CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification						DATE:	
•						Februa	ry 2006
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOME		•	
RESEARCH DEVELOPMENT TEST & EVALUATIO	N, NAVY / BA-7			0702207N Depot	Maintenance (Non-	IF)	1
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	4.200	9.861	2.960				
3030 F/A-18 SLAP	4.200	9.861	2.960				
9999 Congressional Adds		2.600					
		l.		I	1	I	

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The F/A-18 Service Life Assessment Program (SLAP) is assessing the structural condition of the F/A-18 fleet in order to determine what structural modifications are necessary to extend the aircraft designed service life and allow it to achieve inventory requirements. The Resource Sponsor (N78) has indicated an urgent need to assess the structural condition of the F/A-18 fleet to determine whether the structural condition supports OPNAV Tactical Aircraft inventory requirements through fiscal year FY 2023. It is known that F/A-18 aircraft built prior to Lot 18 are limited to 78% of their design fatigue life due to structural cracking in the section of the fuselage known as the "Center Barrel". The Center Barrel Replacement Plus (CBR+) program eliminates structural life limitations caused by cracking in the Center Barrel. The airframe structure also has landing and flight hour limitations, both of which must be addressed to extend the designed service life of the aircraft. The F/A-18 A/B/C/D aircraft structure is being assessed to determine the life limit on landings and flight hours for all four models (Lot 8 aircraft and above). Currently the aircraft structure is limited to 8,300 landings and 6,000 flight hours. The goal of the SLAP program will be to identify critical structures to allow total landings to be increased to 14,500 and flight hours to 12,000. This increase in total landings and flight hours would allow the F/A-18 A/B/C/D to meet OPNAV Tactical Aircraft inventory requirements through FY 2023, to include planning for the announced one year JSF slide. These efforts are required to be conducted for these airframes to ascertain what actions must be taken to safely operate each system until the targeted end of service life.

Congressional Add: Portable Laser Depainting System

R-1 SHOPPING LIST - Item No.

209

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification (Exhibit R-2, page 1 of 12)

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							Februa	ry 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMI	ENT NUMBER AND	NAME		PROJECT NUMBE	ER AND NAME		
RDT&E, N / BA-7	0702207N DEPOT	MAINTENANCE			3030 F/A-18 Service	ce Life Assessment	Program (SLAP)	
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Project Cost	4.200	9.861	2.960					

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The F/A-18 Service Life Assessment Program (SLAP) is assessing the structural condition of the F/A-18 fleet in order to determine what structural modifications are necessary to extend the aircraft designed service life and allow it to achieve inventory requirements. The Resource Sponsor (N78) has indicated an urgent need to assess the structural condition of the F/A-18 fleet to determine whether the structural condition supports OPNAV Tactical Aircraft inventory requirements through fiscal year FY 2023. It is known that F/A-18 aircraft built prior to Lot 18 are limited to 78% of their design fatigue life due to structural cracking in the section of the fuselage known as the "Center Barrel". The Center Barrel Replacement Plus (CBR+) program eliminates structural life limitations caused by cracking in the Center Barrel. The airframe structure also has landing and flight hours limitations, both of which must be addressed to extend the designed service life of the aircraft. The F/A-18 A/B/C/D aircraft structure is being assessed to determine the life limit on landings and flight hours for all four models (Lot 8 aircraft and above). Currently the aircraft structure is limited to 8,300 landings and 6,000 flight hours. The goal of the SLAP program will be to identify critical structure to allow total landings to be increased to 14,500 and flight hours to 12,000. This increase in total landings and flight hours would allow the F/A-18 A/B/C/D to meet OPNAV Tactical Aircraft inventory requirements through fiscal year FY 2023, to include planning for the announced one year JSF slide. These efforts are required to be conducted for these airframes to ascertain what actions must be taken to safely operate each system until the targeted end of service life.

R-1 SHOPPING LIST - Item No.

209

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justifica	ıtion		DATE: February 2006
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND	
DT&E, N / BA-7	0702207N DEPOT MAINTENANCE	3030 F/A-18 Service Life A	ssessment Program (SLAP)
. Accomplishments/Planned Program			
	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	4.200	9.861	2.960
RDT&E Articles Quantity			
Continue to conduct analysis of aircraft struct	ures and complete Landings/Cat/Trap/Flight Hour analy	rsis and technical support.	
	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity			
RDT&E Articles Quantity			
Accomplishments/Effort/Subtotal Cost	FY 05	FY 06	FY 07
RDT&E Articles Quantity			

R-1 SHOPPING LIST - Item No.

209

Exhibit R-2, RDTEN Budget Item Justification (Exhibit R-2, page 3 of 12)

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE:
					February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER	AND NAME		PROJECT NUMBER AND	D NAME
RDT&E, N / BA-7	0702207N DEPOT MAINTENANG	CE		3030 F/A-18 Service Life	Assessment Program (SLAP)
C. PROGRAM CHANGE SUMMARY:					
Funding:		FY 05	FY 06	FY 07	
Previous President's Budget:		7.000	10.012	3.200	
Current President's Budget		4.200	9.861	2.960	
Total Adjustments	_	-2.800	-0.151	-0.240	
Summary of Adjustments Congressional Reductions Congressional Rescissions					
Congressional Undistributed Redu Congressional Increases	ctions	-0.179	-0.105		
Economic Assumptions			-0.046	0.016	
Miscellaneous Adjustments		-2.621		-0.256	
Subtotal		-2.800	-0.151	-0.240	
Schedule: Not applicable.					
Technical: Not applicable.					
	D 4 0110DD			000	

CLASSIFICATION:

EXHIBIT R-2a, RDT&E	Project Justification							DATE:			
									Februar	y 2006	
APPROPRIATION/BUDGET	ACTIVITY	PROGRAM ELE	MENT NUMBE	R AND NAME		PROJECT NUM	BER AND NA	ME			
RDT&E, N /	BA-7	0702207N DEPO	T MAINTENAN	NCE		3030 F/A-18 Ser	vice Life Ass	essment Progra	am (SLAP)		
D. OTHER PROGRA	M FUNDING SUMMARY:								_	Ŧ	
Line Item No. & Na	<u>me</u>	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To <u>Complete</u>	Total <u>Cost</u>	
	1136N F/A-18 Squadrons rvice Life Management Program	98.445	86.283	112.060	113.980	115.366	123.262	124.763	390.513	938.632	

E. ACQUISITION STRATEGY:

The 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 landing from 8,300 to 14,500 catapults and arrestments from 2,000 to 2,700 and flight hours from 6,000 to 12,000. Engineering Change Proposals (ECPs) generated by the SLAP analysis will be incorporated into Service Life Management Program (SLMP) under OSIP (11-99).

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (pa	age 1)										February 200	06	
APPROPRIATION/BUDGET ACT	IVITY		PROGRAM E	LEMENT			PROJECT NU	JMBER AND I	NAME				
RDT&E, N / BA-7			0702207N DE	POT MAINTE	NANCE		3030 F/A-18 S		ssessment Prog				
Cost Categories	Contract	Performing		Total		FY 05		FY 06		FY 07			
	Method & Type	Activity &		PY s	FY 05 Cost	Award	FY 06 Cost	Award Date		Award Date	Cost to Complete	Total	Target Value of Contract
Out on Francisco		Location	Laure	Cost		Date		+	Cost		Complete	Cost	
Systems Engineering	SS/CPFF	BOEING. St.	Louis	12.226	4.200	02/05	9.861	01/06	2.960	01/07		29.247	
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Subtotal Product Development				12.226	4.200)	9.861		2.960		0.000	29.247	,
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												0.000	
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Subtotal Support				0.000	0.000)	0.000		0.000		0.000		
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Remarks:													
				D_1 SHO	PPING LIST	- Itom No	209						

CLASSIFICATION:

									DATE:				
Exhibit R-3 Cost Analysis (page	e 2)										February 200	16	
APPROPRIATION/BUDGET ACTIVIT	ΓΥ		PROGRAM EL					UMBER AND					
RDT&E, N / BA-7		1	0702207N DEF		IANCE	ı	3030 F/A-18	Service Life A	ssessment Prog	ram (SLAP)	1		
	Contract Method & Type	Performing Activity & Location			FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date		Total Cost	Target Value of Contract
	•											0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
Subtotal T&E				0.000	0.000		0.00	0	0.000		0.000	0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
												0.000	
Subtotal Management				0.000	0.000		0.00	0	0.000		0.000	0.000	
Remarks:													
Total Cost				12.226	4.200		9.86	1	2.960	l	0.000	29.247	
Remarks:													

CLASSIFICATION:

EXHIBIT R4, Schedule P	rofile																				DATE	:: ::	F	ebrua	ıry 20	06		
APPROPRIATION/BUDGET / RDT&E, N / BA-7	ACTIVI	TY			PROG						NAM	E						IECT N					Progra					
Fiscal Year		20	05			20					07			20	08			20				20		,	,	20	11	
	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	7	★																										
1.1 Flight Load Structure Crack Growth Analysis Using Design Loads						Δ																						
1.2 Flight Load Structure Usage Flight Spectrum Development	,											<u>V</u>																
1.3 Flight Load Structure Fatigue Loads Development																												
1.4 Flight Load Structure Crack Initiation Life for 90% Spectrum Assessment								\triangle																				
2.1 Ground Load Structure Crack Growth Analysis Using 90% Loads						Δ																						
2.2 Ground Load Structure Fatigue Life Assessment for 90% Spectrum		Λ				Δ																						
3.0 Fleet Aircraft Teardown	4																											

CLASSIFICATION:

FY 2007 1Q-3Q 1Q-3Q 1Q-4Q		JMBER AND N SERVICE LIFE FY 2009	February 200 AME ASSESSMENT P FY 2010	
1Q-3Q 1Q-3Q	3030 F/A-18 S	SERVICE LIFE	AME ASSESSMENT P	ROGRAM (SLAP
1Q-3Q 1Q-3Q				
1Q-3Q 1Q-3Q	FY 2008	FY 2009	FY 2010	FY 2011
1Q-3Q				
1Q-3Q				
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R-1 SHOPPING LIST - Item No.

209

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justificatio	n						DATE:	
							Februa	ary 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	ENT NUMBER AND	NAME		PROJECT NUMBE	ER AND NAME		
RDT&E, N / BA-7	0702207N DEPOT	MAINTENANCE			9999 Congression	al Adds		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Project Cost		2.600						

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Portable La	ser Depair	nting System
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R-1 SHOPPING LIST - Item No.

209

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification	71 I			DATE: February	2006
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	IBER AND NAME	PROJECT NUMBER AND N		
T&E, N / BA-7	0702207N DEPOT MAINTE	NANCE	9999 Congressional Adds		
Accomplishments/Planned Program					
		FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost			2.600	111	
RDT&E Articles Quantity					
Portable Laser Depainting System					
		FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost		1 1 00	1100	1107	
RDT&E Articles Quantity					
		FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost		1100	1100	1107	
RDT&E Articles Quantity					

R-1 SHOPPING LIST - Item No.

209

UNCLASSIFIED Exhibit R-2, RDTEN Budget Item Justification (Exhibit R-2, page 11 of 12)

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	February 2006
RDT&E, N / BA-7		9999 CONGRESSIONAL ADDS	
RDIGE, N / BA-1	0702207N DEPOT MAINTENANCE	9999 CONGRESSIONAL ADDS	
C. PROGRAM CHANGE SUMMARY:			
Funding:	FY 05 FY 06	FY 07	
Previous President's Budget:	0.000 0.000	0.000	
Current BES/President's Budget	0.000 2.600	0.000	
Total Adjustments	0.000 2.600	0.000	
Summary of Adjustments Congressional Reductions Congressional Rescissions Congressional Undistributed Reductio Congressional Increases Economic Assumptions Miscellaneous Adjustments Subtotal	2.600 ———————————————————————————————————	0.000	
Schedule: Not applicable.			
Technical: Not applicable.			