776	12.142	12.137				Continuing	Continuing
A9078 LIGHT DEFENDER PRECISION STRIKE MISSILE				4.262							4.262
Quantity of RDT&E Articles	Not Applicable										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>(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 system consists of hardware and software upgrades to the missile, software upgrades to the F/A-18 aircraft, and software upgrades to the Joint Mission Planning System (JMPS). In complying with DOD mandated requirements, Selective Availability Anti-spoofing Module (SAASM) is being incorporated into the SLAM ER weapon system.</p> <p>(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 will be used to pay for integration of a booster on to the missile.</p> <p>(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ENGINEERING & MANUFACTURING DEVELOPMENT because it encompasses engineering and manufacturing development of new end-items.</p>											

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EXHIBIT R-2a, RDT&E Project Justification								DATE: FEBRUARY 2002			
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					
COST (\$ in Millions)		Prior Years Cost	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			6.254	12.776	12.142	12.137				Continuing	Continuing
RDT&E Articles Qty											
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: 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 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) tracker 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 Aircraft Mission Planning System (TAMPS) and to migrate to the Joint Mission Planning System. SLAM ER aircraft software integration efforts need to remain compatible with ongoing F/A-18 periodic software builds. To comply with DOD mandated requirements, Selective Availability Anit-Spoofing Module (SAASM) will be incorporated into the SLAM ER weapon system.</p> <p>1. FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> (U) (\$ 1.646) Continued SLAM/SLAM ER TAMPS MPM, and F/A-18 MPM into planning components of the JMPS. (U) (\$ 4.608) Continued Missile Flight Test and Evaluation to support TAMPS evolutionary acquisition strategy including ATA. <p>2. FY 2002 PLANS:</p> <ul style="list-style-type: none"> (U) (\$ 1.800) Continue conversion of SLAM/SLAM ER TAMPS MPM, and F/A-18 MPM into planning components of the JMPS. (U) (\$ 2.844) Continue Missile Flight Test and Evaluation to support TAMPS evolutionary acquisition strategy. (U) (\$ 7.685) Begin SLAM-ER/SAASM Integration and introduction of full man-in-the-loop (MITL) capability in support of FA-18 17C/19C software. (U) (\$.060) Continue systems engineering, government and contractor support. (U) (\$.387) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638. <p>3. FY 2003 PLANS:</p> <ul style="list-style-type: none"> (U) (\$ 1.800) Continue conversion of SLAM/SLAM ER TAMPS MPM, and F/A-18 MPM into planning components of the JMPS. (U) (\$ 2.275) Continue Missile Flight Test and Evaluation to support TAMPS evolutionary acquisition strategy; F/A-18 software (17c, 19c). (U) (\$ 8.000) Continue SLAM-ER/SAASM Integration. (U) (\$.067) Continue systems engineering, government and contractor support. 											

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604603N Air to Surface Munitions	PROJECT NUMBER AND NAME A2183 SLAM ER																																						
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center; border-bottom: 1px solid black;">FY2001</th> <th style="text-align: center; border-bottom: 1px solid black;">FY2002</th> <th style="text-align: center; border-bottom: 1px solid black;">FY2003</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2002 President's Budget:</td> <td style="text-align: center;">2.553</td> <td style="text-align: center;">12.890</td> <td></td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: center;">3.701</td> <td style="text-align: center;">-0.114</td> <td></td> </tr> <tr> <td>(U) FY 2003 President's Budget Submit:</td> <td style="text-align: center;">6.254</td> <td style="text-align: center;">12.776</td> <td style="text-align: center;">12.142</td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY 2001 net increase of \$3.701 million reflects an increase of \$3.711 million for continuation of SLAM ER ATA software efforts offset by a \$0.001 million reduction for a Small Business Innovative Research (SBIR) assessment and a \$.009 decrease of \$9k for reprioritization of requirements within the Navy. FY02 decrease of \$.114 million is for an undistributed congressional reduction.</p> <p>(U) Schedule: FY 2001: ATA IOC changed from 3Q/01 to 2Q/02, and ATA FOT&E changed from 1Q-4Q/01 to 1Q/01-1Q/02 due to the resolution of F/A-18 software integration issues and additional DOT&E requirements.</p> <p style="padding-left: 40px;">FY 2002 reflects a change in SAASM PDR from 2Q/02 to 3Q/02 and CDR from 4Q/02 to 3Q/03 due to resolution of technical issues. JMPS UPC contract option award delayed from 1Q/02 to 2Q/02 to conduct independent assessment.</p> <p>(U) Technical: N/A</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Line Item No. & Name</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2001</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2002</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2003</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2004</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2005</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2006</th> <th style="text-align: center; border-bottom: 1px solid black;">FY 2007</th> <th style="text-align: center; border-bottom: 1px solid black;">To Complete</th> <th style="text-align: center; border-bottom: 1px solid black;">Total Cost</th> </tr> </thead> <tbody> <tr> <td>WPN BLI 223100 SLAM ER</td> <td style="text-align: center;">23.753</td> <td style="text-align: center;">25.954</td> <td style="text-align: center;">83.781</td> <td style="text-align: center;">55.930</td> <td style="text-align: center;">63.240</td> <td></td> <td></td> <td style="text-align: center;">Continue</td> <td style="text-align: center;">Continue</td> </tr> </tbody> </table> <p>Related RDT&E,N: Not Applicable</p>						FY2001	FY2002	FY2003	(U) FY 2002 President's Budget:	2.553	12.890		(U) Adjustments from the President's Budget:	3.701	-0.114		(U) FY 2003 President's Budget Submit:	6.254	12.776	12.142	Line Item No. & Name	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Cost	WPN BLI 223100 SLAM ER	23.753	25.954	83.781	55.930	63.240			Continue	Continue
	FY2001	FY2002	FY2003																																					
(U) FY 2002 President's Budget:	2.553	12.890																																						
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WPN BLI 223100 SLAM ER	23.753	25.954	83.781	55.930	63.240			Continue	Continue																															

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2002	
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		
(U) D. ACQUISITION STRATEGY: This is a non-ACAT program with no specific acquisition strategies.				
(U) E. SCHEDULE PROFILE:				
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>TO COMPLETE</u>
(U) Program Milestones	3Q/01 JMPS UPC Contract Award	2Q/02 ATA IOC 2Q/02 SCRB (F/A-18 19C) 1Q/01-1Q/02 FOT&E/ATA	2Q/03 IOC (FA-18, 17C)	2Q/05 IOC (FA-18, 19C)
(U) Engineering Milestones	4Q/01 JMPS UPC Design Review	3Q/02 SAASM PDR	3Q/03 SAASM CDR	
(U) T&E Milestones	1Q/01 DT/ATA	4Q/02 V&V (F/A-18 17C)	4Q/03 DT JMPS UPC	
(U) Contract Milestones	2Q/01 ATA FRP II	2Q/02 ATA FRP III 2Q/02 SAASM Contract Award 2Q/02 JMPS UPC Contract Option	2Q/03 ATA FRP IV 2Q/03 JMPS UPC CONTRACT OPTION	

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2002		
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 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
Software Development	SS/CPIF	Boeing, Mo	117.154	1.269	04/01	1.800	11/01	1.800	11/02	2.375	124.398	124.398
Miscellaneous	Various	Various	46.226	0.377	Various	0.402	Various	0.400	Various	Continuing	Continuing	
SAASM Integration/Fit SW Upgrade	SS/CPIF	Boeing, Mo				7.186	01/02	6.600	01/03	4.300	18.086	18.086
Subtotal Product Development			163.380	1.646		9.388		8.800		Continuing	Continuing	
Remarks:												
Miscellaneous	C/FFP	Delex Corporation	1.101			0.060	8/02	0.067	08/03	0.198	1.426	1.426
SBIR Assessment						0.387					0.387	
Subtotal Support			1.101			0.447		0.067		0.198	1.813	
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5			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 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
Missile Flight Test & Evaluation	WX	NAWC-WD	23.965	4.608	Various	2.541	Various	2.275	Various	4.264	37.653	37.653
Subtotal T&E			23.965	4.608		2.541		2.275		4.264	37.653	
Remarks:												
Gov't Engineering Support (SAASM)	WX	TBD				0.400	Various	1.000	Various	1.000	2.400	2.400
Subtotal Management						0.400		1.000		1.000	2.400	
Remarks:												
Total Cost			188.446	6.254		12.776		12.142		Continuing	Continuing	
Remarks:												

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Exhibit R-2, RDTE Budget Item Justification
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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-5	0604603N Air to Surface Munitions					A9078 LIGHT DEFENDER PRECISION STRIKE MISSILE					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				4.262							4.262
RDT&E Articles Qty											
<p>(U) 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 will be used to pay for integrating the initial risk reduction efforts to the missile.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2001 ACCOMPLISHMENTS: N/A</p> <p>2. FY 2002 PLANS:</p> <p style="padding-left: 40px;">- (U) (\$4.262) Integrate booster system onto Light Defender Weapon.</p>											

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<p>(U) D. ACQUISITION STRATEGY: This is a non-ACAT program with no specific acquisition strategies.</p> <p>(U) E. SCHEDULE PROFILE: N/A</p>				
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>TO COMPLETE</u>
(U) Program Milestones		N/A		
(U) Engineering Milestones		N/A		
(U) T&E Milestones		N/A		
(U) Contract Milestones		Contract award 60 days after funding available.		

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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
Primary Hardware Development												
Ancillary Hardware Development	FFP	Israeli Military Industries/TBD				0.750					0.750	0.750
Systems Engineering	FFP	Israeli Military Industries/TBD				2.000					2.000	2.000
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development						2.750					2.750	
Remarks:												
Development Support Equipment												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
GFE												
Subtotal Support												
Remarks:												

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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
Developmental Test & Evaluation												
Operational Test & Evaluation												
Tooling												
GFE												
Subtotal T&E												
Remarks:												
Contractor Engineering Support	WX	Various				0.100	Various				0.100	
Government Engineering Support	WX	Various				1.212	Various				1.212	
Program Management Support	WX	Various				0.182	Various				0.182	
Travel	WX	Various				0.018	Various				0.018	
Labor (Research Personnel)												
Overhead												
Subtotal Management						1.512					1.512	
Remarks:												
Total Cost						4.262					4.262	
Remarks:												

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Exhibit R-2, RDTE Budget Item Justification
(Exhibit R-2, page 11 of 11)