

EXHIBIT R-2, RDT&E Budget Item Justification						DATE:		
APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE		
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5						0604245N, H-1 UPGRADES		
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Total PE Cost	33.512	3.531	3.795	3.955	3.742	3.810	3.880	
2279 USMC H-1 UPGRADES	33.512	3.531	3.795	3.955	3.742	3.810	3.880	

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The mission of the AH-1W attack helicopter is to provide rotary wing close air support, anti-armor, armed escort, armed/visual reconnaissance, survivability enhancements, and fire support coordination capabilities under day/night and adverse weather conditions. The mission of the UH-1N utility helicopter is to provide command and control and combat assault support under day/night and adverse weather conditions and special operations support; supporting arms coordination and aeromedical evacuation. Major modifications for both aircraft that remanufacture AH-1W/UH-1N's into AH-1Z/UH-1Y's include: a new 4-bladed, composite rotor system with semi-automatic blade fold, new performance matched transmissions, T700 Engine Digital Electronic Control Units (DECUs), new 4-bladed tail rotors and drive systems, more effective stabilizers, upgraded landing gear, tail pylon structural modifications, and common, fully integrated cockpits and avionics systems. This remanufacture will add 10,000 flight hours to AH-1Z/UH-1Y airframes. The fully integrated cockpits will reduce operator workload and improve situational awareness, thus increasing safety and reducing the rate of aircraft attrition. They will provide considerable growth potential for future weapon systems and avionics, which will significantly increase mission effectiveness and survivability. The cockpits will also include integration of onboard mission planning, communications, digital fire control, self-navigation, night navigation/targeting, and weapon systems management in nearly identical crew stations, which significantly reduces training requirements. This remanufacture maximizes commonality between the two aircraft and provides needed improvements in crew and passenger survivability, payload, power available, endurance, range, airspeed, maneuverability and supportability.

FY2007 funding total includes \$18.0M received in GWOT supplemental.

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2007	FY 2008	FY 2009
FY 2008 President's Budget:	7.814	3.608	3.851
FY 2009 President's Budget:	33.512	3.531	3.795
Total Adjustments	25.698	-0.077	-0.056

Summary of Adjustments

Congressional Reductions			
Congressional Rescissions			
Congressional Undistributed Reductions	-0.060	-0.023	
Congressional Increases	18.000		
Economic Assumptions			-0.025
Miscellaneous Adjustments	7.758	-0.054	-0.031
Subtotal	25.698	-0.077	-0.056

Schedule: OPEVAL commenced May 2006 following a delay due to technical issues with the Helmet Mounted Sight Display (HMSD) system and transitioning of EMD aircraft to the operational configuration. Delays in delivering LRIP aircraft and additional OT Pilot Training requirements have led to delays in the start of OPEVAL Phase II. The delays in completion of OPEVAL Phase II and the availability of a test report will delay the start of MS-III to 4Q FY08. Technical issues in the manufacture of Lot I airframes have caused the Lot I, Lot II, and Lot III deliveries to slip 1-2 quarters. LRIP IV deliveries will start 1 quarter late, however the aircraft will deliver as scheduled in PB08. FRP (Lot 5) and subsequent lots remain on schedule.

Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification							DATE:	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5							February 2008	
PROGRAM ELEMENT NUMBER AND NAME 0604245N, H-1 UPGRADES				PROJECT NUMBER AND NAME 2279, USMC H-1 UPGRADES				
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
2279 USMC H-1 UPGRADES	33.512	3.531	3.795	3.955	3.742	3.810	3.880	
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Product Development	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	20.953		
RDT&E Articles Qty			

Prime contractor will perform product development efforts including survivability enhancements and completion of fatigue testing.

Support Development	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	4.000	.463	1.596
RDT&E Articles Qty			

FY09 and out funding required to conduct software development efforts to support development testing and address operational testing results.

Test & Evaluation	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	7.577	.036	.086
RDT&E Articles Qty			

Conduct software development efforts to support design, development, integration of sensor processing technologies and tactical decision tools to expand hardware and software capabilities.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604245N, H-1 UPGRADES	PROJECT NUMBER AND NAME 2279, USMC H-1 UPGRADES

Program Management Support	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	.982	.615	.585
RDT&E Articles Qty			

Perform contractor engineering and technical support including risk analysis in support of development activities and travel.

Software Support	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		2.417	1.528
RDT&E Articles Qty			

Development support efforts to correct deficiencies as a result of operational test; conduct component fatigue testing and technical data analysis.

C. OTHER PROGRAM FUNDING SUMMARY:	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
BLI 017800, UH-1Y/AH-1Z	493,723	415,646	474,141	634,483	636,858	576,801	616,595	2,467,272	7,161,124

D. ACQUISITION STRATEGY: The USMC H-1 Upgrades is an ACAT 1D program which encompasses Engineering and Manufacturing Development of new end-items prior to a production approval decision. The prime contract is a sole source to Bell Helicopter Textron, Inc.

Exhibit R-3 Cost Analysis (page 1)									DATE: February 2008			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NUMBER AND NAME							
RDT&E,N / BA-5		0604245N, H-1 UPGRADES			2279, USMC H-1 UPGRADES							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s 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												
GFE	SS-CPFF	BELL HELICOPTER TEXTRON INC, HURST, TX	24.708								24.708	24.708
Primary Hdw Development	SS-CPFF	BELL HELICOPTER TEXTRON INC, HURST, TX	1,088.952	20.953	4/1/08						1,109.905	1,109.905
Systems Eng	VARIOUS	VARIOUS	3.810								3.810	
Systems Eng	WX/PX	VARIOUS	74.674								74.674	
SUBTOTAL PRODUCT DEVELOPMENT			1,192.144	20.953							1,213.097	

Remarks:

SUPPORT												
Development Support	WX/PX	VARIOUS				.463	1/1/08	1.596	1/1/09	4.944	7.003	
Development Support	WX/PX	VARIOUS	10.162							1.548	11.710	
Integrated Logistics Sup	WX/PX	VARIOUS	27.604								27.604	
Software Dev. Wpns Integ.	WX/PX	NANACAD, PATUXENT RIVER MD								1.528	1.528	
Software Dev. Wpns Integ.	WX/PX	NANACAD, CHINA LAKE CA	2.800	4.000	1/1/07	2.417	1/1/08	1.528	1/1/09	4.584	15.329	
SUBTOTAL SUPPORT			40.566	4.000		2.880		3.124		12.604	63.174	

Remarks:

TEST & EVALUATION												
Dev Test & Eval	WX/PX	NANACAD, PATUXENT RIVER MD	35.252	2.752	12/1/06	.036	12/1/07	.086	12/1/08	.309	38.435	
Dev Test & Eval	VARIOUS	VARIOUS	14.906								14.906	
Oper Test & Eval	WX/PX	VARIOUS	14.591	4.825	6/1/07						19.416	
Oper Test & Eval	WX/PX	VARIOUS	2.406								2.406	
SUBTOTAL TEST & EVALUATION			67.155	7.577		.036		.086		.309	75.163	

Remarks:

MANAGEMENT												
Contractor Eng Sup	C-FPP	VARIOUS	5.425	.360	12/1/06	.180	12/1/07	.180	12/1/08	.720	6.865	6.865
Procurement Fees	VARIOUS	VARIOUS	.005								.005	
Program Mgmt Sup	C-FPP	VARIOUS	7.374	.322	12/1/06	.165	12/1/07	.165	12/1/08	.754	8.780	8.780
SBIR Assessment	IPR/MIPR	DEF CNTR MGNT CMD, FT WORTH, TX	.010								.010	
Travel	WX/PX	VARIOUS	2.657	.300	12/1/06	.270	12/1/07	.240	12/1/08	1.000	4.467	
Travel (Camp Pend)	WX/PX	MCAS, CAMP PENDLETON, CA	.020								.020	
SUBTOTAL MANAGEMENT			15.491	.982		.615		.585		2.474	20.147	

Total Cost			1,315.356	33.512		3.531		3.795		15.387	1,371.581	
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Remarks:

CLASSIFICATION:																															
EXHIBIT R4, Schedule Profile																								DATE:							
APPROPRIATION/BUDGET ACTIVITY																								PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME			
RDT&E, N /																								0604245N USMC H-1 Upgrades				2279 USMC H-1 Upgrades			
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			
Acquisition Milestones								△ MS-III ★ IOC UH-1Y											★ IOC AH-1Z												
Test & Evaluation Milestones Operational Test	■																														
Production Milestones																															
LRIP I FY 04	■																														
LRIP II FY 05					■																										
LRIP III FY 06																															
LRIP IV FY 07			△																												
FRP FY 08									△																						
FRP FY 09										△																					
FRP FY 10											△																				
FRP FY 11												△																			
FRP FY 12																△															
FRP FY 13																					△										
Deliveries																															

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-4a, Schedule Detail					DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5				PROJECT NUMBER AND NAME 2279 USMC H-1 Upgrades			
Schedule Profile	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Full Rate Production (FRP) Decision Milestone III		4Q					
IOC		4Q UH-1Y			2Q AH-1Z		
Operational Evaluation (OT-IIC) (OPEVAL Phase I)*	1Q						
Operational Evaluation (OPEVAL Phase II)		2Q-3Q					
Low-Rate Initial Production I Delivery	2Q-4Q	1Q					
Low-Rate Initial Production II Delivery		1Q-3Q					
Start Low-Rate Initial Production IV (LRIP IV)	3Q						
Low-Rate Initial Production III Delivery		3Q-4Q	1Q				
Low-Rate Initial Production IV Delivery			2Q-4Q				
Full Rate Production Start		4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
Full Rate Production (FRP) Delivery				1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q

* Began in 3rd Quarter 2006