EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7**					R-1 ITEM NOMENCLATURE 0702207N Depot Maintenance (NON-IF)			
COST ($ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost		**5.878**	**18.988**	**21.130**	**9.577**			
3030 F/A-18 SLAP		**2.770**	**18.018**	**17.180**	**8.590**			
3182 T-45 SLAP			**0.970**	**3.950**	**0.987**			
9999 Portable Laser Depainting System		**3.108**						

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

3030: The F/A-18A-F Service Life Assessment Program (SLAP) is assessing the structural condition of the F/A-18 fleet in order to determine what modifications are necessary to extend the aircraft designed life limits to allow it to achieve Chief of Naval Operations (CNO) inventory requirements. The goal of the SLAP program is to identify critical structures and components that can achieve the extended service life limit goals for all models. An increase in total landings and flight hours would allow the F/A-18A/B/C/D/E/F to meet CNO inventory requirements, to include planning for the announced one year Joint Strike Fighter slide. This effort is required to be conducted for these airframes to ascertain what actions and modifications must be taken to safely operate each system beyond its designed life until the targeted end of service life.

3182: The T-45 SLAP is assessing the structural condition of the T-45 Fleet in order to determine structural modifications necessary to extend the aircraft designed service life to support Pilot Training Requirements (PTR)and Naval Flight Officer Training Requirements (NTR) until 2026. The T-45 aircraft structure is currently fatigue limited to 14,400 flight hours based on initial full-scale fatigue tests conducted from 1992-1996. This service life limit prevents the T-45 fleet from meeting PTR/NTR requirements past 2016. Recent studies have determined that the fleet squadrons have not been flying the T-45 aircraft as aggressively as the initial fatigue studies predicted. These studies demonstrate that the 14,400 flight hour service life can likely be extended to 21, 600 flight hours, which will support meeting PTR/NTR until 2026. A T-45 SLAP is required to assess the critical areas within the structure that require modifications to achieve a 21,600 flight hour service life. This assessment will be based on the updated fleet aircraft usage spectrum and future predicted training missions of the T-45 aircraft. The assessment will address critical structural areas that are either landing and/or flight hour limited.

9999: The Portable Laser Depainting System is a Congressional Add.

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY **RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7**	R-1 ITEM NOMENCLATURE 0702207N Depot Maintenance (NON-IF)

B. PROGRAM CHANGE SUMMARY:

Funding:	FY 2007	FY 2008	FY 2009
FY2008 President's Budget:	6.137	19.402	21.295
FY2009 President's Budget:	5.878	18.988	21.130
Total Adjustments	-0.259	-0.414	-0.165
Summary of Adjustments			
Congressional Reductions			
Congressional Rescissions			
Congressional Undistributed Reductions	-0.154	-0.123	
Congressional Increases			
Economic Assumptions			
Miscellaneous Adjustments	-0.105	-0.291	-0.165
Subtotal	-0.259	-0.414	-0.165

Schedule:

3030 F/A-18 SLAP schedule changes in FY08-10 are a result of contract award for E/F SLAP moving from first quarter FY08 to second quarter FY08.

3182 T-45 SLAP schedule is updated for Flight Loads Definition and Update Finite Element Model in FY08 through FY09 to reflect the latest detailed planning.

Technical:

Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME 0702207N Depot Maintenance (NON-IF)				PROJECT NUMBER AND NAME 3030 F/A-18 SLAP			
COST ($ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
3030 F/A-18 SLAP		**2.770**	**18.018**	**17.180**	**8.590**			
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The F/A-18A-F Service Life Assessment Program (SLAP) is assessing the structural condition of the F/A-18 fleet in order to determine what modifications are necessary to extend the aircraft designed life limits to allow it to achieve Chief of Naval Operations (CNO) inventory requirements. The goal of the SLAP program is to identify critical structures and components that can achieve the extended service life limit goals for all models. An increase in total landings and flight hours would allow the F/A-18A/B/C/D/E/F to meet CNO inventory requirements, to include planning for the announced one year Joint Strike Fighter slide. This effort is required to be conducted for these airframes to ascertain what actions and modifications must be taken to safely operate each system beyond its designed life until the targeted end of service life.

B. Accomplishments/Planned Program

F/A-18A-D SLAP	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Co	2.770		
RDT&E Articles Quantity			

Continue to conduct analysis of aircraft structures and complete Landings/Cat/Trap/Flight Hour analysis and technical support.

F/A-18E-F SLAP	FY 07	FY 08	FY 09
Accomplishments/Effort/Subtotal Cost		18.018	17.180
RDT&E Articles Quantity			

Begin analysis of numerous data points to provide exploitation of complete structural fatigue testing with the expectation of extending the current service life of F/A-18E/F flight hours from 6,000 to 9,000 hours.

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	0702207N Depot Maintenance (NON-IF)	3030 F/A-18 SLAP

C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
APN-5 P-1# 28 F/A-18 OSIP (11-99)	98.888	101.532	114.143	121.872	122.338	128.898	182.268	258.344	1433.863

D. ACQUISITION STRATEGY:

The Service Life Assessment Program (SLAP) program employs sole source contracts with Boeing, the aircraft prime manufacturer. SLAP consists of structural analyses of the main landing gear, arresting hook and catapult back-up structures, vertical tails, wings and fuselage. These analyses will provide for the development of aircraft modifications necessary to extend total aircraft landings, catapults /arrestments, and flight hours. Engineering Change Proposals (ECPs) generated by the SLAP analyses will be incorporated into the Service Life Management Program (SLMP) under OSIP (11-99). The F/A-18E/F SLAP will employ sole source contracts with Boeing, the aircraft prime manufacturer. The program will consist of exploitation of complete structural fatigue testing with the expectation of extending the current service life of the F/A-18E/F. Conducting F/A-18E/F SLAP to study the aircraft lifetime will provide a better estimate of aircraft service life and a follow on Service Life Extension Program (SLEP).

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0702207N Depot Maintenance (NON-IF)			PROJECT NUMBER AND NAME 3030 F/A-18 SLAP						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Development												
SLAP - F/A-18A-D	SS/CPFF	McDonnell Douglas, St Louis	26.005	2.770	12/06						28.775	28.775
SLAP - F/A-18E-F	SS/CPFF	McDonnell Douglas, St Louis				18.018	01/08	17.180	01/09	8.590	43.788	44.180
Subtotal Product Development			26.005	2.770		18.018		17.180		8.590	72.563	
Remarks:												
Development Support												
Software Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
Studies & Analyses												
GFE												
Award Fees												
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: **February 2008**				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT 0702207N Depot Maintenance (NON-IF)			PROJECT NUMBER AND NAME 3030 F/A-18 SLAP						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 07 Cost	FY 07 Award Date	FY 08 Cost	FY 08 Award Date	FY 09 Cost	FY 09 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation												
Operational Test & Evaluation												
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support												
Travel												
Transportation												
SBIR Assessment												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	
Remarks:												
Total Cost			26.005	2.770		18.018		17.180		8.590	72.563	
Remarks:												

R-1 SHOPPING LIST - Item No. 205

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																													DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**					PROGRAM ELEMENT NUMBER AND NAME 0702207N Depot Maintenance (NON-IF)												PROJECT NUMBER AND NAME 3030 F/A-18 SLAP A-D												
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	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
1.1 Flight Load Structure Crack Growth Analysis Using Design Loads																												
1.2 Flight Load Structure Usage Flight Spectrum Development																												
1.3 Flight Load Structure Fatigue Loads Development																												
1.4 Flight Load Structure Crack Initiation Life for 90% Spectrum Assessment																												
2.1 Ground Load Structure Crack Growth Analysis Using 90% Loads																												
2.2 Ground Load Structure Fatigue Life Assessment for 90% Spectrum																												
3.0 Fleet Aircraft Teardown																												

Exhibit R-4a, Schedule Detail					DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT 0702207N Depot Maintenance (NON-IF)			PROJECT NUMBER AND NAME 3030 F/A-18 SLAP			
Schedule Profile F/A-18 SLAP A-D	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Flight Load Structure Crack Growth Analysis Using Design Loads							
Flight Load Structure Usage Flight Spectrum Development	1Q-3Q						
Flight Load Structure Fatigue Loads Development	1Q-3Q						
Flight Load Structure Crack Initiation Life for 90% Spectrum Assessment	1Q-4Q	1Q-2Q					
Ground Loads Structure Crack Growth Analysis using 90% Loads							
Ground Loads Structure Fatigue Life Assessment for 90% Spectrum							
Fleet Aircraft Teardown	1Q-2Q						

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																													DATE: **February 2008**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**					PROGRAM ELEMENT NUMBER AND NAME 0702207N Depot Maintenance (NON-IF)												PROJECT NUMBER AND NAME 3030 F/A-18 SLAP E/F												
Fiscal Year	2007				2008				2009				2010				2011				2012				2013			
	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
Contract Award						☆																						
1.1 E/F SLAP Spectrum Development																												
1.2 Flight/Ground Loads Development																												
1.3 FT50/76/77/78/90 Failure Analysis																												
1.4 Damage Tolerance/ Crack Growth Analysis & Testing																												
1.5 Fleet Inspection Development																												
1.6 ECP Development																												

Exhibit R-4a, Schedule Detail					DATE: **February 2008**		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT 0702207N Depot Maintenance (NON-IF)			PROJECT NUMBER AND NAME 3030 F/A-18 SLAP			
Schedule Profile F/A-18 SLAP E/F	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Contract Award		2Q					
E/F SLAP Spectrum Development		3Q-4Q	1Q-3Q				
Flight/Ground Loads Development		3Q-4Q	1Q-3Q				
FT50/FT76/FT77/FT78/FT90 Failure Analysis		3Q-4Q	1Q-4Q	1Q-3Q			
Damage Tolerance/Crack Growth Analysis			2Q-4Q	1Q-3Q			
Fleet Inspection Development				1Q-4Q			
ECP Development			3Q-4Q	1Q-4Q			

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0702207N, DEPOT MAINTENANCE (NON-IF)	PROJECT NUMBER AND NAME 3182, T-45 SLAP	

COST ($ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
3182 T-45 SLAP			.970	3.950	.987			
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND ITEM JUSTIFICATION:

The T-45 Service Life Assessment Program (SLAP) is assessing the structural condition of the T-45 fleet in order to determine structural modifications necessary to extend the aircraft designed service life to support Pilot Training Requirements (PTR) and Naval Flight Officer Training Requirements (NTR) until 2026. The T-45 aircraft structure is currently fatigue limited to 14,400 flight hours based on initial full-scale fatigue tests conducted from 1992-1996. This service life limit prevents the T-45 fleet from meeting PTR/NTR requirements past 2016. Recent studies have determined that the fleet squadrons have not been flying the T-45 aircraft as aggressively as the initial fatigue studies predicted. These studies demonstrate that the 14,400 flight hour service life can likely be extended to 21,600 flight hours, which will support meeting PTR/NTR until 2026. A T-45 Service Life Assessment Program (SLAP) is required to assess the critical areas within the structure that require modifications to achieve a 21,600 flight hour service life. This assessment will be based on the updated fleet aircraft usage spectrum and future predicted training missions of the T-45 aircraft. The assessment will address critical structural areas that are either landing and/or flight hour limited.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Analysis of T-45 structural condition		FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost			.970	3.950
RDT&E Articles Quantity				

The T-45 Service Lift Assessment Program will analyze structural critical areas requiring modification to increase service life from 14,400 flight hours to 21,600 flight hours, publishing results in three separate reports (Updated Finite Element Model report, SLAP Internal Loads Methodology report, and SLAP Fatigue Analysis report).

C. OTHER PROGRAM FUNDING SUMMARY:
Not Applicable

D. ACQUISITION STRATEGY:

The SLAP is a sole source contract with Boeing, the aircraft prime contractor. SLAP consists of structural analyses of landing gear, arresting hook and catapult back-up structure, vertical tail, wings and fuselage. These analyses will facilitate the development of aircraft modifications necessary to extend total aircraft service life from 14,400 to 21,600 flight hours.

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7		PROGRAM ELEMENT 0702207N, DEPOT MAINTENANCE (NON-IF)				PROJECT NUMBER AND NAME 3182, T-45 SLAP						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
SLAP - T -45	SS-FFP	BOEING, SAINT LOUIS, MO				.930	Jan 2008	3.860	Jan 2009	.927	5.717	5.717
SUBTOTAL PRODUCT DEVELOPMENT						.930		3.860		.927	5.717	

Remarks:

SUPPORT												
SUBTOTAL SUPPORT												

Remarks:

TEST & EVALUATION												
SUBTOTAL TEST & EVALUATION												

Remarks:

MANAGEMENT												
Program Management Support	WX	NAWCAD, Patuxent River, MD				.005	Nov 2007	.005	Nov 2008	.005	.015	
Travel	TO	NAVAIR HQ, Patuxent River, MD				.035	Various	.085	Various	.055	.175	
SUBTOTAL MANAGEMENT						.040		.090		.060	.190	

Remarks:

Total Cost						.970		3.950		.987	5.907	

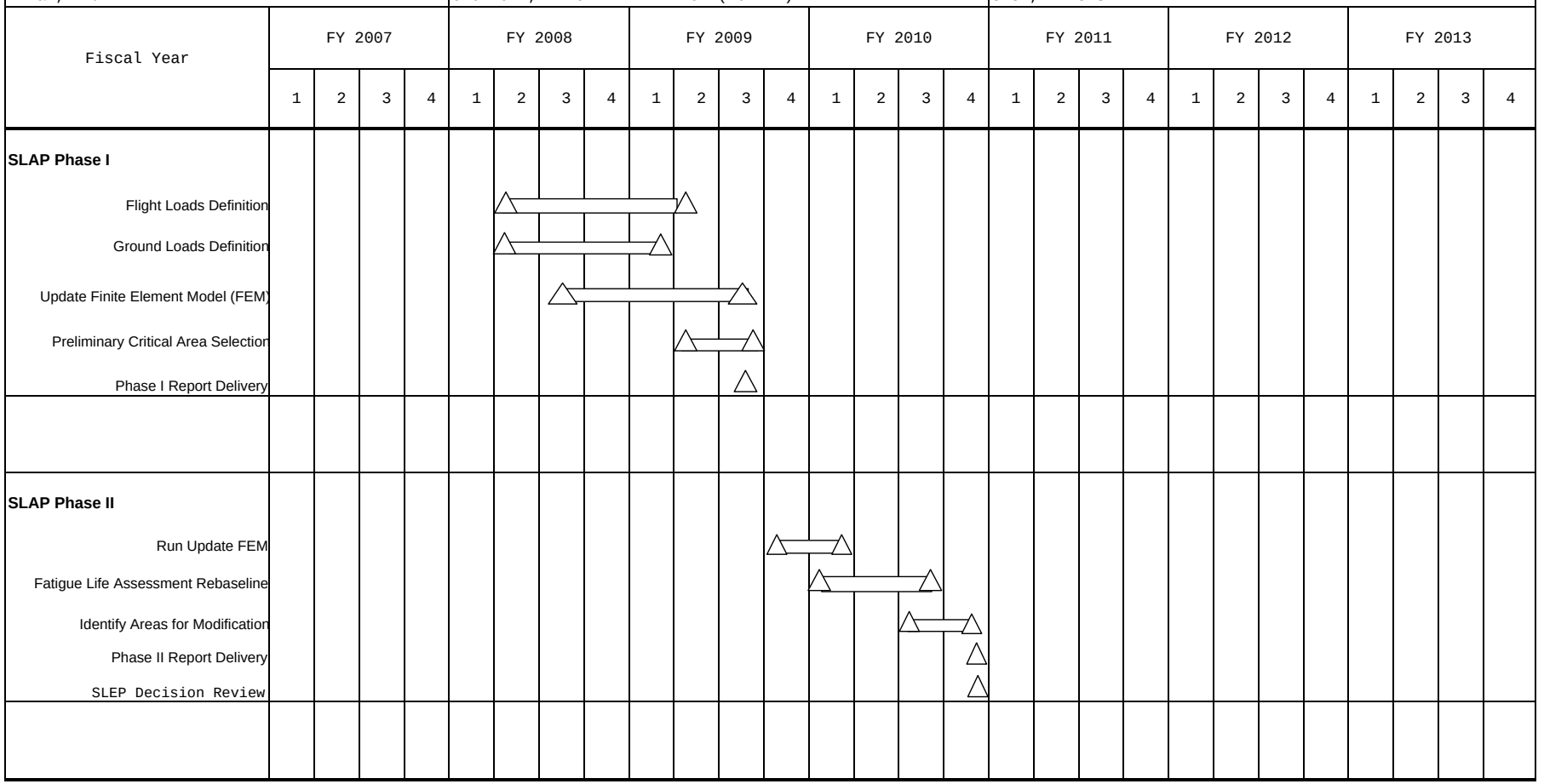
Remarks:

CLASSIFICATION:

EXHIBIT R4, Schedule Profile

DATE: February 2008

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E,N / BA-7	0702207N, DEPOT MAINTENANCE (NON-IF)	3182, T-45 SLAP



CLASSIFICATION:

Exhibit R-4a, Schedule Detail				DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT 0702207N Depot Maintenance (NON-IF)			PROJECT NUMBER AND NAME 3182, T-45 SLAP			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
SLAP Phase I							
Flight Loads Definition		2Q-4Q	1Q-2Q				
Ground Loads Definition		2Q-4Q	1Q				
Update Finite Element Model (FEM)		3Q-4Q	1Q-3Q				
Preliminary Critical Area Selection			2Q-3Q				
Phase I Report Delivery			3Q				
SLAP Phase II							
Run Update FEM			4Q	1Q			
Fatigue Life Assessment Rebaseline				1Q-3Q			
Identify Areas for Modification				3Q-4Q			
Phase II Report Delivery				4Q			
SLEP Decision Review				4Q			

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0702207N DEPOT MAINTENANCE (NON-IF)	PROJECT NUMBER AND NAME 9999 Congressional Adds	

COST ($ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
9785C Portable Laser Depainting System		3.108						
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Congressional Adds

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

9785C-Portable Laser Depainting System		FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		3.108		
RDT&E Articles Qty				

Portable Laser Depainting System